

DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE

# Licensing of Commercial Cannabis Cultivation in Mendocino County Project

State Clearinghouse No. 2023080049



Prepared for:



Department of  
Cannabis Control  
CALIFORNIA

May 2024

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## LIST OF ABBREVIATIONS

°C	degrees Celsius
°F	degrees Fahrenheit
2022 RTP/ATP	Mendocino Council of Governments Regional Transportation Plan and Active Transportation Plan
2022 Scoping Plan	<i>Final 2022 Scoping Plan for Achieving Carbon Neutrality</i>
AB	Assembly Bill
ACLUP	Airport Comprehensive Land Use Plan
ADA	Americans with Disabilities Act
ALUC	airport land use commission
ALUCP	Airport Land Use Compatibility Plan
ATP	Active Transportation Plan
AUMA	Adult Use of Marijuana Act
BAAQMD	Bay Area Air Quality Management District
BERD	Built Environment Resources Directory
BIOS	Biogeographic Information and Observation System
BMP	best management practice
BPTC	best practical treatment or control
CAA	federal Clean Air Act
CAAQS	California ambient air quality standards
CAFE	Corporate Average Fuel Economy
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Occupational Safety and Health Administration
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CA-MUTCD	California Manual on Uniform Traffic Control Devices
CARB	California Air Resources Board
CBC	California Building Code



CCAA	California Clean Air Act
CCBL	Cannabis Cultivation Business License
CCR	California Code of Regulations
CDFA	California Department of Food and Agriculture
CDFW	California Department of Fish and Wildlife
CDPR	California Department of Pesticide Regulation
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CESA	California Endangered Species Act
CFC	California Fire Code
CFR	Code of Federal Regulations
CHP	California Highway Patrol
CI	carbon intensity
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CSD	Community Service District
CSZ	Cascadia Subduction Zone
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dB	decibels
DCC	California Department of Cannabis Control
DHS	California Department of Health Services
District	Mendocino County Air Quality Management District
DOC	California Department of Conservation
DOT	US Department of Transportation
DPR	California Department of Pesticide Regulation
DPS	Distinct Population Segment

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Draft EIR	draft environmental impact report
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EAD	Exposure Assessment Document
ECA	Essential Connectivity Area
EIR	environmental impact report
EMS	emergency medical service
EO	Executive Order
EOP	Emergency Operations Plan
EPA	US Environmental Protection Agency
EPAct	Energy Policy Act
EPCRA	Emergency Planning and Community Right-to-Know Act of 1986
ESA	Endangered Species Act
ESU	Evolutionarily Significant Unit
EV	electric vehicle
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FPA	Z'berg-Nejedly Forest Practice Act of 1973
FTA	Federal Transit Administration
General Plan	Mendocino County General Plan
GHG	greenhouse gas
GIS	geographic information system
gpd	gallons per day
GSP	Groundwater Sustainability Plan
HAP	hazardous air pollutant
HCP	habitat conservation plan
HPUD	Hopland Public Utilities District
Hz	hertz

IEPR	Integrated Energy Policy Report
IS/MND	Initial Study/Mitigated Negative Declaration
lb/day	pounds per day
LCFS	Low Carbon Fuel Standard
L <sub>dn</sub>	Day-Night Level
L <sub>eq</sub>	Equivalent Continuous Sound Level
L <sub>max</sub>	Maximum Sound Level
LOS	level of service
LRA	Local Responsibility Area
LSA	Lake and Streambed Alteration
LSAA	lake and streambed alteration agreement
MAUCRSA	Medicinal and Adult-Use Cannabis Regulation and Safety Act
MBTA	Migratory Bird Treaty Act
MCAQMD	Mendocino County Air Quality Management District
MCCR	Mendocino County Cannabis Regulation
MCCWPP	Mendocino County Community Wildfire Protection Plan
MCFSC	Mendocino County Fire Safe Council
MCL	maximum contaminant level
MCOG	Mendocino Council of Governments
MCRSA	Medical Cannabis Regulation and Safety Act
MGD	million gallons per day
MMRP	Mitigation Monitoring and Reporting Program
MMTCO <sub>2e</sub>	million metric tons of carbon dioxide equivalent
mPa	micro-Pascals
MTA	Mendocino Transit Authority
NAAQS	national ambient air quality standards
NAHC	Native American Heritage Commission
NCAB	North Coast Air Basin
NCCP	natural community conservation plan
NCRWQCB	North Coast Regional Water Control Board
NEHRP	National Earthquake Hazards Reduction Program

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NFIP	National Flood Insurance Program
NO <sub>2</sub>	nitrogen dioxide
NOA	naturally occurring asbesto
NOP	notice of preparation
NO <sub>x</sub>	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRHP	National Register of Historic Places
NWIC	Northwest Information Center
OAV	odor activity value
OEHHA	Office of Environmental Health Hazard Assessment
OPR	California Governor’s Office of Planning and Research
OSHA	Occupational Safety and Health Administration
OWTS	on-site wastewater treatment systems
PG&E	Pacific Gas and Electric Company
PM <sub>10</sub>	Respirable particulate matter
PM <sub>2.5</sub>	Fine particulate matter
Porter-Cologne Act	Porter-Cologne Water Quality Control Act of 1970
ppb	part per billion
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
PV	photovoltaic
RCD	risk characterization document
RCRA	Resource Conservation and Recovery Act of 1976
RMS	root-mean-square
Road Handbook	Handbook for Forest Ranch and Rural Roads
ROG	reactive organic gas
RPS	Renewables Portfolio Standard
RTIP	Regional Transportation Improvement Program

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RTP	regional transportation plan
RWQCB	regional water quality control board
SARA Title III	Superfund Amendments and Reauthorization Act of 1986
SB	Senate Bill
SEMS	Standard Emergency Management System
SGMA	Sustainable Groundwater Management Act
SIP	state implementation plan
SO <sub>2</sub>	sulfur dioxide
SPCC	Spill Prevention, Control, and Countermeasure
SPL	sound pressure level
SR	State Route
SRA	State Responsibility Area
SWPPP	storm water pollution prevention plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TCP	traffic control plan
THP	timber harvest plan
TISG	Transportation Impact Study Guide
TMDL	total maximum daily load
TPZ	timber production zone
TRI	Toxic Release Inventory
TTC	temporary traffic control
USACE	US Army Corps of Engineers
USC	US Code
USFS	US Forest Service
USFWS	US Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
UVAP	Ukiah Valley Area Plan
UVBGS	Ukiah Valley Basin Groundwater Sustainability Agency

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VdB	vibration decibels
VegCAMP	Vegetation Classification and Mapping Program
VHFHSZ	Very High Hazard Severity Zones
VMP	Vegetation Management Program
VMT	vehicle miles traveled
VOC	volatile organic compound
WDR	waste discharge requirements
WFCE	Working Forest Conservation Easements
WUI	wildland urban interface
WWTF	wastewater treatment facility
ZEV	zero-emission vehicle

# EXECUTIVE SUMMARY

## ES.1 INTRODUCTION

This summary is provided in accordance with California Environmental Quality Act Guidelines (State CEQA Guidelines), section 15123. As stated in section 15123(a), “an EIR [environmental impact report] shall contain a brief summary of the proposed action and its consequences. The language of the summary should be as clear and simple as reasonably practical.” As required by the guidelines, this chapter includes (1) a summary description of the Licensing of Commercial Cannabis Cultivation in Mendocino County Project, (2) a synopsis of environmental impacts and recommended mitigation measures (Table ES-1), (3) identification of the alternatives evaluated and of the environmentally superior alternative, and (4) a discussion of the areas of controversy associated with the project.

## ES.2 SUMMARY DESCRIPTION OF THE PROJECT

### ES.2.1 Project Location

Mendocino County is located along the Pacific Ocean in the northwestern portion of California. The County is bordered by Humboldt and Trinity Counties to the north; Tehama, Glenn, and Lake Counties to the east, and Sonoma County to the south (see Figure 2-1 in Chapter 2, “Project Description.” The County is approximately 2,247,000 acres (including the incorporated cities).

Mendocino County is predominantly rural, with a majority of its land area consisting of forest and agricultural areas. Approximately 16 percent of the County’s land area is under federal, state, and tribal ownership. Development (residential, commercial, office, and industrial) is located within the County’s nine unincorporated communities (Anderson Valley/Boonville Area, Round Valley/Covelo Area, Fort Bragg Area, Hopland/Sanel Valley Area, Laytonville Area, Potter Valley Area, Redwood Valley Area, Little Lake Valley Area, and Ukiah Valley Area) and the incorporated cities of Fort Bragg, Point Arena, Ukiah, and Willits.

### ES.2.2 Project Objectives

The objectives of the project are to:

- ▶ Implement the California Department of Cannabis Control’s (DCC) cultivation licensure program in the County, in an effort to minimize the public health and safety risks associated with unlicensed commercial cannabis activity, while promoting a robust and economically viable legal cannabis industry in the County;
- ▶ Effectively transition qualified existing provisional cannabis cultivation licenses to annual licenses through a streamlined cannabis licensing process to ensure that such provisional cannabis cultivation license holders complete the annual license process by the statutory timeframes identified in Business and Professions Code, section 26050.2;
- ▶ Provide a mechanism for future cannabis cultivation license applicants to obtain annual licenses through a streamlined cannabis licensing process;

- ▶ Ensure that cannabis cultivation by licensees is conducted in accordance with applicable state and local laws related to land conversion, air quality, electricity usage, water usage, water quality, biological resources, agricultural discharges, and similar matters;
- ▶ Protect natural and built resources in Mendocino County; and
- ▶ Minimize potential adverse effects of cannabis cultivation activities on the environment.

### ES.2.3 Characteristics of the Project

The project consists of commercial cannabis cultivation conducted under the Medicinal and Adult-Use Cannabis Regulation and Safety Act (MAUCRSA) in Mendocino County.

As of April 2023, there are 623 commercial cannabis cultivation sites, 23 of which have associated cannabis distribution transport-only operations, within the unincorporated areas of Mendocino County that hold provisional state cannabis cultivation licenses and distribution transport-only licenses and that may therefore operate under MAUCRSA, on a conditional basis, for a limited period. DCC is considering whether to transition some or all of these provisional licenses to annual licenses (i.e., whether to issue annual licenses to some or all of these provisional licensees). DCC may also consider other annual licensing actions (e.g., the issuance of new, additional annual cultivation licenses) for future commercial cannabis cultivation within the unincorporated areas of Mendocino County.

## ES.3 ENVIRONMENTAL IMPACTS AND RECOMMENDED MITIGATION MEASURES

### ES.3.1 Project Impacts

This EIR has been prepared pursuant to the CEQA (Public Resources Code (PRC) section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations, title 14, section 15000 et seq.) to evaluate the physical environmental effects of the proposed Licensing of Commercial Cannabis Cultivation in Mendocino County Project. The California Department of Cannabis Control (DCC) is the lead agency for the project. DCC has the principal responsibility for approving and carrying out the project and for ensuring that the requirements of CEQA have been met. After the Final EIR is prepared and the EIR public-review process is complete, DCC is the party responsible for certifying that the EIR adequately evaluates the impacts of the project.

Table ES-1, presented at the end of this chapter, provides a summary of the environmental impacts for the Licensing of Commercial Cannabis Cultivation in Mendocino County Project. The table provides the level of significance of the impact before mitigation, recommended mitigation measures, and the level of significance of the impact after implementation of the mitigation measures.

### ES.3.2 Significant and Unavoidable Impacts and Cumulative Impacts

Mitigation measures have been identified in Sections 3.1 through 3.17 of this draft environmental impact report (Draft EIR) that are intended to mitigate project effects to the extent feasible. For the following environmental issue areas, one or more impacts are considered significant and unavoidable; that is, no feasible mitigation is available to reduce the



project's impacts or the project's contribution to cumulative impacts to a less-than-significant level.

## AIR QUALITY

- ▶ The cultivation and processing of cannabis by new and expanded licensed commercial cannabis cultivation sites could generate objectionable odors created by the growing and processing of cannabis that could adversely impact residents and other sensitive land uses. This impact would be **significant and unavoidable** (Impact 3.3-3) and **cumulatively considerable and significant and unavoidable** (Impact CUM-3).

## ARCHAEOLOGICAL, HISTORIC, AND TRIBAL CULTURAL RESOURCES

- ▶ New licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations associated with the implementation of the project could be located on lands that contain or are near historic resources. This could result in damage to or destruction of a historic building or structure, thereby resulting in a substantial adverse change in the significance of a historical resource as defined in section 15064.5. Although mitigation (Mitigation Measure 3.4-1) would assist in reducing this impact, it is uncertain whether all historic resources could be retained. This impact would be **significant and unavoidable** (Impact 3.4-1).

## GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

- ▶ Operation of potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and distribution transport-only operations would result in greenhouse gas (GHG) emissions that could conflict with state GHG reduction targets and decarbonization efforts. Although mitigation (Mitigation Measure 3.8-1) would assist in reducing this impact, it is uncertain whether GHG emissions would be adequately reduced. This impact would be **significant and unavoidable** (Impact 3.8-1) and **cumulatively considerable and significant and unavoidable** (CUM-8).

## ES.4 ALTERNATIVES TO THE PROPOSED PROJECT

The following brief descriptions are the alternatives evaluated in this Draft EIR. The reader is referred to Chapter 5, "Alternatives," for a detailed discussion of the analysis.

- ▶ **Alternative 1: No Project Alternative.** This alternative would consist of continued operation of existing provisional and annual licensed commercial cannabis cultivation sites and associated distribution uses in Mendocino County. However, no new annual licenses for commercial cannabis cultivation sites and associated processing and distribution uses would be issued.
- ▶ **Alternative 2: Siting Limitation for Cannabis Cultivation Sites Alternative.** This alternative would restrict the licensing of new commercial cannabis cultivation sites to land areas in the unincorporated area outside of the Cannabis Priority Watersheds designated by the State Water Resources Control Board (SWRCB): Mattole River, Middle South Fork Eel River, East Fork Russian River, Headwaters Russian River, Navarro River, and Dry Creek.

## ES.5 AREAS OF CONTROVERSY

A notice of preparation (NOP) was distributed for the Licensing of Commercial Cannabis Cultivation in Mendocino County Project on August 2, 2023, to responsible agencies, interested parties, and organizations, as well as private organizations and individuals who may have an interest in the project. A public-scoping meeting was held on August 22, 2023. The purpose of the NOP and the scoping meeting was to provide notification that an EIR was being prepared for the project and to solicit input on the scope and content of the environmental document. The NOP and responses to the NOP are included in Appendix A of this Draft EIR. The following key concerns and issues were expressed during the scoping process:

- ▶ Impacts on agriculture and forestry resources, as well as Williamson Act contract lands;
- ▶ Depletion and water theft from existing water supply and water sources;
- ▶ Impacts on land use and planning;
- ▶ Impacts related to tribal and cultural resources;
- ▶ Unpleasant views and deterioration of views due to the addition of cannabis cultivation structures, such as fences and hoop houses;
- ▶ Introduction of pests from cannabis crops to existing surrounding crops;
- ▶ Unpleasant odors and light pollution;
- ▶ Hazardous products being released into soil and water table;
- ▶ Toxic pesticides and materials contaminating water sources;
- ▶ Ecosystems being disrupted by water diversions and toxic contaminants;
- ▶ Negative effects on residential communities due to the proximity of cannabis cultivation sites;
- ▶ Noise pollution from cannabis cultivation operations;
- ▶ Increased strain and depletion of public services and utilities;
- ▶ Restriction of recreational activities on public and private lands;
- ▶ Increased traffic on local roadways, resulting in poor air quality, increased noise, and deterioration of roadways;
- ▶ Cannabis cultivation sites contributing to wildfire dangers;
- ▶ Concerns regarding the DCC's involvement in the cannabis licensing process;
- ▶ Degradation of biological resources, habitats, aquatic habitats, and listed species as a result of cannabis cultivation operations;
- ▶ Impacts to wildlife as a result of night light pollution and noise;
- ▶ Impacts on slope stability due to grading from cannabis cultivation operations;
- ▶ Soil loss from increased traffic on private roads;
- ▶ Available housing for employees;
- ▶ Emergency response times of local public services;
- ▶ Potential increase in wildfire risk due to use of generators and other gasoline-powered equipment;

- ▶ Compliance with fire safety and prevention regulations;
- ▶ Contribution toward climate change as a result of cannabis cultivation operations;
- ▶ Potential negative impacts toward wineries and wine growers in the County as a result of cannabis cultivation sites close proximity; and
- ▶ Cumulative impacts of cannabis cultivations sites.

Each issue is addressed in this Draft EIR to the extent that substantial evidence permits and to the extent that it is an environmental issue. This Draft EIR does not address impacts that are speculative and not reasonably foreseeable; it does not address issues that fall outside of the scope of CEQA, including most social and economic issues.

## ES.6 ISSUES TO BE RESOLVED

Section 15123 of the State CEQA Guidelines requires the summary section of a Draft EIR to identify issues to be resolved in the EIR, including the choice among alternatives and whether or how to mitigate the significant project effects. The following issues, in addition to the areas of controversy, are identified to be resolved:

- ▶ Whether annual licenses should be issued for the 623 existing provisional licensed cannabis cultivation premises in Mendocino County;
- ▶ Whether the extent of future new licensed cannabis cultivation sites should be limited; and
- ▶ Whether proposed mitigation measures identified in this EIR should be applied to future licensing actions.

**Table ES-1 Summary of Impacts and Mitigation Measures**

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<b>Aesthetics</b>			
<p><b>Impact 3.1-1: Have a Substantial Adverse Effect on a Scenic Vista</b>                      Commercial cannabis cultivation sites in the County that would occur under the project could alter localized views of scenic vistas. However, the limitations on size, coverage, and location of commercial cannabis cultivation provided under State and local regulations would limit the potential for commercial cannabis-related uses to alter or have a substantial adverse visual impact on scenic vistas. Commercial cannabis operations are aesthetically not substantially different in appearance from similar agricultural and rural land uses in the County. As a result, this impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS
<p><b>Impact 3.1-2: Substantially Damage Scenic Resources, Including, but Not Limited to, Trees, Rock Outcroppings, and Historic Buildings within a State Scenic Highway</b>                      Commercial cannabis cultivation sites in the County that would occur under the project could alter scenic resources within a state scenic highway. Because portions of SRs 1, 20, and 128 and US 101 are considered eligible for official designation under the California Scenic Highway Program, for the purpose of this EIR, they are considered as scenic resources. State and local regulations, which include screening and tree retention requirements, would limit the potential for commercial cannabis-related uses to substantially degrade scenic resources within state scenic highways. This impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS
<p><b>Impact 3.1-3: Substantially Degrade the Existing Visual Character or Quality of Public Views of the Site and Its Surroundings</b>                      Operation of existing provisionally licensed commercial cannabis cultivation sites and licensing of new commercial cannabis cultivation sites under the project would be visually consistent with the existing rural and agricultural character of the County. Commercial cannabis operations are not substantially different in appearance from other agricultural operations. This impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<p><b>Impact 3.1-4: Create a New Source of Substantial Light or Glare That Would Adversely Affect Day or Nighttime Views in the Area</b> Existing provisionally licensed commercial cannabis cultivation sites and future commercial cannabis cultivation sites licensed under the project could involve the use of artificial lighting. State and local regulations would include lighting standards to address nighttime lighting and glare impacts. This impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS
<b>Agricultural and Forestry Resources</b>			
<p><b>Impact 3.2-1: Convert Farmland to Nonagricultural Use or Conflict with Existing Zoning for Agricultural Use or a Williamson Act Contract</b> Implementation of the project could result in an increase in expanded or new licensed commercial cannabis cultivation sites in unincorporated Mendocino County. Business and Professions Code section 26060(a) defines medical and adult-use cannabis as agricultural products. Because commercial cannabis is defined by the state as an agricultural product, the project would not result in conversion of farmland to nonagricultural uses, nor conflict with existing zoning for agricultural use or a Williamson Act contract. Additionally, the MCCR and Mendocino County policies allow commercial cannabis cultivation sites on agricultural lands, including Williamson Act contracted lands, including allowable zoning designations for existing and future cultivation activities within the County, including land zoned for agricultural uses. There would be no impact on conversion of farmland to nonagricultural use or conflict with zoning for agricultural use or a Williamson Act contract.</p>	NI	No mitigation is required for this impact.	LTS
<p><b>Impact 3.2-2: Convert Substantial Forest Land, Conflict with or Cause Rezoning of Forest Land or Timberland Production Zone, or Involve Other Changes in the Existing Environment Which, Because of Their Location or Nature, Could Result in Substantial Conversion of Forest Land to Non-Forest Use</b> Existing provisionally licensed commercial cannabis cultivation and expanded or new licensed commercial cannabis cultivation sites could lead to the clearing of forest areas and conflict with timber production activities. However, existing and new licensed commercial cannabis cultivation sites would be required to comply with MCCR and Attachment A (General Requirements and Prohibitions) of the SWRCB Order WQ 2023-0102-DWQ (Section 1) which includes protection measures for timber resources. This impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<b>Air Quality</b>			
<p><b>Impact 3.3-1: Generate Short-Term Construction-Related Emissions of ROG, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub></b>                      Construction related to the potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution operations could result in emission of ROG, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> from the operation of heavy-duty equipment, vendor and worker commute trips, and application of architectural coatings. From a project-level, construction of individual licensed commercial cannabis cultivation sites would not generate construction emissions of ROG, NO<sub>x</sub>, PM<sub>10</sub> exhaust, or PM<sub>2.5</sub> exhaust exceeding MCAQMD's average daily mass emissions thresholds of significance. Because the project's emissions of these pollutants would not exceed MCAQMD's average daily mass emissions thresholds, this impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS
<p><b>Impact 3.3-2: Generate Long-Term Operational Emissions of ROG, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub></b>                      Operation of existing provisionally licensed, expansion of existing provisionally licensed, and operation of new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could generate operational emissions of criteria air pollutants and ozone precursors exceeding MCAQMD's average daily mass emissions thresholds of significance. Because operational emissions of criteria air pollutants and ozone precursors from individual commercial cannabis cultivation sites would not be greater than MCAQMD's daily mass emissions threshold, this impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS
<p><b>Impact 3.3-3: Expose a Substantial Number of People to Odors Considered Objectionable and That Have Adverse Effects</b>                      The cultivation, processing, and distribution of cannabis by existing provisionally licensed, potentially expanded of existing provisionally licensed, and new licensed commercial cannabis cultivation sites could generate objectionable odors with adverse effects for residents and other sensitive land uses. This impact would be significant and unavoidable.</p>	SU	Compliance with MCCR sections 10A.17.040(C), 10A.17.070(P), 10A.17.160, 20.240.070(C), and 20.240.070 (D) would provide all feasible measures to address and minimize odor impacts as well as corrective actions for licensed commercial cannabis cultivation sites that routinely generate nuisance odor impacts off-site. However, it is possible that nuisance odor impacts would occur occasionally before abatement for expansion of existing provisionally licensed and new licensed outdoor and mixed-light commercial cannabis cultivation sites not contained within buildings or greenhouses. There are no feasible mitigation measures for completely avoiding the potential for occasional odor nuisance impacts because there is no reliable method to contain odors on-site under all atmospheric conditions during harvest season. There are no effective mitigation measures to ensure elimination of cannabis odors. This impact would be significant and unavoidable.	SU

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<b>Archaeological, Historical, and Tribal Cultural Resources</b>			
<p><b>Impact 3.4-1: Cause a Substantial Adverse Change in the Significance of a Historical Resource</b></p> <p>Implementation of the project could result in existing and new licensed commercial cannabis cultivation sites obtaining annual licensure on lands that contain or are near historic resources. This could result in damage to or destruction of a historic building or structure, thereby resulting in a substantial adverse change in the significance of a historical resource as defined in State CEQA Guidelines, section 15064.5. This would be a potentially significant impact.</p>	PS	<p><b>Mitigation Measure 3.4-1: Implement Additional Measures to Protect Historic Resources</b></p> <p>As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1 - Term 21), the DCC shall require new licensed commercial cannabis cultivation sites in Mendocino County to identify and evaluate all historic-age (over 45 years in age) buildings and structures that are proposed to be removed or modified as part of new licensed commercial cannabis cultivation site operations. This shall include preparation of a historic structure report and evaluation of resources to determine their eligibility for recognition under federal, state, or county local official register of historic resources criteria. The evaluation shall be prepared by an architectural historian or historical architect meeting the Secretary of the Interior’s Standards and Guidelines for Archeology and Historic Preservation, Professional Qualification Standards. The evaluation shall comply with State CEQA Guidelines, section 15064.5(b).</p> <p>If resources eligible for inclusion in the NRHP, CRHR, or local official register of historic resources are identified, an assessment of impacts on these resources shall be included in the report, as well as detailed measures to avoid impacts. If avoidance of a significant architectural/built-environment resource is not feasible, additional mitigation options include, but are not limited to, specific design plans for historic districts or plans for alteration or adaptive reuse of a historical resource that follows the Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitation, Restoring, and Reconstructing Historic Buildings.</p>	SU
<p><b>Impact 3.4-2: Cause a Substantial Adverse Change in the Significance of Unique Archaeological Resources</b></p> <p>New and existing licensed commercial cannabis cultivation sites associated with implementation of the project could be located on properties that contain known or unknown archaeological resources. Ground-disturbing activities associated with new or expanded licensed commercial cannabis cultivation site operations could result in discovery or damage of yet undiscovered archaeological resources as defined in State CEQA Guidelines, section 15064.5. However, licensed cannabis cultivation sites would be required to comply with Attachment A (Section 1, General Requirements and Prohibitions) of the SWRCB Order WQ 2023-0102-DWQ, which includes protection measures to archaeological resources which would reduce impacts less than significant.</p>	LTS	No mitigation is required for this impact.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<p><b>Impact 3.4-3: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource</b>                      Pursuant to AB 52, the DCC sent letters inviting tribal consultation to the 22 tribal contacts identified by the NAHC. No responses were received as a result of AB 52 notification. Although no tribal cultural resources, defined by CEQA section 21074, were identified, it is possible that tribal cultural resources could be identified through the development of new or expanded licensed commercial cannabis cultivation sites. Compliance with CEQA section 21080.3.2 and section 21084.3(a) would render this impact less than significant.</p>	LTS	No mitigation is required for this impact.	LTS
<p><b>Impact 3.4-4: Disturb Human Remains</b>                      Previously undiscovered human remains could be discovered when soils are disturbed during construction of licensed commercial cannabis cultivation sites under the project. Compliance with Health and Safety Code section 7050.5 and California Public Resources Code section 5097 would make this impact less than significant.</p>	LTS	No mitigation is required for this impact.	LTS
<b>Biological Resources</b>			
<p><b>Impact 3.5-1: Result in Disturbance to or Loss of Special-Status Plant Species and Habitat</b>                      Potential land use conversion and development from the potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations under the project could result in disturbance to or loss of special-status plant species if they are present. Additionally, expanded and new licensed commercial cannabis cultivation sites could result in the introduction or spread of invasive plants during vegetation removal, ground disturbance, or introduction of off-site soils, which could result in exclusion of special-status plants. Because the loss of special-status plants could substantially affect the abundance, distribution, and viability of local and regional populations of these species, this impact would be potentially significant.</p>	PS	<p><b>Mitigation Measure 3.5-1a: Conduct Preapproval Biological Surveys</b>                      As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A: General Requirements and Prohibitions – Term 4 and 10 and MCCR 10A.17.100(A)(2)), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to provide the following technical information. It shall be used to determine whether there is potential for special-status plant species, special-status wildlife species, or sensitive habitats identified in this Program EIR to be present within a proposed expanded or new commercial cannabis cultivation sites seeking a license from DCC.</p>	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		<p>Before approval of any application for commercial cannabis operations, a biological survey shall be conducted by a qualified biologist. The survey area shall include the proposed expanded or new commercial cannabis cultivation sites, including areas of anticipated construction and ground disturbance, as well as staging areas, areas of anticipated light or noise impact, ingress and egress routes, and utility routes. The survey area shall be large enough to encompass areas subject to both direct and indirect impacts. The qualified biologist shall assess the habitat suitability of the proposed development area for all special-status plants, special-status wildlife, and sensitive habitats identified as having potential to occur in the County. The biologist shall provide a letter report to the project applicant and DCC with evidence to support a conclusion as to whether special-status species and sensitive habitats are present or are likely to occur in the proposed development area. At a minimum, the letter report shall include:</p> <ul style="list-style-type: none"> <li>▪ date, time, and weather conditions if a reconnaissance survey is conducted as part of the biological survey;</li> <li>▪ a description and explanation of whether the site conditions are considered typical or atypical, if a reconnaissance survey is conducted as part of the biological survey;</li> <li>▪ a map depicting the proposed development area and the unique, rare, and special-status species, sensitive habitats, or sensitive natural communities found;</li> <li>▪ a vegetation map of the proposed development area using the National Vegetation Classification System (e.g., A Manual of California Vegetation) and an associated table, including acreage of vegetation types that could be adversely affected by project implementation;</li> <li>▪ a special-status species table generated from review of the CNDDDB, the California Native Plant Society Inventory of Rare and Endangered Plants, lists maintained by USFWS, and the most recent, best-available range information for special-status species;</li> <li>▪ a description of survey methods and any protocols utilized during the survey; and</li> <li>▪ a list of common and special-status species and habitats observed in the proposed development area.</li> </ul>	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		<ul style="list-style-type: none"> <li>▶ If the biological survey identifies no potential for special-status plants, special-status wildlife, or sensitive habitats to occur, the applicant shall not be subject to any additional biological resource protection measures identified in the ordinance.</li> <li>▶ If special-status species or sensitive habitats are present or have the potential to be present, the letter report will include a discussion of potential direct and indirect impacts on these resources, and the appropriate biological resource protection measures identified in Mitigation Measures 3.5-1b, 3.5-1c, 3.5-2a through 3.5-2o, 3.5-4a, 3.5-4b, 3.5-5, and 3.5-6b shall be implemented.</li> </ul> <p><b>Mitigation Measure 3.5-1b: Conduct Special-Status Plant Surveys and Implement Avoidance Measures and Mitigation</b></p> <p>As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to provide the following information should special-status plant species are determined to have potential to be present on the proposed commercial cannabis cultivation sites:</p> <ul style="list-style-type: none"> <li>▶ During the blooming period for the special-status plant species with potential to occur on the site, a qualified botanist shall conduct protocol-level surveys for special-status plants in all proposed disturbance areas following survey methods from the CDFW <i>Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities</i> (CDFW 2018a).</li> <li>▶ If special-status plants are not identified, the botanist shall document the findings in a letter report to the applicant, DCC, and CDFW, and no further mitigation shall be required.</li> <li>▶ If special-status plant species are found, the qualified botanist shall consult with CDFW to designate a no-disturbance buffer and/or redesign of the commercial cannabis cultivation site improvements that shall be reflected in application materials to DCC. If the special-status plant species cannot be avoided, the application shall be denied.</li> </ul>	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		<p><b>Mitigation Measure 3.5-1c: Implement Measures to Avoid Introduction or Spread of Invasive Plant Species</b></p> <p>As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 11), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to provide documentation that the following measures will be implemented:</p> <ul style="list-style-type: none"> <li>▶ The application shall include identification of invasive plant species that occur on the site and where they are located. The application shall identify specific measures to be employed for the removal of invasive species and on-site management practices.</li> <li>▶ Invasive plant species (defined above in the impact discussion) shall be removed from the site to the extent feasible, using measures appropriate to the species. For example, species that cannot easily reroor, resprout, or disperse seeds may be left on site in a debris pile. Species that resprout readily (e.g., English ivy) or disperse seeds (e.g., pampas grass) should be hauled off-site and disposed of appropriately at a landfill site. A qualified botanist shall determine the appropriate percent cover of invasive species to remove for the site and what type of restoration plantings will be appropriate for the site.</li> <li>▶ The site shall be monitored annually to ensure successful removal and prevention of new infestations of invasive species.</li> <li>▶ Heavy equipment and other machinery shall be inspected for the presence of invasive species before on-site use, and shall be cleaned before entering the site, to reduce the risk of introducing invasive plant species.</li> </ul>	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<p><b>Impact 3.5-2: Result in Disturbance to or Loss of Special-Status Wildlife Species and Habitat</b></p> <p>Potential land use conversion and development from the potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations under the project could adversely affect several special-status wildlife species. Expanded and new licensed commercial cannabis cultivation sites may include ground disturbance, vegetation removal, and overall conversion of wildlife habitat, which could result in the disturbance to or loss of individuals and reduced breeding productivity of these species. Special-status wildlife species are protected under the ESA, CESA, the Fish and Game Code, CEQA, and other regulations. Because the loss of special-status wildlife species and their habitat could substantially affect the abundance, distribution, and viability of local and regional populations of these species, this impact would be potentially significant.</p>	<p>PS</p>	<p><b>Mitigation Measure 3.5-2a: Conduct Preconstruction Surveys for Special-Status Amphibians</b></p> <p>As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures if special-status amphibian species are determined to have potential to be present on the proposed commercial cannabis cultivation sites:</p> <ul style="list-style-type: none"> <li>▶ If California red-legged frogs are detected during the initial biological survey (see Mitigation Measure 3.5-1a) or are determined to be likely to occur (i.e., aquatic or upland habitats potentially suitable for the species are present on the site), then it shall be assumed that commercial cultivation activities could result in take of this species, and the application shall be denied.</li> <li>▶ If special-status amphibians other than California red-legged frog are detected during the initial biological survey (see Mitigation Measure 3.5-1a) or are determined to be likely to occur, consultation with CDFW shall be initiated to determine whether mitigation measures, such as project design modifications, relocation of the site, relocation of individual animals, or installation of exclusionary fencing, shall be necessary and appropriate.</li> <li>▶ Regardless of detection during the initial biological survey, if habitat suitable for special-status amphibians other than California red-legged frog is present in the proposed development area, a qualified biologist familiar with the life cycle of California giant salamander, foothill yellow-legged frog, northern red-legged frog, Pacific tailed frog, red-bellied newt, and southern torrent salamander shall conduct preconstruction surveys of proposed new development activities 48 hours before new development activities. Preconstruction surveys for special-status amphibian species shall be conducted throughout the proposed construction area and a minimum 400-foot buffer around the proposed development area or other buffer size as recommended by CDFW. Surveys shall consist of “walk and turn” surveys of areas beneath surface objects (e.g., rocks, leaf litter, moss mats, coarse woody debris) for salamanders, and visual searches for frogs. Preconstruction surveys shall be conducted during the appropriate season to maximize potential for observation for each species, and appropriate surveys shall be conducted for the applicable life stages (i.e., eggs, larvae, adults).</li> </ul>	<p>LTS</p>

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		<ul style="list-style-type: none"> <li>▶ If special-status amphibians are not detected during the preconstruction survey and, for California red-legged frog, the species is determined to be unlikely to occur, then further mitigation is not required.</li> <li>▶ If special-status amphibians other than California red-legged frog are detected during the preconstruction survey, work on the site shall not commence until the applicant has consulted with CDFW as described above. Injury to or mortality of special-status amphibians shall be avoided by modifying project design, relocating the commercial cannabis cultivation site, or relocating individual animals.</li> </ul> <p><b>Mitigation Measure 3.5-2b: Conduct Surveys for Western Pond Turtle and Relocate Individuals</b></p> <p>As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures if western pond turtle are determined to have potential to be present on the proposed commercial cannabis cultivation sites:</p> <ul style="list-style-type: none"> <li>▶ If pond turtles are detected during the initial biological survey (see Mitigation Measure 3.5-1a) or are determined to be likely to occur, consultation with CDFW shall be initiated to determine whether additional measures, such as project design modifications, relocation of the site, relocation of individual animals by a qualified biologist with a valid CDFW Scientific Collecting Permit, or installation of exclusionary fencing, shall be necessary and appropriate.</li> <li>▶ Regardless of detection during the initial biological survey, if aquatic habitat suitable for western pond turtle is present in the proposed development area, a qualified biologist familiar with the life history of western pond turtle shall conduct preconstruction surveys of proposed new development activities within a minimum of 1,500 feet of any aquatic habitat 24 hours before such development activities or as recommended by CDFW.</li> <li>▶ If pond turtles are not detected during the preconstruction survey, then no further mitigation is required.</li> </ul>	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		<ul style="list-style-type: none"> <li>▶ If pond turtles are detected during the preconstruction survey, then consultation with CDFW shall be initiated as described above. Injury or mortality of western pond turtle shall be avoided through project design modification, commercial cannabis cultivation site relocation, or relocation of the turtle by a qualified biologist with a valid CDFW Scientific Collecting Permit. If relocation of western pond turtles is determined to be necessary, turtles shall be relocated to similar nearby habitat free of predators (e.g., racoon, coyote, raptors, bullfrog, nonnative turtles, other western pond turtles) as determined by the qualified biologist. If western pond turtles are relocated, a report shall be submitted electronically to CDFW within 15 days of the relocation. The report shall include the location, date, time, and duration of collection and release; the number of individuals relocated; and identification of the qualified biologist.</li> <li>▶ If western pond turtle, which is currently a candidate for listing under the ESA, is listed as threatened in the future, take shall be prohibited. If take cannot be avoided, the application shall be denied.</li> </ul> <p><b>Mitigation Measure 3.5-2c: Conduct Preconstruction Nesting Raptor Surveys and Establish Protective Buffers</b></p> <p>As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of nesting raptors (excluding burrowing owl and northern spotted owl) that have potential to be present on or adjacent the proposed commercial cannabis cultivation sites:</p> <ul style="list-style-type: none"> <li>▶ To minimize the potential for loss of nesting raptors, tree removal activities shall occur only during the nonbreeding season (September 1–January 31), if feasible.</li> </ul>	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		<ul style="list-style-type: none"> <li>▶ If removal of trees cannot be avoided during the breeding season, before removal of any trees or ground-disturbing activities between February 1 and August 31, a qualified biologist shall conduct preconstruction surveys for nesting raptors and shall identify active nests within a certain distance, depending on the species that are known or have potential to be present. For northern harrier, surveys shall occur at a minimum of 500 feet of the proposed development area or as recommended by CDFW. For northern goshawk and/or white-tailed kite, surveys shall occur at a minimum of 0.25 mile of the proposed development area or as recommended by CDFW. Additionally, for American peregrine falcon, bald eagle, and golden eagle, surveys shall occur at a minimum of 0.5 mile of the proposed development area or as recommended by CDFW. The surveys shall be conducted between February 1 and August 31.</li> <li>Impacts on nesting raptors, including direct impacts and indirect impacts (e.g., noise, presence of construction crews) shall be avoided by establishing appropriate buffers around active nest sites identified during preconstruction raptor surveys. Factors to be considered for determining buffer size shall include the presence of natural buffers provided by vegetation or topography, nest height, locations of foraging territory, and baseline levels of noise and human activity. Buffer size may be adjusted if the qualified biologist and the applicant, in consultation with CDFW, determine that such an adjustment would not be likely to adversely affect the nest. The buffer areas shall be protected with construction fencing, and no activity shall occur within the buffer areas until the qualified biologist has determined, in coordination with CDFW, that the young have fledged, the nest is no longer active, or reducing the buffer would not likely result in nest abandonment. Monitoring of the nest by a qualified biologist during and after construction activities (e.g., ground disturbance, vegetation removal, installation of commercial cannabis cultivation sites) shall be required if the activity has potential to adversely affect the nest.</li> <li>▶ Removal of bald and golden eagle nests is prohibited regardless of the occupancy status under the federal Bald and Golden Eagle Protection Act. If bald or golden eagle nests are found during preconstruction surveys, then the nest tree shall not be removed.</li> <li>▶ To avoid the potential for loss of northern goshawk and their nests, or loss or fragmentation of occupied or habitat suitable for northern goshawk, removal of old-growth habitat shall be prohibited, as outlined in Mitigation Measure 3.5-4a.</li> </ul>	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		<p>▶ Trees shall not be removed during the breeding season for nesting raptors unless a survey by the qualified biologist verifies that there is not an active nest in the tree.</p> <p><b>Mitigation Measure 3.5-2d: Conduct Take Avoidance Survey for Burrowing Owl, Implement Avoidance Measures, and Compensate for Loss of Occupied Burrows</b></p> <p>As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of burrowing owl that have potential to be present on or adjacent the proposed commercial cannabis cultivation sites:</p> <ul style="list-style-type: none"> <li>▶ A qualified biologist shall conduct a focused survey for burrowing owls in areas of habitat suitable for the species (e.g., grasslands, agricultural areas) on and within a minimum of 1,640 feet (500 meters) of the commercial cannabis cultivation site no less than 14 days before initiating ground disturbance activities using survey methods described in Appendix D of the Staff Report on Burrowing Owl Mitigation (CDFG 2012) or as recommended by CDFW.</li> <li>▶ If no occupied burrows are found, the qualified biologist shall submit a report documenting the survey methods and results to the applicant and CDFW, and no further mitigation shall be required.</li> <li>▶ If an active burrow is found within a minimum of 1,640 feet of ground-disturbing activities (or as recommended by CDFW) that would occur during the nonbreeding season (September 1 through January 31), the applicant shall establish and maintain a minimum protection buffer of 164 feet (50 meters) around the occupied burrow throughout construction. The actual buffer size shall be determined by the qualified biologist based on the time of year and level of disturbance in accordance with guidance provided in the Staff Report on Burrowing Owl Mitigation (CDFG 2012). The protection buffer shall be adjusted if, during consultation with CDFW, a qualified biologist determines that an alternative buffer would not disturb burrowing owl use of the burrow because of particular site features or other buffering measures.</li> </ul>	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		<p>▶ If an active burrow is found during the breeding season (February 1 through August 31), occupied burrows shall not be disturbed and shall be provided with a protective buffer at a minimum of 164 feet unless a qualified biologist verifies through noninvasive means that either (1) the birds have not begun egg laying or (2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. There is an option for the size of the buffer to be adjusted depending on the time of year and level of disturbance as outlined in the burrowing owl staff report. The size of the buffer shall be reduced if a broad-scale, long-term monitoring program acceptable to CDFW is implemented so that burrowing owls are not adversely affected.</p> <p><b>Mitigation Measure 3.5-2e: Conduct Northern Spotted Owl Preconstruction Habitat Suitability Surveys and Determine Presence or Absence of the Species</b></p> <p>As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of northern spotted owl from proposed commercial cannabis cultivation sites:</p> <ul style="list-style-type: none"> <li>▶ To avoid the potential for loss of northern spotted owl and their nests, or loss or fragmentation of occupied or habitat suitable for northern spotted owl, removal of old-growth habitat shall be prohibited, as outlined in Mitigation Measure 3.5-4a.</li> <li>▶ If the area of proposed new development activities is within habitat suitable for northern spotted owl (e.g., mature forest), and a qualified biologist determines it is within a minimum of 1.3 miles (average species home range) of a known occurrence of northern spotted owl, or as recommended by CDFW, the following measures shall be followed:</li> </ul>	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		<ul style="list-style-type: none"> <li>▪ Before removal of any trees or ground-disturbing activities adjacent or in nesting, roosting, or foraging habitat (e.g., forest clearings) for spotted owl, a qualified biologist familiar with the species and protocol, shall conduct preconstruction surveys for nests within a minimum 1.3-mile buffer around the site as described in <i>Protocol for Surveying Proposed Management Activities That May Impact Northern Spotted Owls</i> (USFWS 2012) and the 2019 revision to <i>Northern Spotted Owl Take Avoidance Analysis and Guidance for Private Lands in California</i> (USFWS 2019) or as recommended by CDFW. Surveys shall take place between March 1 and August 31. Three complete surveys spaced at least 7 days apart must be completed by June 30. Six complete surveys over the course of 2 years must be completed to determine presence or absence of northern spotted owl.</li> <li>▪ If northern spotted owls are determined to be absent at a minimum of 1.3 miles from the site or as recommended by CDFW, then further mitigation is not required.</li> <li>▪ If northern spotted owls are determined to be present within a minimum of 1.3 miles of the site or as recommended by CDFW, then it is presumed that habitat removal could cause harm to northern spotted owl populations in the area and could result in direct take of northern spotted owls. If northern spotted owls are determined to be present within a minimum of 1.3 miles of the site or as recommended by CDFW, proposed commercial cannabis cultivation activities shall not be permitted.</li> </ul> <p><b>Mitigation Measure 3.5-2f: Conduct Preconstruction Special-Status Nesting Bird Surveys and Establish Protective Buffers</b>                      As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of grasshopper sparrow, little willow flycatcher, olive-sided flycatcher, purple martin, tricolored blackbird, western yellow-billed cuckoo, yellow warbler, yellow-breasted chat, or other bird nests from proposed commercial cannabis cultivation sites:</p> <ul style="list-style-type: none"> <li>▶ To minimize the potential for disturbance to or loss of grasshopper sparrow, little willow flycatcher, olive-sided flycatcher, purple martin, tricolored blackbird, western yellow-billed cuckoo, yellow warbler, yellow-breasted chat, or other bird nests, vegetation removal activities shall occur only during the nonbreeding season (September 1–January 31).</li> </ul>	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		<ul style="list-style-type: none"> <li>▶ If little willow flycatcher is detected during the initial biological survey (see Mitigation Measure 3.5-1a) or is determined to be likely to occur based on the presence of suitable habitat, a protocol-level survey shall be conducted by a qualified biologist familiar with the species and the protocol before removal of any vegetation or any ground disturbance. The protocol-level survey shall include methods outlined in A Willow Flycatcher Survey Protocol for California (Bombay et al. 2003).</li> <li>▶ If little willow flycatcher is determined to be present during the protocol-level survey, no development activity shall occur during the breeding season (May 1 through August 31) in and within a minimum of 300 feet of the little willow flycatcher habitat, or as recommended by CDFW. Development activities in or adjacent to identified little willow flycatcher habitat shall not damage or destroy willows or other riparian shrubs unless agreed upon through consultation with CDFW.</li> <li>▶ If grasshopper sparrow, olive-sided flycatcher, purple martin, tricolored blackbird, western yellow-billed cuckoo, yellow warbler, yellow-breasted chat, or other bird nests are detected during the initial biological survey (see Mitigation Measure 3.5-1a) or are determined to be likely to occur based on the presence of suitable habitat, before removal of any vegetation or any ground disturbance between February 1 and August 31, a qualified biologist shall conduct preconstruction surveys for nests on any structure or vegetation planned for removal, as well as nests located within a 100-foot buffer around the site or as recommended by CDFW. The surveys shall be conducted no more than 7 days before construction commences. If no active nests are found during focused surveys, no further action under this measure shall be required. If active nests are located during the preconstruction surveys, the biologist shall notify CDFW. If deemed necessary by CDFW, modifications to the project design to avoid removal of occupied habitat while still achieving project objectives may be required. If DCC determines in consultation with CDFW that avoidance is not feasible or conflicts with project objectives, construction shall be prohibited within a minimum of 100 feet of the nest to avoid disturbance, depending on the species identified, until the nest is no longer active. Final avoidance buffer size shall be determined by a qualified biologist in consultation with CDFW.</li> </ul>	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		<p><b>Mitigation Measure 3.5-2g: Conduct Marbled Murrelet Preconstruction Habitat Suitability Surveys and Determine Presence or Absence of the Species</b></p> <p>As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of marbled murrelet from proposed commercial cannabis cultivation sites:</p> <ul style="list-style-type: none"> <li>▶ To avoid the potential for loss of marbled murrelet and their nests, or loss or fragmentation of occupied or habitat suitable for marbled murrelet, removal of old-growth habitat shall be prohibited, as outlined in Mitigation Measure 3.5-4a.</li> <li>▶ If the area of proposed new development activities is in or adjacent to habitat suitable for marbled murrelet (e.g., coniferous forest), as determined by a qualified biologist, the following measures shall be followed:                     <ul style="list-style-type: none"> <li>▪ Before removal of any trees or ground-disturbing activities adjacent to or in habitat suitable for marbled murrelet between April 15 and August 5, a qualified biologist familiar with the life history of the marbled murrelet shall conduct preconstruction surveys for nests within a 0.25-mile buffer around the site as described in Methods for Surveying Marbled Murrelets in Forests: A Revised Protocol for Land Management and Research (Evans Mack et al. 2003) or as recommended by CDFW.</li> <li>▪ If marbled murrelets are determined to be absent at a minimum of 0.25 mile from the site or as recommended by CDFW, then further mitigation is not required.</li> </ul> </li> <li>▶ If marbled murrelets are determined to be present on the site, a 0.25-mile buffer shall be established around occupied nest sites or a buffer as recommended by CDFW. No project activity may occur within the 0.25-mile buffer area or other recommended buffer by CDFW until the end of marbled murrelet breeding season (August 6). The nest tree and any adjacent trees that provide screening or canopy cover to the nest shall be retained regardless of the diameter of the tree.</li> </ul>	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		<p><b>Mitigation Measure 3.5-2h: Conduct Crotch Bumble Bee and Western Bumble Bee Preconstruction Habitat Suitability Surveys and Focused Surveys</b></p> <p>As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of Crotch bumble bee and western bumble bee from proposed commercial cannabis cultivation sites:</p> <ul style="list-style-type: none"> <li>▶ Before implementation of ground-disturbing activities, a qualified biologist shall conduct a habitat assessment for Crotch bumble bee and western bumble bee following the guidance in the Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species (CDFW 2023). Results of the habitat assessment shall be submitted to the applicant, DCC, and CDFW before initiating ground-disturbing activities. If the area of proposed new development activities contains habitat suitable for Crotch bumble bee or western bumble bee (e.g., nesting habitat, foraging habitat), the following measures shall be followed:                     <ul style="list-style-type: none"> <li>▪ To avoid impacts on Crotch bumble bee and western bumble bee, cannabis-related development activities shall not occur in habitats suitable for these species from April through September (i.e., flight season) if feasible.</li> <li>▪ Focused surveys for Crotch bumble bees and western bumble bees shall be conducted following the guidance in the Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species (CDFW 2023). Crotch bumble bee and western bumble bee presence may also be assumed. If Crotch bumble bees or western bumble bees are detected during focused surveys or presence is assumed, the following measure shall be implemented:                             <ul style="list-style-type: none"> <li>• If Crotch bumble bees or western bumble bees are detected during review and surveys or presence is assumed, the qualified biologist shall contact CDFW for coordination regarding avoidance and mitigation. Avoidance and mitigation measures may include seasonal avoidance or physical avoidance of nest or overwintering sites.</li> </ul> </li> </ul> </li> </ul>	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		<p><b>Mitigation Measure 3.5-2i: Avoid Overwintering Monarch Habitat and Conduct Preconstruction Monarch Survey</b>                      As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of the monarch from proposed commercial cannabis cultivation sites:</p> <ul style="list-style-type: none"> <li>▶ To avoid impacts on monarch butterfly, new development related to cannabis activities shall not occur in overwintering sites identified by Xerces (2023).</li> <li>▶ No more than 14 days before implementing project activities that would result in ground disturbance or vegetation removal during the time when milkweed plants could host monarch eggs or caterpillars (approximately mid-March through late September), a qualified biologist shall conduct focused surveys for milkweed plant and inspect these plants for monarch eggs, larvae (i.e., caterpillars), and pupae. If monarch eggs, caterpillars, or pupae are found, the host plants shall be avoided until metamorphosis is completed and adult butterflies emerge and leave the host plant. If no eggs or caterpillars are detected, no additional protection measures are necessary.</li> </ul> <p><b>Mitigation Measure 3.5-2j: Conduct Preconstruction American Badger Survey and Establish Protective Buffers</b>                      As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of the American badger from proposed commercial cannabis cultivation sites:</p> <ul style="list-style-type: none"> <li>▶ Before the commencement of construction activities, a qualified wildlife biologist shall conduct surveys of the grassland or agricultural habitats slated for conversion or disturbance on the site to identify any American badger burrows/dens. These surveys shall be conducted no more than 30 days before the start of construction.</li> </ul>	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		<ul style="list-style-type: none"> <li>▶ If occupied American badger burrows are not found, further mitigation shall not be required.</li> <li>▶ If occupied American badger burrows are found, impacts on active badger dens shall be avoided through an exclusion zone around all active dens, the size and shape of which shall be established by a qualified biologist , in consultation with CDFW. Within the exclusion zone, all project activities shall be prohibited until denning activities are complete or the den is abandoned. The qualified biologist shall monitor each den once per week to track the status of the den and to determine when it is no longer occupied.</li> </ul> <p><b>Mitigation Measure 3.5-2k: Conduct Preconstruction Fisher Survey and Preserve Active Den Sites and Associated Habitats</b></p> <p>As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of the fisher from proposed commercial cannabis cultivation sites:</p> <ul style="list-style-type: none"> <li>▶ To minimize the potential for loss of or disturbance to fisher habitat and dens, removal of old-growth habitat shall be prohibited, as outlined in Mitigation Measure 3.5-4. Habitat features within non-old-growth habitat, such as large trees, large snags, coarse woody debris, and understory vegetation (e.g., shrubs), in sites that overlap the range of fisher shall be retained on the site to the extent feasible, to maintain connectivity of fisher habitat.</li> <li>▶ Before commencement of new development related to cannabis activities occurring during the fisher denning season (March 1 to July 31), including tree removal (non-old-growth), a qualified wildlife biologist shall conduct preconstruction surveys of all suitable habitat on the site and shall identify sightings of individual fishers, as well as potential dens.</li> <li>▶ If individuals or potential or occupied dens are not found, further mitigation shall not be required.</li> </ul>	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		<ul style="list-style-type: none"> <li>▶ If fishers are identified or if potential dens of this species are located, an appropriate method shall be used by the qualified wildlife biologist to confirm whether a fisher is occupying the den. This may involve use of remote field cameras, track plates, or hair snares. Other devices, such as a fiber optic scope, may be used to determine occupancy. If no fisher occupies the potential den, the entrance shall be temporarily blocked so that no other animals occupy the area during ground disturbance, vegetation removal, or installation of commercial cannabis cultivation sites, but only after it has been fully inspected. The blockage shall be removed after these activities have been completed.</li> <li>▶ If a den is found to be occupied by a fisher, a no-disturbance buffer shall be placed around the occupied den location. The no-disturbance buffer shall include the den tree (or other structure) plus a suitable buffer as determined by the biologist in coordination with CDFW. Construction activities in the no-disturbance buffer shall be avoided until the nest is unoccupied as determined by a qualified wildlife biologist in coordination with CDFW.</li> </ul> <p><b>Mitigation Measure 3.5-2I: Conduct Preconstruction Surveys for Ringtail and Implement Avoidance Measures</b></p> <p>As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of the ringtail from proposed commercial cannabis cultivation sites:</p> <ul style="list-style-type: none"> <li>▶ Before commencement of new development related to cannabis activities occurring during the ringtail nesting season (not well defined but likely approximately March 1 to July 31), including tree or shrub removal, a qualified wildlife biologist shall conduct preconstruction surveys of all habitat suitable for ringtail on the site and shall identify sightings of individual ringtails, as well as potential dens.</li> <li>▶ If individuals or potential or occupied dens are not found, further mitigation shall not be required.</li> </ul>	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		<ul style="list-style-type: none"> <li>▶ If ringtails are detected or if potential dens of this species are located, an appropriate method shall be used by the qualified wildlife biologist to confirm whether a ringtail is occupying the den. This may involve use of remote field cameras, track plates, or hair snares. Other devices, such as a fiber optic scope, may be used to determine occupancy. If no ringtail occupies the potential den, the entrance shall be temporarily blocked so that no other animals occupy the area during ground disturbance, vegetation removal, or installation of commercial cannabis cultivation sites, but only after it has been fully inspected. The blockage shall be removed after these activities have been completed.</li> <li>▶ If a den is found to be occupied by a ringtail, a no-disturbance buffer shall be placed around the occupied den location. The no-disturbance buffer shall include the den tree (or other structure) plus a buffer the size of which shall be determined by the biologist in coordination with CDFW to prevent disturbance and abandonment. Construction activities in the no-disturbance buffer shall be avoided until the den is unoccupied as determined by a qualified wildlife biologist in coordination with CDFW.</li> </ul> <p><b>Mitigation Measure 3.5-2m: Conduct Preconstruction Bat Surveys and Establish Protective Buffers</b></p> <p>As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of the pallid bat, Townsend’s big-eared bat, and western red bat from proposed commercial cannabis cultivation sites:</p> <ul style="list-style-type: none"> <li>▶ Before commencing any development related to cannabis activities, a qualified biologist shall conduct surveys for roosting bats. If evidence of bat use is observed, the species and number of bats using the roost shall be determined. Bat detectors may be used to supplement survey efforts. If no evidence of bat roosts is found, then no further study shall be required.</li> </ul>	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		<ul style="list-style-type: none"> <li>▶ If pallid bats, Townsend’s big-eared bats, or western red bats are detected during the surveys, a program addressing mitigation for the specific occurrence shall be submitted to CDFW by the qualified biologist subject to the review and approval of CDFW. Implementation of the mitigation plan shall be a condition of project approval. The mitigation plan shall establish a buffer area around the roost during hibernation or while females in maternity colonies are nursing young that is large enough to prevent disturbance to the colonies.</li> </ul> <p><b>Mitigation Measure 3.5-2n: Conduct Preconstruction Point Area Mountain Beaver Surveys and Avoid Active Burrows</b></p> <p>As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of the Point Arena mountain beaver from proposed commercial cannabis cultivation sites:</p> <ul style="list-style-type: none"> <li>▶ To avoid impacts on Point Arena mountain beaver, focused surveys (i.e., burrow searches) for the species shall be conducted by a qualified biologist before new development related to cannabis activities within a minimum of 200 feet of aquatic habitat (e.g., near creeks and drainages) in coastal habitats in Point Arena, the immediate area surrounding Point Arena, and up to approximately 5 miles inland of Point Arena or as recommended by CDFW.</li> <li>▶ If an active Point Arena mountain beaver burrow is not detected during focused surveys, then further mitigation for the species shall not be required.</li> <li>▶ If an active Point Arena mountain beaver burrow is identified by a qualified biologist, a no-disturbance buffer of at least 250 feet shall be established around the burrow, or as recommended by CDFW, and no project related activities shall occur within this buffer.</li> </ul>	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		<p><b>Mitigation Measure 3.5-2o: Conduct Preconstruction Sonoma Tree Vole Surveys and Relocate Individuals</b></p> <p>As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of the Sonoma tree vole from proposed commercial cannabis cultivation sites:</p> <ul style="list-style-type: none"> <li>▶ To minimize the potential for loss of or disturbance to Sonoma tree vole habitat and nests, removal of old-growth habitat shall be prohibited, as outlined in Mitigation Measure 3.5-4a.</li> <li>▶ Before commencing any tree or other vegetation removal activities or ground disturbance, a qualified biologist shall conduct surveys for Sonoma tree vole nests (e.g., searching for nests in trees on the site and confirming that nests belong to voles rather than squirrels or birds). If no evidence of Sonoma tree vole nests is found, then no further mitigation for the species shall be required.</li> <li>▶ If occupied trees or nests are identified within a minimum of 100 feet of the site or as recommended by CDFW, the qualified biologist shall determine whether project development activities shall adversely affect the voles, based on factors such as noise level of development activities or line of sight between the tree and the disturbance source. If it is determined that development activities would not affect the voles, then development can proceed without protective measures.</li> <li>▶ If the biologist determines that development activities would likely disturb Sonoma tree voles, the proposed area of disturbance shall be relocated a minimum of 200 feet from the nest or as recommended by CDFW.</li> </ul>	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		<p><b>Mitigation Measure 3.5-2p: Implement Generator Noise Reduction Measures</b>                      As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses who wish to use a generator to comply with the following performance standards for generator noise levels to protect wildlife (USFWS 2020):</p> <ul style="list-style-type: none"> <li>▶ The operation of generators at full operational speed shall meet the noise level standards as set forth in the MCCR and the Mendocino County General Plan policies DE100, 101, and 103. Conformance with these standards shall be confirmed by an acoustical engineer. All generators shall be, at a minimum, equipped with the manufacturer’s specified muffler. Additional measures for noise attenuation may include additional muffler features and/or a structure to enclose the generator designed for sound suppression (MCCR section 10A.17.070(F)(1)). The following additional noise performance standards shall apply to generator use for sites within 0.25 mile of habitat determined to be suitable for northern spotted owl or marbled murrelet by a qualified biologist:                             <ul style="list-style-type: none"> <li>▪ Project-generated sound must not exceed ambient nesting conditions by 20–25 dBA.</li> <li>▪ Project-generated sound, when added to existing ambient conditions, must not exceed 90 A-weighted decibels (dBA).</li> </ul> </li> <li>▶ Time of day adjustment: Marbled murrelet and northern spotted owl are most active during dawn and dusk. Within approximately 2 hours of sunrise and sunset, ambient sound levels are lower than during the middle of the day (by approximately 5–10 decibels). This shall be accounted for when determining impacts of project-generated sound.</li> </ul>	
<p><b>Impact 3.5-3: Result in Disturbance to or Loss of Special-Status Fisheries</b>                      Surface water diversions for licensed commercial cannabis cultivation sites that may occur under the project could adversely affect several special-status fish species. Special-status fish species are protected under the ESA, CESA, and other regulations. The alteration of surface water conditions that support special-status fish species would be a less-than-significant impact.</p>	<p>LTS</p>	<p>No mitigation is required for this impact.</p>	<p>LTS</p>

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<p><b>Impact 3.5-4: Result in Disturbance to or Loss of Sensitive Natural Communities, Riparian Habitat, Old-Growth Habitat, or Other Sensitive Habitats</b></p> <p>Potential land use conversion and development that may occur from potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could adversely affect riparian habitat, old-growth habitat, and other sensitive natural communities if they are present on the site. Construction-related activities, including ground disturbance, old-growth habitat removal, removal of riparian vegetation, or disturbance of stream and river habitat, would be a potentially significant impact.</p>	<p>PS</p>	<p><b>Mitigation Measure 3.5-4: Identify, Avoid, and Protect Sensitive Natural Communities, Riparian Habitat, and Wetland Vegetation or Provide Compensation</b></p> <p>As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions –Term 10 and 37), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of sensitive natural communities, riparian habitat, old-growth habitat, and other sensitive habitats from proposed commercial cannabis cultivation sites:</p> <ul style="list-style-type: none"> <li>▶ For new commercial cannabis cultivation uses that could disturb sensitive natural communities or riparian habitat, the application shall include a report prepared by a qualified biologist that summarizes the potential presence of any of these sensitive resources as identified during the biological survey conducted under Mitigation Measure 3.5-1a, including riparian habitat associated with aquatic features, old-growth forests, oak woodlands, special-status fish stream habitats, and sensitive natural communities. Further, the qualified biologist shall perform a protocol-level survey following the CDFW <i>Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities</i> (current version dated March 20, 2018) of the site before the start of new development related to cannabis activities. Sensitive natural communities shall be identified using the best means possible, including keying them out using the most current edition of <i>A Manual of California Vegetation</i> (including updated natural communities data at <a href="http://vegetation.cnps.org/">http://vegetation.cnps.org/</a>) or referring to relevant reports (e.g., reports found on the VegCAMP website).</li> </ul>	<p>LTS</p>

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		<ul style="list-style-type: none"> <li>▶ The report shall include the requirements that all sensitive areas identified above shall be flagged or fenced with brightly visible construction flagging and/or fencing under the direction of the qualified biologist before development activities begin and that grading, excavation, other ground-disturbing activities, and vegetation removal shall not occur in these areas during development activities. Foot traffic by construction personnel shall also be limited in these areas to prevent the introduction of invasive or weedy species. Periodic inspections during construction shall be conducted by the monitoring biologist to maintain the integrity of exclusion fencing/flagging throughout the period of construction involving ground disturbance.</li> <li>▶ If the report documents that site development would affect the bed, bank, channel, or associated riparian habitat subject to CDFW jurisdiction under Fish and Game Code section 1602, a Streambed Alteration Notification shall be submitted to CDFW, pursuant to section 1600 et seq. of the Fish and Game Code. If proposed activities are determined to be subject to CDFW jurisdiction, the applicant shall abide by the conditions of any executed agreement before any ground disturbance.</li> <li>▶ Old-growth habitat identified shall be avoided. Applications proposing to alter old-growth habitat shall be denied.</li> <li>▶ MCCR section 10A.17.040(K) prohibits the removal of any commercial tree species, as defined by CCR, title 14, section 895.1, for the purpose of developing a commercial cannabis cultivation site, which includes removal of species that make up sensitive natural communities found in Mendocino County, including redwood and California bay, and the removal of any true oak species (<i>Quercus</i> spp.) or tan oak. Compliance with this requirement will be provided to DCC.</li> </ul>	

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		<p>► In consultation with DCC and CDFW, applicants shall compensate for permanent loss of riparian habitat at a minimum of a 2:1 ratio through contributions to a CDFW-approved wetland mitigation bank or through the development and implementation of a Compensatory Stream and Riparian Mitigation and Monitoring Plan for creating or restoring in-kind habitat in the surrounding area. If mitigation credits are not available, stream and riparian habitat compensation shall include establishment of riparian vegetation on currently unvegetated bank portions of streams affected by the project and enhancement of riparian habitat through removal of nonnative species, where appropriate, and planting of additional native riparian plants to increase the cover, continuity, and width of the riparian corridor along streams in the site and surrounding areas. Construction activities and compensatory mitigation shall be conducted in accordance with the terms of a streambed alteration agreement, as required under section 1602 of the Fish and Game Code, as well as SWRCB Order WQ 2023-0102-DWQ.</p> <p>The Compensatory Stream and Riparian Mitigation and Monitoring Plan shall identify:</p> <ul style="list-style-type: none"> <li>▪ compensatory mitigation sites and criteria for selecting these mitigation sites;</li> <li>▪ in-kind reference habitats for comparison with compensatory riparian habitats (using performance and success criteria) to document success;</li> <li>▪ monitoring protocol, including schedule and annual report requirements (compensatory habitat shall be monitored for a minimum of 5 years from completion of mitigation, or human intervention (including recontouring and grading), or until the success criteria identified in the approved mitigation plan have been met, whichever is longer);</li> <li>▪ ecological performance standards, based on the best available science and including specifications for native riparian plant densities, species composition, amount of dead woody vegetation gaps and bare ground, and survivorship; at a minimum, compensatory mitigation planting sites must achieve 80-percent survival of planted riparian trees and shrubs by the end of the 5-year maintenance and monitoring period, or dead and dying trees shall be replaced and monitoring continued until 80-percent survivorship is achieved;</li> </ul>	

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		<ul style="list-style-type: none"> <li>▪ corrective measures if performance standards are not met;</li> <li>▪ responsible parties for monitoring and preparing reports; and</li> <li>▪ responsible parties for receiving and reviewing reports and for verifying success or prescribing implementation or corrective actions.</li> </ul>	
<p><b>Impact 3.5-5: Result in Disturbance to or Loss of State or Federally Protected Wetlands</b></p> <p>Potential land use conversion and development from potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could adversely affect state or federally protected wetlands, such as streams, rivers, lakes, and wetlands. This impact would be potentially significant.</p>	<p>PS</p>	<p><b>Mitigation Measure 3.5-5: Identify State or Federally Protected Wetlands and Avoid These Features</b></p> <p>As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 1, 10, and 37), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of state and federally protected wetlands from proposed commercial cannabis cultivation sites:</p> <ul style="list-style-type: none"> <li>▶ The application shall include a report prepared by a qualified biologist that includes a summary of sensitive resources, including wetlands, streams, and rivers, that were identified during the biological survey conducted under Mitigation Measure 3.5-1a. State and federally protected wetlands are of special concern to resource agencies and are afforded specific consideration, based on section 404 and section 401 of the CWA, the Porter-Cologne Water Quality Control Act, and other applicable regulations.</li> <li>▶ If the report documents that state or federally protected wetlands are present, a delineation of these resources, including wetlands that would be affected by the project, shall be prepared by a qualified biologist. The delineation shall be submitted to DCC and the North Coast RWQCB.</li> <li>▶ If, based on the verified delineation, it is determined that fill of any state or federally protected wetlands would result from implementation of the project, then the applicant shall modify the proposed project to avoid these resources by providing a buffer of at least 100 feet around these features. Depending on site features, a buffer of greater than 100 feet may be required. Buffer size shall be determined in consultation with CDFW and the North Coast RWQCB.</li> </ul>	<p>LTS</p>

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		<p>► Commercial cannabis cultivation activities would be subject to Term 3 of Attachment A (Section 1, General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ, which requires operations to comply with Fish and Game Code section 1602. When commercial cannabis cultivation activities would affect the bed, bank, channel, or associated riparian habitat subject to CDFW jurisdiction under Fish and Game Code section 1602, a Streambed Alteration Notification shall be submitted to CDFW, pursuant to section 1600 et seq. of the Fish and Game Code. If proposed activities are determined to be subject to CDFW jurisdiction, the applicant shall abide by the conditions of any executed agreement before any ground disturbance in areas under section 1600 et seq. jurisdiction.</p>	
<p><b>Impact 3.5-6: Interfere with Resident or Migratory Wildlife Corridors or Native Wildlife Nursery Sites</b>                      Potential land use conversion and development from the potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could adversely affect resident or migratory wildlife corridors, as well as nursery sites, through habitat fragmentation; degradation of aquatic habitat (e.g., streams and rivers); disturbance from increased noise and human presence, as well as increased trash, which may attract predators and discourage wildlife use of surrounding natural habitat; and blockage of important wildlife migration paths. The impact on movement corridors and habitat connectivity for these species would be potentially significant.</p>	<p>PS</p>	<p><b>Mitigation Measure 3.5-6a:</b> Implement Mitigation Measure 3.5-5: Identify State or Federally Protected Wetlands and Avoid These Features  <b>Mitigation Measure 3.5-6b:</b> Implement Mitigation Measure 3.5-2k: Conduct Preconstruction Fisher Survey and Preserve Active Den Sites and Associated Habitats and 3.5.4: Identify, Avoid, and Protect Sensitive Natural Communities, Riparian Habitat, and Wetland Vegetation or Provide Compensation</p>	<p>LTS</p>
<p><b>Impact 3.5-7: Conflict with Any Local Policies or Ordinances Protecting Biological Resources</b>                      Several policies in the Mendocino County General Plan, Ukiah Valley Area Plan, Brooktrails Township Specific Plan, and Mendocino County Code protect biological resources. Mitigation measures identified Impacts 3.5-1, 3.5-2, 3.5-3, 3.5-4, 3.5-5, and 3.5-6 would be consistent and would assist in implementing Mendocino County policies and requirements that protect biological resources. This impact would be less than significant.</p>	<p>LTS</p>	<p>No mitigation is required for this impact.</p>	<p>LTS</p>

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<b>Energy</b>			
<p><b>Impact 3.6-1: Result in Wasteful, Inefficient, or Unnecessary Consumption of Energy during Project Construction or Operation</b></p> <p>Operation of expanded provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and distribution transport-only operations would result in the consumption of fuel (gasoline and diesel) and electricity. The energy needs for construction of expanded existing provisionally licensed and new commercial cannabis cultivation sites would be temporary and would not require additional capacity or increase peak or base period demand for electricity or other forms of energy. Notably, the project does not involve changing the existing regulations that allow for commercial cannabis use or cultivation; therefore, the projected energy use for each commercial cannabis cultivation type would be similar to that associated with existing provisionally licensed commercial cannabis sites currently operating in Mendocino County. Potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites would be more energy efficient than existing provisionally licensed cultivation sites because of increasing requirements related to energy efficiency in the building code and in on-road and off-road fuel efficiency. Thus, the impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS
<p><b>Impact 3.6-2: Conflict with Plans for Renewable Energy and Energy Efficiency</b></p> <p>Mendocino County does not have an adopted climate action plan or a plan to promote renewable energy. Therefore, the state’s 2008 Update Energy Action Plan and the 2019 California Energy Efficiency Action Plan serve as the appropriate plans for comparison. Operation of existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations energy use would be primarily electric, with such electricity provided by PG&amp;E. As required by SB 100, PG&amp;E’s electricity would be generated by increasingly more renewable sources to meet the state’s progressive renewable energy targets. Additionally, section 10A.17.040(D) of the MCCR would require that indoor and mixed-use cultivation sites use alternative forms of electricity and not rely on generators as their primary source of energy. Therefore, the construction and operation of licensed commercial cannabis cultivation sites would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. This impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<b>Geology and Soils</b>			
<p><b>Impact 3.7-1: Directly or Indirectly Cause Potential Substantial Adverse Effects, Including the Risk of Loss, Injury, or Death from Seismic Hazards</b>                      Potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations associated with the implementation of the project could expose additional people and structures in a region susceptible to strong seismic shaking. Existing provisionally licensed, expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation operations would not exacerbate existing seismic hazards and would be required to comply with existing state and local regulatory requirements related to seismic hazards (e.g., building codes and other laws and regulations), such that the exposure of people or structures to risk of loss, injury, or death resulting from rupture of a known earthquake fault or strong seismic shaking would be avoided or reduced. This impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS
<p><b>Impact 3.7-2: Result in Substantial Soil Erosion of the Loss of Topsoil or Be Located on Expansive Soils, Creating Substantial Direct or Indirect Risks to Life or Property</b>                      Potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could result in development of new facilities which could include clearing, grading, excavation, and other earth-moving activities. The potential for commercial cannabis cultivation sites being located on expansive soils, substantial soil erosion, or loss of topsoil from implementation of the project would be addressed through compliance with SWRCB Order WQ 2023-0102-DWQ, Mendocino County Code’s Grading Ordinance, and the CBC. Impacts related to soil erosion, loss of topsoil, or expansive soils would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<p><b>Impact 3.7-3: Be Located on a Geologic Unit or Soil That is Unstable, or That Would Become Unstable as a Result of the Project, and Potentially Result in On- or Off-site Landslide, Lateral Spreading, Subsidence, Liquefaction or Collapse</b></p> <p>Potential expansion of existing provisionally licensed, new licensed commercial cannabis cultivation sites, and associated processing and/or distribution transport-only operations could result in the exposure of people and property to risks associated with unstable or expansive soils. However, licensed commercial cannabis cultivation sites would be required to comply with state and local regulatory requirements (e.g., building codes and other laws and regulations) related to geologic hazards, such that the risk to life or property through exposure to expansive or unstable soils because of the project would be reduced. This impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS
<p><b>Impact 3.7-4: Have Soils Incapable of Adequately Supporting the Use of Septic Tanks or Alternative Wastewater Disposal Systems Where Sewers Are Not Available for the Disposal of Wastewater</b></p> <p>Potential expansion of existing provisionally licensed, new licensed commercial cannabis cultivation sites, and associated processing and/or distribution transport-only operations associated with the implementation of the project could lead to the installation of septic tanks and onsite sewage disposal systems. Portions of the County may contain areas with soils not suitable for wastewater treatment. Such systems must be sited, designed, and constructed in accordance with applicable state and local requirements. Because the siting and design of wastewater disposal systems is governed by existing requirements, there would be a less-than-significant impact.</p>	LTS	No mitigation is required for this impact.	LTS
<p><b>Impact 3.7-5: Directly or Indirectly Destroy a Unique Paleontological Resource or Site or Unique Geologic Feature</b></p> <p>Potential expansion of existing provisionally licensed, new licensed commercial cannabis cultivation sites, and associated processing and/or distribution transport-only operations could result in the accidental damage of previously undiscovered paleontological resources. However, with compliance of Mendocino County General Plan policy DE-116, paleontological resources analyses would be conducted for each new site to avoid damage to resources. This impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<b>Greenhouse Gas Emissions and Climate Change</b>			
<p><b>Impact 3.8-1: Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases</b>                      Operation of expanded of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would result in GHG emissions that could conflict with state GHG reduction targets and decarbonization efforts. Therefore, future operation of commercial cannabis cultivation sites would have a significant climate change impact.</p>	<p>S</p>	<p><b>Mitigation Measure 3.8-1: Implement On-Site Project Design Features to Demonstrate the Fair Share in Meeting the State’s Long-Term GHG Reduction Targets</b>                      DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to apply these requirements:</p> <ul style="list-style-type: none"> <li>▶ Prohibit on-site natural gas or propane use.</li> <li>▶ Implement Tier 2 requirements of the CALGreen Code’s EV charging standards.</li> <li>▶ If the aforementioned project design features cannot be feasibly incorporated into the project’s design, include other relevant project design characteristics. Examples of measures that could be applied to individual commercial cannabis cultivation sites include, but are not limited to the following:                             <ul style="list-style-type: none"> <li>▪ exceeding the requirements of the most recent version of Part 6 of the Title 24 California Building Code (California Energy Code),</li> <li>▪ using low-flow appliances,</li> <li>▪ using Energy Star appliances, and</li> <li>▪ implementing zero net energy buildings.</li> </ul> </li> </ul>	<p>SU</p>

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<b>Hazards and Hazardous Materials</b>			
<p><b>Impact 3.9-1: Create a Significant Hazard through Transport, Use, or Disposal of Hazardous Materials, or Due to Upset and Accident Conditions</b>                      Existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could create a hazard through the routine transport, use, or disposal of hazardous materials, or due to upset and accident conditions, during construction or operational activities. Commercial cannabis cultivation operations involve the use of pesticides, herbicides, rodenticides, and other chemicals for the growing of commercial cannabis. However, existing provisionally licensed commercial cannabis cultivation and new licensed commercial cannabis cultivation sites would be required to comply with existing applicable rules and regulations specifically designed to protect public health. As described in Section 3.9.1 “Regulatory Setting,” regulation of licensed commercial cannabis cultivation operations under the MCCR and CCR, title 4, division 19 includes requirements related to the storage and use of pesticides, herbicides, and rodenticides, as well as testing of commercial cannabis goods to ensure that contamination or exposure does not occur.</p>	LTS	No mitigation is required for this impact.	LTS
<p><b>Impact 3.9-2: Create Potential Human Hazards from Exposure to Existing On-Site Hazardous Materials</b>                      Existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could include construction activities that disturb subsurface materials and could encounter previously unidentified contamination from past practices, placement of undocumented fill, or even unauthorized disposal of hazardous wastes. This could include hazardous materials sites identified in lists compiled pursuant to Government Code section 65962.5. Encountering these materials could expose workers, the public, or the environment to adverse effects depending on the volume, materials involved, and concentrations. In addition, construction activities could expose naturally occurring asbestos. Mendocino County contains ultramafic rock, along with other rock types, that could contain naturally occurring asbestos. Encountering these rock types could trigger a referral to the MCAQMD for implementation of their Policies for Areas Containing NOA. New licensed commercial cannabis cultivation sites would be required to comply with MCCR section 10A.17.090, which requires evaluation of previous land uses that could have created a hazardous conditions as well as with MCAQMD provisions that address naturally occurring asbestos. This impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS

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<p><b>Impact 3.9-3: Emit Hazardous Emissions or Handle Hazardous Materials within 0.25 Miles of a School</b>                      Existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations are not anticipated to use large quantities of hazardous materials. Materials for commercial cannabis cultivation operations would be used in accordance with applicable regulations to limit the potential for accident or upset conditions. Setbacks from school sites are required to be at least 1,000 feet from commercial cannabis cultivation sites as stated under MCCR section 10A.17.040(A)(1). This impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS
<p><b>Impact 3.9-4: Result in a Safety Hazard or Excessive Noise for People Residing or Working in a Project Area That Is Located Within 2 Miles of a Public Airport or Public Use Airport</b>                      Existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations located near public airports would be required to comply with the Mendocino County ACLUP, which includes requirements for land use compatibility in the vicinity of airports. Further, future licensed commercial cannabis cultivation sites would not result in new sensitive land uses or attract dense populations that would be subject to safety or noise hazards associated with existing airports. Therefore, licensed commercial cannabis cultivation sites would not create a safety hazard or excessive noise exposure for people working or residing near a public airport. This impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS
<p><b>Impact 3.9-5: Impair Emergency Response or Evacuation Plans</b>                      Construction and operation of licensed commercial cannabis cultivation sites are subject to and constructed in accordance with applicable State and Mendocino County policies and standards, including established roadway design and safety standards, such as Caltrans Standard Specifications and the County Roads and Development Standards, as discussed further in Section 3.15, "Transportation." These standards prevent the development of transportation infrastructure that would result in inadequate emergency access or would significantly impair emergency response or evacuation plans. Therefore, this impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS

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<b>Hydrology and Water Quality</b>			
<p><b>Impact 3.10-1: Degrade Water Quality and Floodplains</b>                      Potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could have the potential to modify surface drainage and flows in such a manner that increased sedimentation and erosion could take place, leading to water quality degradation as well as impacts to floodplains. This could further impact impaired waterways that are subject to TMDLs. Commercial cannabis cultivation operations could result in additional water quality impacts to surface water and groundwater resources and the associated beneficial uses identified in the North Coast RWQCB Basin Plan. Compliance with the requirements SWRCB Order WQ 2023-0102-DWQ and County regulations would address water quality impacts. This impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS
<p><b>Impact 3.10-2: Decrease Groundwater Supply or Interfere with Groundwater Recharge</b>                      Potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations as part of the implementation of the project would increase groundwater production. However, MCCR section 10A.17.080(C)(1)(b) would require a watershed assessment, for groundwater use, to establish if there is sufficient watershed supply to serve the proposed commercial cannabis cultivation site. In addition, new wells constructed in Mendocino County are subject to permit requirements under Mendocino County Ordinance Chapter 16.04. These requirements would address the potential effects of short-term and long-term well operation in isolated locations that could affect the operability of adjacent wells. In addition, licensed commercial cannabis cultivation sites within the Ukiah Valley Groundwater Basin would not conflict with the Ukiah Valley Basin GSP. As a result, this impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS

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<p><b>Impact 3.10-3: Result in Diversion of Surface Water</b>                      Potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites, and associated processing and/or distribution transport-only operations as part of the implementation of the project could result in decreased flow rates on county streams and rivers from surface water diversion. Low flows are associated with increased temperature and may also aggravate the effects of water pollution. Compliance with SWRCB Order WQ 2023-0102-DWQ requires that certain flow and gauging requirements be met and that a surface water diversion forbearance period be implemented. This impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS
<b>Land Use and Planning</b>			
<p><b>Impact 3.11-1: Conflict with Any Land Use Plan, Policy, or Regulation Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect</b>                      Potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would be required to comply with the MCCR, which defines allowable County zoning designations within which commercial cannabis uses may occur. In addition, such licensees would also need to comply with the Mendocino County Zoning Code, the Mendocino County General Plan and , and state commercial cannabis cultivation licensing requirements, which includes protection of environmental resources. As a result, no conflicts with applicable land use plans, policies, or regulations would occur. This impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS

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<b>Noise and Vibration</b>			
<p><b>Impact 3.12-1: Create Substantial Temporary, Construction Noise</b>                      Construction of new or expanded licensed commercial cannabis cultivation operations could involve the use of heavy off-road equipment. The use of construction equipment could result in temporary noise increases at surrounding land uses; however, construction noise modeling identified that noise levels would not exceed FTA construction daytime or nighttime noise standards at nearby sensitive receptors due to the required setback distances established in section 10A.17.040(A) of the MCCR(see Appendix D). Simultaneous operation of three pieces of construction equipment (i.e., bulldozer, excavator, and grader) would generate a combined noise level up to 84.8 dB L<sub>eq</sub> and 88.8 dB L<sub>max</sub> at 50 feet from the source. Through the required setback distance requirements alone, the noise level generated by the construction equipment would attenuate to approximately 72.8 dB L<sub>eq</sub> and 76.8 dB L<sub>max</sub> at 200 feet and 58.8 dB L<sub>eq</sub> and 62.8 dB L<sub>max</sub> at 1,000 feet, which are below FTA's daytime and nighttime construction noise thresholds (i.e., 90 dB L<sub>eq</sub> and 80 dB L<sub>eq</sub>, respectively). Therefore, this impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<p><b>Impact 3.12-2: Create Substantial Temporary, Construction Vibration</b>                      The use of heavy-duty construction equipment can generate increased vibration levels. According to the FTA, vibratory rollers generate ground vibration levels of 0.21 in/sec PPV at 25 feet. Based on modeling conducted, vibration levels from the use of a vibratory roller could exceed the threshold of significance of 0.2 in/sec PPV for structural damage within 26 feet of any vibratory roller activities (see Appendix D for modeling details.) New and expanded licensed commercial cannabis cultivation sites would be required to comply with the applicable setback standards and would be subject to review to ensure that the site is compliant with all applicable zoning and design standards. Although, it is not anticipated that construction vibration levels would exceed FTA standards for structural damage, it cannot be guaranteed at this time that construction of indoor cultivation facilities would be located far enough from sensitive receptors so that adverse effects to humans does not occur. This impact would be potentially significant.</p>	<p>PS</p>	<p><b>Mitigation Measure 3.12-2: Develop and Implement a Vibration Control Plan</b>                      DCC shall require provisionally licensed commercial cannabis cultivation sites or new commercial cannabis cultivation applicants in Mendocino County to apply these requirements to construction activity for proposed expansion or construction of commercial cannabis cultivation sites within 110 feet of an offsite occupied residence or other sensitive receptor.</p> <p>A vibration control plan shall be developed by the future project applicant (i.e., licensees) and their construction contractors to be submitted with license applications. The plan shall consider all potential vibration-inducing activities that would occur within the distance parameter described above and include various measures, setback distances, precautions, monitoring programs, and alternative methods to vibration intensive activities with the potential to result in adverse impacts to sensitive receptors. The following vibration control measures (or other equally effective measures) shall be included in the plan:</p> <ul style="list-style-type: none"> <li>▶ To prevent disturbance for sensitive land uses, minimum setback requirements for different types of ground vibration producing activities (e.g., vibratory roller) shall be established based on the proposed activities and locations, once determined. Established setback requirements can be breached only if a project-specific, site-specific, technically adequate ground vibration study indicates that the buildings would not be exposed to ground vibration levels in excess of 75 VdB, and ground vibration measurements performed during the construction activity confirm that the buildings are not being exposed to levels in excess of 75 VdB.</li> <li>▶ Limit vibration-intensive activities to the daytime hours between 7:00 a.m. and 8:00 p.m. Monday through Friday and between 8:00 a.m. and 8:00 p.m. on Saturday and Sunday.</li> <li>▶ Operate all vibration inducing impact equipment as far away from vibration-sensitive sites as reasonably possible from nearby structures.</li> <li>▶ Phase high-impact activities so as not to occur simultaneously with other construction activities, to the extent feasible. The total vibration level produced could be significantly less when each vibration source is operated at separate times.</li> </ul>	<p>LTS</p>

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<p><b>Impact 3.12-3: Result in a Substantial Permanent Increase in Stationary Operational Noise</b>                      New or expanded licensed commercial cannabis cultivation sites in the County could generate increased noise levels from the use of specialized equipment and loading operations. However, noise from these activities would be temporary and periodic in nature, and adjacent land uses would not be exposed to noise levels that exceed noise standards in the Mendocino County Code of Ordinances. Therefore, this impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS
<p><b>Impact 3.12-4: Generate Long-Term, Traffic-Generated Noise</b>                      New or expanded licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations would increase vehicle trips; however, at this time, it is not known which roadways would be affected by new trips and to what extent traffic noise would increase. Although future individual licenses would likely result in less than a doubling of trips on surrounding roadways and therefore would not substantially increase traffic noise during project-level environmental review, the uncertainty related to the location of each individual commercial cannabis cultivation site makes accurately quantifying the change in traffic noise associated with implementation of the project too speculative. For this reason, as allowed under State CEQA Guidelines, section 15145, it is too speculative to determine to what degree traffic noise would change as a result of implementation of the project. Therefore, no significance conclusion is provided.</p>	no significance conclusion provided	No mitigation is required for this impact.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<b>Population, Employment, and Housing</b>			
<p><b>Impact 3.13-1: Induce Substantial Unplanned Population Growth in an Area, Either Directly (by Proposing New Homes or Businesses) or Indirectly (through Extension of New Roads or Other Infrastructure)</b>                      Existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would not induce any changes in the operation of the existing businesses, and the conversion would not result in any substantial unplanned population growth. Potential new licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations could include new housing units and new job opportunities, but the potential increase in dwelling units would be consistent with allowed land uses under the Mendocino County General Plan and associated zoning. It is expected that new commercial cannabis cultivation jobs could be filled by employment resources in the County and region and would not trigger the need for substantial housing development beyond what is planned under the Mendocino County General Plan. This impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS
<b>Public Services and Recreation</b>			
<p><b>Impact 3.14-1: Result in Substantial Adverse Physical Impacts Associated with the Need for New or Physically Altered Fire Protection Facilities</b>                      Potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could increase the demand for fire protection services. All existing and future licensed sites would be required to comply with state and local regulations (including the MCCR and fire code regulations). This impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS
<p><b>Impact 3.14-2: Result in Substantial Adverse Physical Impacts Associated with the Need for New or Physically Altered Law Enforcement Facilities</b>                      Potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would not require increased law enforcement services that would result in the need for new or altered facilities to ensure compliance with state and local security requirements for commercial cannabis cultivation sites. Therefore, the potential impact related to law enforcement services would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<b>Transportation</b>			
<p><b>Impact 3.15-1: Conflict with a Program, Plan, Ordinance or Policy Addressing the Circulation System Consisting of Transit, Roadway, Bicycle, and Pedestrian Facilities</b></p> <p>Although it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites will propose to expand their cultivation activities as they transition to annual licensure, expansion of existing commercial cannabis cultivation sites would still be required to comply with all applicable policies related to bicycles, pedestrians, transit, and safety. Future licensed commercial cannabis cultivation and associated processing or distribution transport-only uses would be required by Mendocino County to comply with the County’s General Plan policies and applicable requirements (e.g., MCCR). For these reasons, the project would not conflict with a program, plan, ordinance, or policy addressing the circulation system. This impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS
<p><b>Impact 3.15-2: Conflict or Be Inconsistent with State CEQA Guidelines, Section 15064.3, Regarding VMT</b></p> <p>There would be no construction activities or change in operations for existing provisionally licensed sites that would retain the extent of their existing licensed commercial cannabis cultivation. Additionally, although it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites will propose to expand their cultivation activities as they transition to annual licensure, as described below, this component of the project would meet OPR Technical Advisory’s screening criteria for small projects (i.e., generate less than 110 new daily trips). Although future licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations would likely meet the same screening criteria mentioned above during project-level environmental review, at the programmatic level, the uncertainty related to estimating trip lengths associated with individual commercial cannabis cultivation sites makes accurately quantifying the change in total VMT associated with implementation of the project too speculative. For this reason, as allowed under State CEQA Guidelines, section 15145, it is too speculative to determine to what degree VMT would change as a result of implementation of the project. Therefore, no significance conclusion is provided.</p>	no significance conclusion provided	No mitigation is required for this impact.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<p><b>Impact 3.15-3: Substantially Increase Hazards Due to a Design Feature or Incompatible Uses</b></p> <p>The transition of provisionally licensed commercial cannabis cultivation sites to annual licensure, and potential expansion of such existing provisionally licensed commercial cannabis cultivation sites are not expected to create transportation hazards related to these sites. Additionally, future licensed commercial cannabis cultivation and associated processing or distribution transport-only uses would be subject to and constructed in accordance with applicable roadway design and safety standards such as Caltrans Standard Specifications and the County Roads and Development Standards. Individual site plans for future licensed sites would be subject to review by County of Mendocino staff ensuring all applicable design and safety standards are met. Furthermore, the preparation and implementation of a TCP for each new licensed site that dictates construction within public roadway right of way would minimize potential hazards during construction. Therefore, compliance with local and State standards and regulations would not result in substantially increased hazards due to a design feature or incompatible uses. This impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS
<p><b>Impact 3.15-4: Result in Inadequate Emergency Access</b></p> <p>Existing provisionally licensed, potential expansion of existing provisionally licensed, and future licensed commercial cannabis cultivation and associated processing and/or distribution transport-only uses would be subject to review by County of Mendocino staff and responsible emergency service agencies. Additionally, future licensed facilities would be constructed in accordance with applicable County policies, including established roadway design and safety standards such as the County Roads and Development Standards and the 2022 California Fire Code adopted by reference in section 18.04.025 of the County Code of Ordinances. These standards would prevent the development of future facilities and associated offsite improvements that would result in inadequate emergency access. This impact is less than significant.</p>	LTS	No mitigation is required for this impact.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<b>Utilities and Service Systems</b>			
<p><b>Impact 3.16-1: Increase Demand on Wastewater Treatment Systems</b>                      Continued operation of existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could result in increased wastewater service demand for public wastewater systems that may not have adequate treatment capacity. Wastewater septage capacity in the County is shown in Table 3.16-1. Commercial cannabis cultivation uses could generate wastewater that may contain contaminants, such as residual pesticides and herbicides, that cannot be adequately treated by existing public wastewater treatment systems. Pursuant to SWRCB Order WQ 2023-0102-DWQ, all cannabis wastewater must be disposed either through a connection to a permitted wastewater treatment collection system that accepts cannabis wastewater or collected in storage tanks and disposed of by a permitted wastewater handler at a permitted wastewater treatment facility that accepts cannabis wastewater. The MCCR also requires verification of wastewater service. This impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS
<p><b>Impact 3.16-2: Increase Demand for Water Supplies</b>                      Operation of existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would increase water demand in the County. SWRCB Order WQ 2023-0102-DWQ instream flow requirements and surface water diversion forbearance during dry months address surface water diversion impacts of licensed commercial cannabis cultivation uses, while the MCCR requires identification and verification of water supply source to be used. This impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<p><b>Impact 3.16-3: Generate Amounts of Solid Waste in Excess of Infrastructure, Violate Existing Statutes Related to Solid Waste, or Result in Adverse Environmental Effects</b></p> <p>Operation of existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would generate solid waste from cannabis plant and product waste, as well as non-cannabis waste (e.g., vegetation clearing and waste associated with pesticide use). Consistent with state commercial cannabis licensing regulations, licensees must maintain accurate and comprehensive records regarding cannabis waste that account for, reconcile, and provide evidence for all activity related to the generation and disposition of cannabis waste. Waste management plans and other regulations would ensure that solid waste (cannabis and non-cannabis waste) that is hauled off-site is disposed of properly. In addition, implementation of a cannabis waste management plan, as required by CCR, title 4, section 17223, would result in proper management of on-site composting of cannabis waste and prevent adverse environmental effects. This impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS
<b>Wildfire</b>			
<p><b>Impact 3.17-1: Exacerbate Wildfire Risks and Expose Project Occupants to Pollutant Concentrations from a Wildfire or the Uncontrolled Spread of a Wildfire</b></p> <p>Mendocino County is highly susceptible to wildfires. Implementation of the project could create new fire hazards from creation of new fuel and ignition sources and expose people and structures to increased wildfire hazards and unhealthy air quality conditions from smoke. Compliance with existing State and local requirements related to fire protection and management would ensure that impacts remain less than significant.</p>	LTS	No mitigation is required for this impact.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<p><b>Impact 3.17-2: Require the Installation or Maintenance of Associated Infrastructure (Such as Roads, Fuel Breaks, Emergency Water Sources, Power Lines, or Other Utilities) That May Exacerbate Fire Risk or That May Result in Temporary or Ongoing Impacts to the Environment</b></p> <p>Implementation of the project would include the development of on-site and off-site infrastructure improvements to support new commercial cannabis cultivation uses that could create new fire hazards, largely due to the presence of new electrical infrastructure that could create new ignition points. This impact would be potentially significant.</p>	<p>PS</p>	<p><b>Mitigation Measure 3.17-2a: Implement Fire Prevention Measures for New Electrical Infrastructure</b></p> <p>The DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to place new electrical power lines to the premises underground, if feasible. If electric infrastructure cannot be placed underground, fuel breaks along power lines and any stand-alone electrical facilities in a manner that would avoid ignition of adjacent vegetation to the satisfaction of Mendocino County, local fire protection agency, and/or CAL FIRE.</p> <p><b>Mitigation Measure 3.17-2b: Implement Fire Prevention Measures for On-Site Construction</b></p> <p>The DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to prepare and implement a fire protection plan that includes the following provisions:</p> <ul style="list-style-type: none"> <li>▶ Fire watch personnel responsible for watching for the occurrence of fire during and after equipment use shall be identified.</li> <li>▶ Equipment shall be located so that exhausts do not discharge against combustible materials.</li> <li>▶ Equipment shall not be refueled while in operation and not until after a cooldown period.</li> <li>▶ Water and tools dedicated to firefighting shall be on hand in the area of onsite construction and maintenance activities at all times.</li> <li>▶ Fire protection plans created by local jurisdictions shall be submitted to the DCC as part of licensing requirements.</li> </ul>	<p>LTS</p>

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<p><b>Impact 3.17-3: Expose People or Structures to Significant Risks, Including Downslope or Downstream Flooding or Landslides, as a Result of Runoff, Postfire Slope Instability, or Drainage Changes</b>                      Previous wildfires in Mendocino County have resulted in the loss of vegetation on sloped terrain. This condition could result in soil erosion and slope failure within the unincorporated County. Operation and development of licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations in these areas could exacerbate this condition and increase the risk of further erosion and slope failure. However, compliance with SWRCB Order WQ 2023-0102-DWQ, MCCR section 10A.17.070(L), and the Mendocino County Code of Ordinances would reduce risks associated with postfire slope instability or drainage changes. This impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS
<p><b>Impact 3.17-4: Expose People or Structures to Loss, Injury, or Death Involving Wildland Fires</b>                      Construction and operation of licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could be located in wildfire hazard areas and increase wildfire risks. Implementation of the project would ensure compliance with California Fire Code requirements and would ensure that commercial cannabis uses incorporate fire protection measures that would avoid an increased risk of wildfire and increased exposure to wildfire hazards and associated affects from a wildfire event. Therefore, this impact would be less than significant.</p>	LTS	No mitigation is required for this impact.	LTS
<b>Cumulative</b>			
<b>Impact CUM-1: Contribution to Cumulative Aesthetic Impacts</b>		Would not be cumulatively considerable	
<b>Impact CUM-2: Contribution to Cumulative Agriculture and Forestry Resource Impacts</b>		Would not be cumulatively considerable	
<b>Impact CUM-3: Contribution to Cumulative Air Quality Impacts</b>		Cumulatively considerable and significant and unavoidable	
<b>Impact CUM-4: Contribution to Cumulative Archaeological, Historical, and Tribal Cultural Resources Impacts</b>		Would be less than cumulatively considerable	
<b>Impact CUM-5: Contribution to Cumulative Biological Resource Impacts</b>		Would be less than cumulatively considerable	
<b>Impact CUM-6: Contribution to Cumulative Energy Impacts</b>		Would not be cumulatively considerable	
<b>Impact CUM-7: Contribution to Cumulative Geology, Soils, and Mineral Resource Impacts</b>		Would be less than cumulatively considerable	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact CUM-8: Contribution to Cumulative Greenhouse Gas Emissions and Climate Change Impacts		Cumulatively considerable and significant and unavoidable	
Impact CUM-9: Contribution to Cumulative Hazardous and Hazardous Material Impacts		Would be less than cumulatively considerable	
Impact CUM-10: Contribution to Cumulative Hydrology and Water Quality Impacts		Would be less than cumulatively considerable	
Impact CUM-11: Contribution to Cumulative Land Use and Planning Impacts		Would not be cumulatively considerable	
Impact CUM-12: Contribution to Cumulative Noise Impacts		Would not be cumulatively considerable	
Impact CUM-13: Contribution to Cumulative Population and Housing Impacts		Would not be cumulatively considerable	
Impact CUM-14: Contribution to Cumulative Public Services and Recreation Impacts		Would not be cumulatively considerable	
Impact CUM-15: Contribution to Cumulative Transportation Impacts		Would not be cumulatively considerable	
Impact CUM-16: Contribution to Cumulative Utilities and Service Systems Impacts		Would not be cumulatively considerable	
Impact CUM-17: Contribution to Cumulative Wildfire Impacts		Would not be cumulatively considerable	

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# 1 INTRODUCTION

This draft environmental impact report (Draft EIR) evaluates the environmental impacts of the proposed Licensing of Commercial Cannabis Cultivation in Mendocino County Project. This Draft EIR has been prepared under the direction of California Department of Cannabis Control (DCC) in accordance with the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code (PRC) section 21000 et seq.) and California Code of Regulations (CCR), title 14, section 15000 et seq. (hereinafter, “State CEQA Guidelines”). This chapter of the Draft EIR provides information on:

- ▶ The project requiring environmental analysis (synopsis);
- ▶ The type, purpose, and intended uses of the Draft EIR;
- ▶ The scope of this Draft EIR;
- ▶ The agency roles and responsibilities;
- ▶ The public review process;
- ▶ The organization of the Draft EIR; and
- ▶ The standard terminology.

## 1.1 PURPOSE AND INTENDED USES OF THIS DRAFT EIR

CEQA requires that public agencies consider the significant and potentially significant adverse environmental effects of projects over which they have discretionary approval authority before taking action on those projects (PRC section 21000 et seq.). CEQA also requires that each public agency avoid or mitigate to a less-than-significant level, wherever feasible, the significant and potentially significant adverse environmental effects of projects it approves or implements. If implementing a project would result in significant and unavoidable environmental impacts (i.e., significant effects that cannot be feasibly mitigated to a less-than-significant level), the project can still be approved, but the lead agency decision maker—in this case, the DCC—must prepare findings and issue a written “statement of overriding considerations,” which explains the specific economic, social, or other considerations that they believe, based on substantial evidence, make those significant effects acceptable (PRC section 21002, CCR, title 14, section 15093).

According to CEQA, preparation of an EIR is required whenever it can be fairly argued, based on substantial evidence, that a proposed project may result in a significant environmental impact. An EIR is an informational document used to inform public agency decision makers and the public of the significant and potentially significant environmental effects of a project, identify possible ways to mitigate or avoid the significant effects, and describe a range of reasonable alternatives to the project that could feasibly attain most of the basic objectives of the project while substantially lessening or avoiding any of the significant environmental impacts. Public agencies are required to consider the information presented in the EIR when determining whether to approve a project.

In accordance with State CEQA Guidelines, section 15168, this document is a program EIR that examines the environmental impacts of a series of actions (i.e., transitioning existing provisionally licensed commercial cannabis cultivation sites and associated cannabis

distribution transport-only uses into annual licensure as well as issuance of annual licenses for future cannabis cultivation and associated processing operations consistent with California Code of Regulations, title 4, section 15002). In accordance with State CEQA Guidelines, section 15168, a program EIR must examine the overall environmental effects of the entire program and potential actions carried out as part of the program, including construction and operational activities.

As encouraged under CEQA, DCC intends to use this Program EIR to broadly evaluate countywide impacts and to streamline the environmental review and consideration of future annual license applications for commercial cannabis cultivation. DCC plans to make full use of existing streamlining provided by CEQA, as well as emerging streamlining techniques that may become available later, as applicable. Subsequent to adoption of the EIR, DCC may consider whether to transition some or all existing provisional licenses to annual licenses (i.e., whether to issue annual licenses to some or all provisional licensees). Once transitioned, annual licenses must be renewed annually thereafter, provided that they are in compliance with all licensure requirements. DCC may also consider other annual licensing actions (e.g., the issuance of new, additional annual cultivation licenses) for future commercial cannabis cultivation sites within the unincorporated areas of Mendocino County. Individual applications for annual commercial cannabis licensure would be subject to further site-specific environmental review as applicable under CEQA in accordance with State CEQA Guidelines, section 15168(c), "Use with Later Activities." This section of the State CEQA Guidelines addresses environmental review of projects intended to be addressed in a program for which an EIR was prepared. DCC may determine that the environmental impacts of an individual application are adequately addressed in this EIR, and that no further environmental review is required. However, DCC may also determine that an additional focused environmental review is required for an individual applicant. Preparation of a site-specific environmental review document, such as a negative declaration or mitigated negative declaration, would be required if DCC determines that the individual applicant would cause a significant environmental impact that was not examined in the EIR or would substantially increase the severity of a previously identified significant impact under State CEQA Guidelines, sections 15162 and 15168(c).

## 1.2 SCOPE OF THIS DRAFT EIR

This Draft EIR includes an evaluation of the following 17 environmental issue areas as well as other CEQA-mandated issues (e.g., cumulative impacts, growth-inducing impacts, significant unavoidable impacts, alternatives):

- ▶ Aesthetics;
- ▶ Agriculture and forestry resources;
- ▶ Air quality;
- ▶ Archaeological, historical, and tribal cultural resources;
- ▶ Biological resources;
- ▶ Energy;
- ▶ Geology, soils, and mineral resources;
- ▶ Greenhouse gas emissions and climate change;
- ▶ Hazards and hazardous materials;

- ▶ Hydrology and water quality;
- ▶ Land use and planning;
- ▶ Noise and vibration;
- ▶ Population and housing;
- ▶ Public services and recreation;
- ▶ Transportation;
- ▶ Utilities and service systems; and
- ▶ Wildfire.

Under the CEQA statutes and the State CEQA Guidelines, a lead agency may limit an EIR's discussion of environmental effects when such effects are not considered potentially significant (PRC section 21002.1(e); State CEQA Guidelines, sections 15128, 15143). Information used to determine which impacts would be potentially significant was derived from review of the Licensing of Commercial Cannabis Cultivation in Mendocino County Project; review of applicable planning documents and CEQA documentation; field work; feedback from public and agency consultation; comments received during a virtual public scoping meeting held on August 22, 2023; and comments received on the Notice of Preparation (NOP) (see Appendix A of this Draft EIR).

The NOP was distributed on August 2, 2023, to responsible agencies, interested parties, and organizations, as well as private organizations and individuals who may have an interest in the project. The purpose of the NOP and the scoping meeting was to provide notification that an EIR for the Licensing of Commercial Cannabis Cultivation in Mendocino County Project was being prepared and to solicit input on the scope and content of the environmental document. As a result of the review of existing information and the scoping process, it was determined that each of the issue areas listed above should be evaluated fully in this Draft EIR. Further information on the NOP and scoping process is provided below in Section 1.4, "Public Review Process."

## 1.3 AGENCY ROLES AND RESPONSIBILITIES

### 1.3.1 Lead Agency

DCC is the lead agency responsible for approving and carrying out the project and for ensuring that the requirements of CEQA have been met. After the EIR public review process is complete, DCC will determine whether to certify the EIR (see State CEQA Guidelines, section 15090) and approve the project.

### 1.3.2 Trustee and Responsible Agencies

A trustee agency is a state agency that has jurisdiction by law over natural resources that are held in trust for the people of the State of California. Responsible agencies are public agencies, other than the lead agency, that have discretionary-approval responsibility for reviewing, carrying out, or approving elements of a project. Responsible agencies should participate in the lead agency's CEQA process, review the lead agency's CEQA document, and use the document when deciding on project elements.

The following responsible and trustee agencies may have jurisdiction over elements of the project:

## STATE AGENCIES

- ▶ California Department of Fish and Wildlife (CDFW)
- ▶ State Water Resources Control Board (SWRCB)
- ▶ California Department of Forestry and Fire Protection (CAL FIRE)

## REGIONAL AND LOCAL AGENCIES

- ▶ Mendocino County Air Quality Management District (MCAQMD)
- ▶ North Coast Regional Water Quality Control Board (NCRWQCB)
- ▶ Mendocino County

### 1.3.3 Required Permits and Approvals

This section identifies the permits and other approval actions likely to be required before implementation of individual elements of the project. The following permits/approvals would be required for subsequent individual cannabis cultivation operation applicants:

#### STATE

- ▶ Department of Cannabis Control: Issuance of annual cannabis cultivation licenses.
- ▶ California Department of Fish and Wildlife: Lake and Streambed Alteration Agreement (if applicable).
- ▶ State Water Resources Control Board or North Coast Regional Water Quality Control Board: Enrollment in an Order or Waiver of Waste Discharge Requirements.
- ▶ State Water Resources Control Board, Division of Water Rights: Water right certification or Small Irrigation Use Registration (if applicable).
- ▶ California Air Resources Control Board: Portable Equipment Registration Certificate (if applicable)

#### LOCAL

- ▶ Mendocino County: Issuance of County licenses for new cultivation premises.
- ▶ Mendocino County Air Quality Management District: Permit to Operate or other proof of engine registration.

## 1.4 PUBLIC REVIEW PROCESS

As identified above in Section 1.2, “Scope of This Draft EIR,” in accordance with CEQA regulations, an NOP was distributed on August 2, 2023, to responsible agencies, interested parties and organizations, and private organizations and individuals who could have interest in



the project. A virtual scoping meeting was held on August 22, 2023, via the WebEx online meeting platform or telephone conferencing.

The purpose of the NOP was to provide notification that an EIR for the Licensing of Commercial Cannabis Cultivation in Mendocino County Project was being prepared and to solicit input on the scope and content of the document. The NOP and responses to the NOP are included in Appendix A of this Draft EIR.

This Draft EIR is being circulated for public review and comment for a period of 45 days. During this period, comments from the general public as well as organizations and agencies on environmental issues may be submitted to the lead agency.

Upon completion of the public review and comment period, a Final EIR will be prepared that will include both written and oral comments on the Draft EIR received during the public-review period, responses to those comments, and any revisions to the Draft EIR made in response to public comments. The Draft EIR and Final EIR together will make up the EIR for the project.

Before approving the project, the lead agency is required to certify that the EIR has been completed in compliance with CEQA, that the decision-making body reviewed and considered the information in the EIR, and that the EIR reflects the independent judgment of the lead agency.

## 1.5 DRAFT EIR ORGANIZATION

This Draft EIR is organized into chapters, as identified and briefly described below. Chapters are further divided into sections (e.g., Chapter 3, “Environmental Impacts and Mitigation Measures,” and Section 3.6, “Energy”):

- ▶ The “Executive Summary”: This chapter introduces the Licensing of Commercial Cannabis Cultivation in Mendocino County Project; provides a summary of the environmental review process, effects found not to be significant, and key environmental issues; and lists significant impacts and mitigation measures to reduce significant impacts to a less-than-significant level.
- ▶ Chapter 1, “Introduction”: This chapter provides a synopsis of the project; a description of the type, purpose, and intended uses of this Draft EIR; a description of the scope of this EIR; a description of the lead and responsible agencies; a summary of the public review process; a description of the organization of this EIR; and definitions of standard terminology used in this EIR.
- ▶ Chapter 2, “Project Description”: This chapter describes the location, background, and goals and objectives for the Licensing of Commercial Cannabis Cultivation in Mendocino County Project and describes the project elements in detail.
- ▶ Chapter 3, “Environmental Impacts and Mitigation Measures”: The sections in this chapter evaluate the expected environmental impacts generated by the Licensing of Commercial Cannabis Cultivation in Mendocino County Project, arranged by subject area (e.g., land use, hydrology and water quality). In each subsection of Chapter 3, the regulatory background, existing conditions, analysis methodology, and thresholds of significance are described. The anticipated changes to the existing conditions after development of the project are then evaluated for each subject area. For any significant or potentially significant impact that would result from project implementation, mitigation measures are presented and the level of impact significance after mitigation is identified. Environmental impacts are numbered sequentially within each section (e.g., Impact 3.2-1, Impact 3.2-2,

etc.). Any required mitigation measures are numbered to correspond to the impact numbering; therefore, the mitigation measure for Impact 3.2-2 would be Mitigation Measure 3.2-2.

- ▶ Chapter 4, “Cumulative Impacts”: This chapter provides information required by CEQA regarding cumulative impacts that would result from implementation of the Licensing of Commercial Cannabis Cultivation in Mendocino County Project, as well as other past, present, and probable future projects.
- ▶ Chapter 5, “Alternatives”: This chapter evaluates alternatives to the Licensing of Commercial Cannabis Cultivation in Mendocino County Project, including alternatives considered but eliminated from further consideration, the No Project Alternative, and two alternative development options. The environmentally superior alternative is identified.
- ▶ Chapter 6, “Other CEQA Sections”: This chapter evaluates growth-inducing impacts and irreversible and irretrievable commitment of resources, and discloses any significant and unavoidable adverse impacts.
- ▶ Chapter 7, “Report Preparers”: This chapter identifies the preparers of the document.
- ▶ Chapter 8, “References”: This chapter identifies the organizations and persons consulted during preparation of this Draft EIR and the documents and individuals used as sources for the analysis.

## 1.6 STANDARD TERMINOLOGY

This Draft EIR uses the following standard terminology:

- ▶ “No impact” means no change from existing conditions (no mitigation is needed).
- ▶ “Less-than-significant impact” means no substantial adverse change in the physical environment (no mitigation is needed).
- ▶ “Potentially significant impact” means a substantial adverse change in the environment that might occur (mitigation is recommended because potentially significant impacts are treated as significant).
- ▶ “Significant impact” means a substantial adverse change in the physical environment that would occur (mitigation is recommended).
- ▶ “Significant and unavoidable impact” means a substantial adverse change in the physical environment that would occur and that cannot be avoided, even with the implementation of all feasible mitigation.

## 2 PROJECT DESCRIPTION

The California Department of Cannabis Control (DCC) is preparing a program environmental impact report (EIR) to evaluate commercial cannabis cultivation conducted under the Medicinal and Adult-Use Cannabis Regulation and Safety Act (MAUCRSA) in Mendocino County. Currently, there are 623 commercial cannabis cultivation sites, 23 of which have associated cannabis distribution transport-only operations within the unincorporated areas of Mendocino County that hold provisional state licenses, and that may therefore operate under MAUCRSA, on a conditional basis, for a limited period. (See Business and Professions Code section 26050.2.) DCC is considering whether to transition some or all of these provisional licenses to annual licenses (i.e., whether to issue annual licenses to some or all of these provisional licensees). DCC may also consider other annual licensing actions (e.g., the issuance of new, additional annual cultivation licenses) for future commercial cannabis cultivation and associated processing and distribution operations within the unincorporated areas of Mendocino County.

Licensed commercial cannabis activity in California is subject to regulatory approval at both the state and local levels. All legal commercial cannabis activity must be conducted pursuant to state licensing requirements; local jurisdictions may also impose additional licensing, permitting, or other regulatory requirements. As discussed below, Mendocino County regulates commercial cannabis cultivation through the County's Mendocino Cannabis Cultivation Regulations (MCCR). DCC is responsible for issuing state licenses for commercial cannabis activity, including cultivation. DCC will be serving as lead agency in connection with the licensure of commercial cannabis cultivation in Mendocino County.

### 2.1 PROJECT LOCATION

Mendocino County is located along the Pacific Ocean in the northwestern portion of California. The County is bordered by Humboldt and Trinity Counties to the north; Tehama, Glenn, and Lake Counties to the east; and Sonoma County to the south (Figure 2-1). The County is approximately 2,247,000 acres (including the incorporated cities).

Mendocino County is predominantly rural, with a majority of its land area consisting of forest and agricultural areas. Approximately 16 percent of the County's land area is under federal, state, and tribal ownership. Development (residential, commercial, office, and industrial) is located within the County's nine unincorporated communities (Anderson Valley/Boonville Area, Round Valley/Covelo Area, Fort Bragg Area, Hopland/Sanel Valley Area, Laytonville Area, Potter Valley Area, Redwood Valley Area, Little Lake Valley Area, and Ukiah Valley Area) and the incorporated cities of Fort Bragg, Point Arena, Ukiah, and Willits.

### 2.2 PROJECT BACKGROUND

Cannabis cultivation is a multistep process that includes preparation of soil/growing mediums; planting seeds or cannabis clones; irrigation, fertilization, and pest management; harvesting; and drying, curing, and trimming plants. Cultivation license types are based on the type of production and lighting used, as well as the number of plants grown and size of the canopy (i.e., the area where mature/flowering plants are grown).

This section presents an overview of cannabis cultivation activities as well as state and County cannabis regulations.

## 2.2.1 Cannabis Cultivation Activities

### CANNABIS OPERATIONS

#### Nursery Operations

Nursery operations exist for the purpose of plant propagation and seed production. Propagation of plants is typically done through the cloning of plants or germination. Seed production involves the use of mature cannabis plants. To maintain specific varieties of cannabis at cultivation sites, the practice of cloning is often employed. Female plants are maintained in a vegetative, nonflowering stage using artificial light for approximately 18 hours per day and are used as a source of the cuttings, or “clones.” Cuttings (i.e., targeted trimmings of a plant) are taken and dipped into a medium to stimulate root growth. After roots develop, the clones are placed into small pots to grow to a size sufficient for transplanting to larger pots in which they grow to maturity. The clones must all be female plants with the same genetic composition as the “mother” plant.

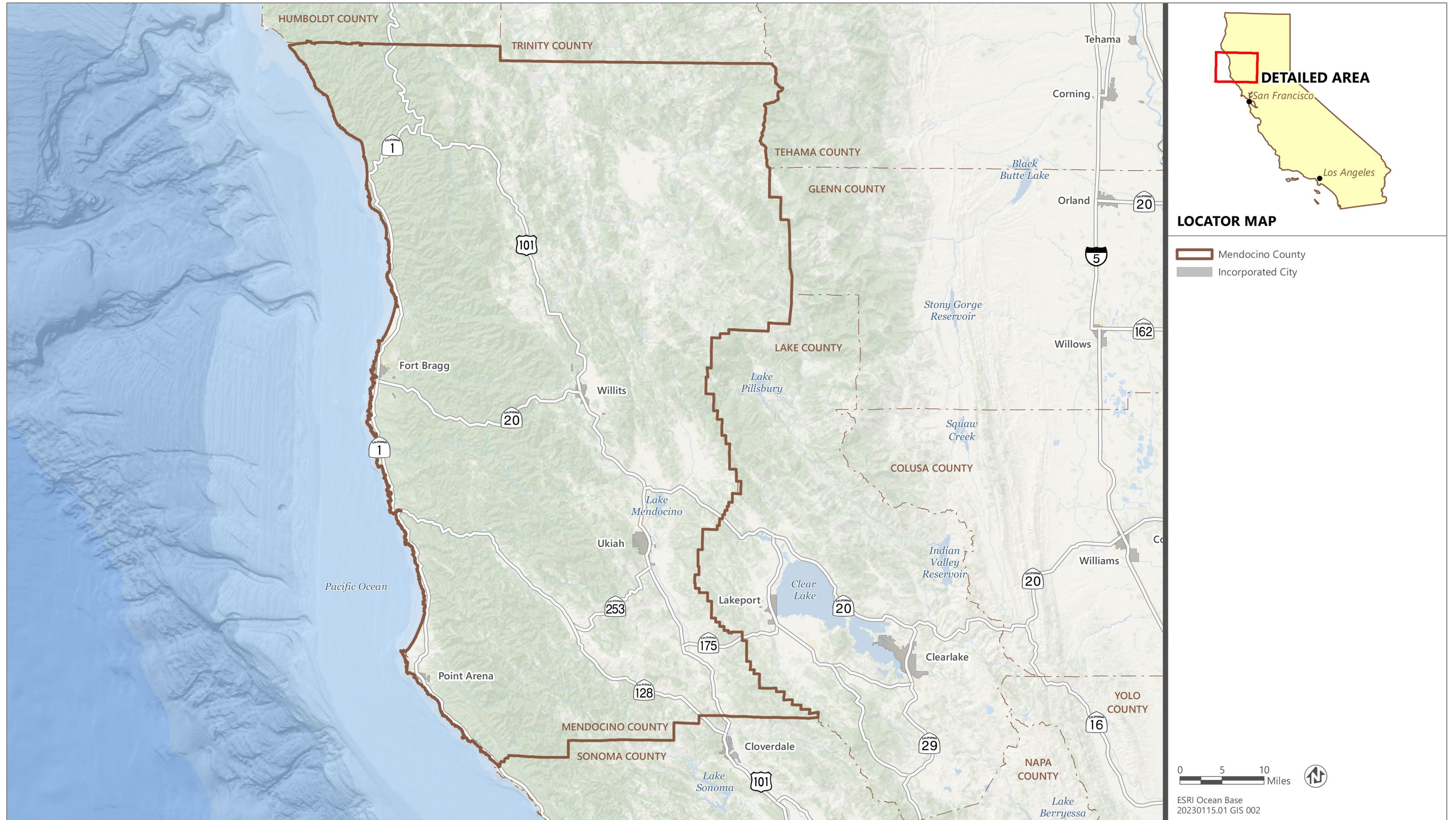
Germination, the process during which seeds sprout, commonly occurs in a nursery in an enclosed greenhouse building. Generally, germination is initiated by soaking seeds between wet paper towels, soaking them in a cup of water at room temperature, planting them in wet peat pellets, or planting them directly in potting soil. Warmth, darkness, and moisture initiate metabolic processes, such as the activation of hormones that trigger the expansion of the embryo in the seed. After germination is complete, seedlings are prepared for indoor, outdoor, or mixed-light cultivation.

Nurseries can be located on the cultivation sites as an ancillary component of cultivation operations when used to support on-site needs without separate state licensing. Nurseries can also be operated as a stand-alone wholesale operation that can provide a source of seed or immature clone plants that can be purchased as part of a commercial cultivation operation. These types of nurseries are licensed similarly to commercial cannabis cultivation sites.

#### Outdoor Cultivation

Cannabis can be grown outdoors, either in natural soil or in pots of premade or commercial soil with no artificial light. Some strains perform better than others in outdoor settings, depending on conditions. To generate optimum quantities of cannabinoids, the active chemical compounds in cannabis, the plant needs fertile soil and long hours of daylight. For outdoor cultivation, growers generally select areas that receive 12 hours or more of sunlight per day. Outdoor cultivation activities can also involve non-artificial light deprivation (i.e., manipulation of light by covering hoop houses (temporary structures), greenhouses, or similar structures with light-blocking tarps or blinds, which are used to promote flowering, rather than use of artificial light). Depending on the varietal, each plant can reach 12 or more feet in height with a radius of 6 feet or more. Outdoor cultivation sites may operate their own onsite nursery in greenhouses or other structures that may use lighting for plant growth before outdoor planting.

There are several State cannabis license types available for outdoor cultivation based on the number of cannabis plants or cannabis canopy area (canopy is the area where mature (flowering) plants are grown) (Table 2-1). The smallest outdoor cannabis cultivation license type is “specialty cottage outdoor” (up to 25 mature cannabis plants), whereas the largest license type is “large outdoor” (more than 1 acre of total cannabis canopy area).



Source: Data received from Mendocino County in 2023; adapted by Ascent in 2023.

**Figure 2-1 Mendocino County and Incorporated Cities**

## Mixed-Light Cultivation

Mixed-light cultivation uses a combination of natural and supplemental artificial lighting to increase the number of harvests in a year. In some cases, mixed-light operations rely on greenhouses and/or supplemental light due to poor environmental conditions or short growing seasons. Mixed-light cultivation operations allow for manipulation of light and dark cycles through the use of artificial lighting. Light manipulation is used to increase or decrease the vegetative and flowering phases by mimicking seasonal daylight variation. In the northern hemisphere, daylight exceeds 12 hours per day beginning with the vernal equinox (March 21) and is less than 12 hours per day after the autumnal equinox (September 21). Longer light exposure, which peaks at the summer solstice (June 21), is associated with the vegetative stage; the flowering stage is prompted when the number of daylight hours approaches 12 hours per day or less.

Light manipulation techniques can increase the number of harvests per year. Artificial light is used to “extend” daylight hours or to disrupt periods of darkness (typically for approximately 2 hours in the middle of the night) to foster vegetative development. Similar to outdoor cultivation operations, mixed-light operations can manipulate light covering hoop houses (temporary structures often used in mixed-light operations) or greenhouses (or similar structures) with light-blocking tarps or blinds, which are used to promote flowering. In addition, artificial light may be used to supplement sunlight during periods of low light. Light systems that are not connected to the electrical grid use generators and/or solar-powered systems. Licensed cultivators using generators rated at 50 horsepower and greater must comply with the Airborne Toxic Control Measure for stationary or portable engine generators by obtaining a Portable Equipment Registration Certificate from the California Air Resources Board, for a portable engine generator. For a portable or stationary engine, a Permit to Operate or other proof of engine registration would need to be obtained by the Mendocino County Air Quality Management District.

Several state cannabis license types are available for mixed-light cultivation, which are based on the number of cannabis plants or cannabis canopy area (Table 2-1). The smallest mixed-light cannabis cultivation license type is “specialty cottage mixed-light” (up to 2,500 square feet of total cannabis canopy area), whereas the largest license type is “large mixed-light” (more than 22,000 square feet of total cannabis canopy area). Mixed-light licenses also have two tiers based on the amount of artificial light used:

- ▶ Tier 1: Up to 6 watts per square foot of artificial light, and
- ▶ Tier 2: 6 to 25 watts per square foot of artificial light.

## Indoor Cultivation

Indoor cultivation makes exclusive use of artificial light during the vegetative and flowering phases. Generally, cultivating cannabis indoors rather than outdoors is more complicated and expensive, but it allows the cultivator complete control over the growing environment and regular harvests irrelevant of seasons. Plants of any type can be grown faster indoors than outdoors because light, carbon dioxide concentrations, and humidity can be controlled. Plants can also be grown indoors with hydroponic techniques, which use a mineral nutrient solution in water or other similar method that retains plant roots rather than soil. Licensed cultivators using generators rated at 50 horsepower and greater must comply with the Airborne Toxic Control Measure for stationary or portable engine generators by obtaining a Portable Equipment Registration Certificate from the California Air Resources Board, for a portable

engine generator. For a portable or stationary engine, a Permit to Operate or other proof of engine registration would need to be obtained by the Mendocino County Air Quality Management District.

Several State cannabis license types are available for indoor cultivation based on the number of cannabis plants or cannabis canopy area (Table 2-1). The smallest outdoor cannabis cultivation license type is “specialty cottage indoor” (up to 500 square feet of total cannabis canopy), whereas the largest license type is “large indoor” (more than 22,000 square feet of total cannabis canopy area).

## PROCESSING ACTIVITIES

Processing involves drying, curing, grading, trimming, and packing. These steps may be performed within the parcel where the cannabis was grown or at separate licensed facilities that accept product from multiple cultivation sites. Plants are trimmed of their leaves to reveal buds, which typically are hang-dried or placed on drying racks in a warehouse, barn, or other enclosed building, often including the use of fans. Cultivation sites may accommodate harvest staff on-site, or staff may commute daily. Harvested and trimmed cannabis typically is vacuum sealed in plastic bags. The State allows cultivators to process their own cannabis, or obtain a separate processing license for independent operations and the processing of other cultivators’ cannabis

## DISTRIBUTION TRANSPORT-ONLY ACTIVITIES

The state allows cultivators to obtain licensure for distribution transport-only activities, which enable such cultivators to transport cannabis between licensees; however, they shall not transport any cannabis or cannabis products, except immature cannabis plants, seeds, and trade samples, to a licensed retailer or licensed microbusiness authorized to engage in retail activities. Cultivators engaging in distribution transport-only activities are responsible for complying with all the requirements for a holder of a distribution license, except for those related to quality assurance and regulatory compliance testing. Transport-only distributors may not engage in wholesale, destruction, packaging, labeling, or storing of cannabis goods; arrange for testing of cannabis goods; or deliver cannabis goods to a customer.

## 2.2.2 Evolution of State Cannabis Regulations

### COMPASSIONATE USE ACT (1996) AND THE MEDICAL MARIJUANA PROGRAM ACT (2003)

The Compassionate Use Act of 1996 was enacted by California voters as Proposition 215. It allowed patients with a valid doctor’s recommendation and the patients’ designated primary caregivers to possess and cultivate cannabis for personal medical use without facing criminal charges from the state. The Compassionate Use Act changed California’s penal code by decriminalizing the cultivation and possession of medical marijuana by a patient or the patient’s primary caregiver for the patient’s personal use and by creating a limited defense to the crimes of possessing or cultivating marijuana.

The passage of Senate Bill (SB) 420 (Statutes of 2003) enacted the Medical Marijuana Program Act, which clarified the scope and application of the Compassionate Use Act and

established the California medical marijuana program. Specially, this act established a voluntary program for the issuance of identification cards to qualified patients and established procedures under which a qualified patient with an identification card may use marijuana for medical purposes to protect patients and their caregivers from arrest.

## **MEDICAL CANNABIS REGULATION AND SAFETY ACT (2015)**

Originally referred to as the Medical Marijuana Regulation and Safety Act but renamed through subsequent amendments, the Medical Cannabis Regulation and Safety Act (MCRSA) was established through a series of three separate bills that were enacted together in September 2015 (Assembly Bill (AB) 266, AB 243, and Senate Bill (SB) 643; former Business and Professions Code section 19300 et seq.). MCRSA established California's first framework for the licensing, regulation, and enforcement of commercial medicinal cannabis cultivation, manufacture, retail sale, transport, distribution, delivery, and testing. Under MCRSA, all licenses were required to be approved by the applicable local jurisdiction.

AB 266 established a new Bureau of Medical Cannabis Regulation (later renamed the California Bureau of Cannabis Control) under the California Department of Consumer Affairs. SB 643 and AB 243 further identified two other licensing authorities: the California Department of Food and Agriculture (CDFA), which was responsible for regulating commercial cannabis cultivation; and the California Department of Public Health, which was responsible for developing standards for the commercial manufacture, testing, and production and labeling of cannabis edibles.

## **ADULT USE OF MARIJUANA ACT (2016) AND MEDICINAL AND ADULT-USE CANNABIS REGULATION AND SAFETY ACT (2017)**

On November 8, 2016, California voters approved Proposition 64, the California Marijuana Legalization Initiative, also known as the Adult Use of Marijuana Act (AUMA). Proposition 64 legalized the nonmedicinal adult use of cannabis; established California's framework for the licensing, regulation, and enforcement of commercial nonmedicinal cannabis activity; and set a date of January 1, 2018, for the licensing authorities to begin issuing commercial cannabis licenses.

In June 2017, the California State Legislature passed a budget trailer bill, SB 94, that integrated MCRSA with AUMA and created the Medicinal and Adult-Use Cannabis Regulation and Safety Act (MAUCRSA) (Business and Professions Code section 26000 et seq.). Under MAUCRSA, a single regulatory system was designed to govern the cannabis industry (both medicinal and adult-use) in California. Under MAUCRSA, three licensing authorities were established: the Bureau of Cannabis Control was charged with the licensing, regulation, and enforcement of commercial cannabis distribution, retail, microbusinesses, testing laboratories, and temporary cannabis events; the Department of Food and Agriculture's CalCannabis Cultivation Licensing Division was responsible for the licensing, regulation, and enforcement of commercial cannabis cultivation; and the Department of Public Health's Manufactured Cannabis Safety Branch was responsible for the licensing, regulation, and enforcement of commercial cannabis manufacturing. MAUCRSA also authorized the state licensing authority to issue temporary licenses until January 1, 2019, if specified conditions were met. In December 2017, the licensing authorities began accepting applications for temporary licensure and on January 1, 2018, the first temporary licenses for medicinal and adult-use cannabis activities became effective.



On July 12, 2021, the governor signed California AB 141 (Chapter 70, statutes of 2021), which consolidated the three former cannabis licensing authorities—the Department of Consumer Affairs’ Bureau of Cannabis Control, the Department of Food and Agriculture’s CalCannabis Cultivation Licensing Division, and the Department of Public Health’s Manufactured Cannabis Safety Branch—into a single Department of Cannabis Control (DCC) within the Business, Consumer Services, and Housing Agency. DCC inherited all the powers, duties, purposes, functions, responsibility, and jurisdiction of the three separate licensing entities formerly authorized by MAUCRSA. DCC now serves as the single regulatory and enforcement entity for all licensed commercial cannabis businesses in California.

DCC regulates all commercial cannabis license holders in California, including cultivators, retailers, manufacturers, distributors, testing laboratories, microbusinesses, and temporary cannabis events.

### 2.2.3 Current State Permitting of Cannabis Cultivation Operations

Licensing of commercial cannabis cultivation sites (medical and adult use) and associated uses is regulated by DCC under Division 10 of the Business and Professions Code and CCR, title 4, Division 19. A summary of state cannabis cultivation license types is provided in Table 2-1, below.

**Table 2-1 State Cannabis Operation License Types**

Name	Description
<b>Cultivation</b>	
Specialty Cottage Outdoor	For outdoor cultivation sites with up to 25 mature plants or 2,500 square feet or less of total canopy
Specialty Cottage Indoor	For indoor cultivation sites with 500 square feet or less of total canopy
Specialty Cottage Mixed-Light Tier 1 and Tier 2	For mixed-light cultivation sites with 2,500 square feet or less of total canopy
Specialty Outdoor	For outdoor cultivation sites with less than or equal to 5,000 square feet of total canopy or up to 50 mature plants on noncontiguous plots
Specialty Indoor	For indoor cultivation sites with between 501 and 5,000 square feet of total canopy
Specialty Mixed-Light Tier 1 and 2	For mixed-light cultivation sites with between 2,501 and 5,000 square feet of total canopy
Small Outdoor	For outdoor cultivation sites with between 5,001 and 10,000 square feet of total canopy
Small Indoor	For indoor cultivation sites with between 5,001 and 10,000 square feet of total canopy
Small Mixed-Light Tier 1 and Tier 2	For mixed-light cultivation sites with between 5,001 and 10,000 square feet of total canopy
Medium Outdoor	For outdoor cultivation sites with between 10,001 square feet and 1 acre (43,560 square feet) of total canopy
Medium Indoor	For indoor cultivation sites with between 10,001 and 22,000 square feet of total canopy
Medium Mixed-Light Tier 1 and Tier 2	For mixed-light cultivation sites between 10,001 and 22,000 square feet of total canopy
Nursery	For cultivation of clones, immature plants, seeds, and other agricultural products used specifically for the propagation of cannabis plants
Processor	For processor-only trimming, drying, curing, grading, packaging, or labeling of cannabis and nonmanufactured cannabis products

Name	Description
Large Outdoor	For outdoor cultivation sites with more than 1 acre of total canopy that use no artificial light
Large Indoor	For indoor cultivation sites with more than 22,000 square feet of total canopy that use artificial light exclusively
Large Mixed-Light	For mixed-light cultivation sites with more than 22,000 square feet of total canopy
<b>Distribution Transport-Only</b>	
(Type 13)	For distribution transport-only activities, which enable such cultivators to transport cannabis between licensees; however, they shall not transport any cannabis or cannabis products, except immature cannabis plants, seeds, and trade samples, to a licensed retailer or licensed microbusiness authorized to engage in retail activities.

Source: Data compiled by Ascent in 2023.

## ISSUANCE OF PROVISIONAL LICENSES BY DCC

In an effort to ensure that commercial cannabis cultivation sites were able to maintain state licensure (and thus operate under MAUCRSA) while completing project specific environmental review and local permitting, the California Legislature passed a series of bills, starting in 2018, establishing a provisional licensing program. (See Business and Professions Code section 26050.2.) Until June 30, 2023, DCC issued provisional licenses for cannabis cultivators that completed an application consistent with CCR, title 4, section 15002, if the applicant provided evidence of compliance with the following California Department of Fish and Wildlife (CDFW) lake and streambed alteration agreement (LSAA) requirements:

- ▶ a final CDFW LSAA;
- ▶ a draft CDFW LSAA, signed and returned to CDFW;
- ▶ written verification by CDFW that an LSAA is not needed; or
- ▶ written verification from CDFW that the applicant submitted a notification described in Section 1602 of the Fish and Game Code, submitted payment of applicable fees pursuant to Section 1609 of the Fish and Game Code, and is responsive to CDFW as prescribed in Section 26050.2 of the Business and Professions Code.

Provisional licenses were granted for applications not in exceedance of 1 acre of total canopy for outdoor cultivation or 22,000 square feet for mixed-light or indoor cultivation. Multiple cultivation licenses on contiguous (i.e., connected, touching, or adjoining) premises that exceeded 1 acre of total canopy for outdoor cultivation or 22,000 square feet for mixed-light or indoor cultivation were not permitted to renew after January 1, 2023.

## ISSUANCE OF ANNUAL CULTIVATION LICENSES BY DCC

Issuance of annual licenses requires completion of an application consistent with CCR, title 4, sections 15002 and 15011, including payment of application fees and evidence of exemption from, or compliance with, CEQA as required by CCR, title 4, section 15010. In addition, CCR, title 4, section 16304 outlines the following environmental protection measures in which all cannabis cultivation operations shall comply with:

- (1) Principles, guidelines, and requirements adopted pursuant to section 13149 of the Water Code and implemented by the State Water Resources Control Board, Regional Water Quality Control Boards, or California Department of Fish and Wildlife;

- (2) Any conditions of licensure included pursuant to section 26060.1(b)(1) of the Business and Professions Code;
- (3) Requirements of section 7050.5(b) of the Health and Safety Code if human remains are discovered during cultivation activities;
- (4) Requirements for generators pursuant to CCR, title 4, section 16306;
- (5) Requirements for pesticides pursuant to CCR, title 4, section 16307;
- (6) Outdoor lights used for safety or security purposes are shielded and downward facing; and
- (7) Lights used for indoor or mixed-light cultivation are shielded from sunset to sunrise to reduce nighttime glare.

Moreover, CCR, title 4, sections 16305–16311 outline additional cannabis cultivation requirements for renewable energy usage, cannabis canopy areas, cultivation plans, pest management, and identification of water sources.

## 2.2.4 Mendocino County Cannabis Regulations

On March 21, 2017, the Mendocino County Board of Supervisors adopted the Mendocino County Medical Cultivation Regulation, which created a local regulatory framework for commercial cannabis cultivation activities and approvals in the County under County Code of Ordinances Chapters 10A.17 and 20.232 in addition to state licensing requirements administered by the California Department of Cannabis Control (DCC) under CCR, title 4, division 19. Since adoption, the County has approved multiple modifications, including one change that renamed the ordinance to the Mendocino Cannabis Cultivation Regulations (MCCR) when the ordinance was broadened to encompass both medicinal and adult-use cannabis cultivation. Most recently, on May 23, 2023, the Mendocino County Board of Supervisors amended the MCCR to streamline cannabis cultivation licensing processes. The amendments make the County’s issuance of a license a ministerial process and remove the requirement to submit certain compliance documents as part of the initial application process, thereby reducing the amount of information reviewed by Mendocino County as part of its license application review while retaining the overall requirements of the ordinance for compliance with relevant statutes and regulations.

A summary of County cannabis cultivation license types is provided in Table 2-2.

**Table 2-2 County Cannabis Operation License Types**

Name	Description
<b>Cultivation</b>	
Small Outdoor (Type C)	For outdoor cultivation sites up to 2,500 square feet of total canopy
Small Indoor (Type C-A)	For indoor cultivation sites up to 2,500 square feet of total canopy
Small Mixed-Light Tier 1 and Tier 2 (Type C-B)	For mixed-light cultivation sites up to 2,500 square feet of total canopy
Medium Outdoor (Type 1)	For outdoor cultivation sites with between 2,501 and 5,000 square feet of total canopy on one legal parcel not less than 5 acres in size
Medium Indoor (Type 1A)	For indoor cultivation sites with between 2,501 and 5,000 square feet of total canopy
Medium Mixed-Light Tier 1 and 2 (Type 1B)	For mixed-light cultivation sites with between 2,501 and 5,000 square feet of total canopy, all or a portion of which may be within a structure or structures during a cultivation cycle, on one legal parcel not less than 5 acres in size

Name	Description
Nursery (Type 4)	For nursery sites cultivating only cannabis that do not exceed 22,000 square feet of total plant canopy on one legal parcel
Large Outdoor (Type 2)	For outdoor cultivation sites with between 5,001 and 10,000 square feet of total canopy size that use no artificial lighting on one legal parcel not less than 10 acres in size
Large Indoor (Type 2A)	For indoor cultivation sites with between 5,001 and 10,000 square feet of total canopy size on one legal parcel that use artificial lighting exclusively
Large Mixed-Light (Type 2B)	For mixed-light cultivation sites with between 5,001 and 10,000 square feet of total canopy, all or a portion of which may be within a structure or structures during a cultivation cycle, on one legal parcel not less than 10 acres in size

Source: Data compiled by Ascent in 2023.

Cannabis cultivation is limited to the following DCC license types, described in Table 2-3, based on Mendocino County Code section 10A.17.060. Under the MCCR, processing and distribution transport-only operations are done in conjunction with cultivation activities<sup>1</sup>.

**Table 2-3 DCC and Mendocino County Cultivation Licenses Comparison**

DCC Licenses	Mendocino County Licenses
<b>Outdoor Cultivation Licenses</b>	
Specialty Cottage Outdoor	Mendocino County license Type C Small Outdoor
Specialty Outdoor	Mendocino County license Type C and Type 1
Small Outdoor	Mendocino County license Type 2
<b>Indoor Cultivation Licenses</b>	
Specialty Cottage Indoor	Mendocino County license Type C-A
Specialty Indoor	Mendocino County license Type C-A and Type 1A
Small Indoor	Mendocino County license Type 2A
<b>Mixed-Light Cultivation Licenses</b>	
Specialty Cottage Mixed-Light Tier 1 and Tier 2	Mendocino County license Type C-B
Specialty Mixed-Light Tier 1 and Tier 2	Mendocino County license Type 1B
Small Mixed-Light Tier 1 and Tier 2	Mendocino County license Type 2B
<b>Nursery Licenses</b>	
Nursery DCC License	Mendocino County license Type 4 (limited to 22,000 square feet of total cannabis plant canopy)

Source: Data compiled by Ascent in 2023.

Requirements for all cannabis cultivation licensees are provided in the MCCR under Section 10A.17.070. Requirements are generally related to:

- ▶ **Location.** Cannabis cultivation operations shall be permitted on legal parcels that comply with zoning districts applicable to the corresponding license type as outlined in Chapter 20.242 of the County ordinance.
- ▶ **Dwelling units.** All legal parcels with a cultivation site are required to have a dwelling unit on-site. However, this requirement does not apply to legal parcels within the following

<sup>1</sup> Per Section 10A.17.020 of the MCCR, "Cultivation of cannabis" means any activity involving the planting, growing, harvesting, drying, curing, grading, or trimming or processing of cannabis.

zoning districts: Upland Residential (U-R), Agricultural (A-G), Rangeland (R-L), Forest Land (F-L), Timberland Production (TPZ), Limited Industrial (1-1), General Industrial (1-2), Pinoleville Industrial (P-1), as well as legal conforming parcels in Rural Residential, lot size 10 acres (R-R:L-10).

- ▶ **Defensible space.** Cannabis cultivation operations shall maintain defensible space protocols around legal parcel structures, as established by the California Department of Forestry and Fire Protection.
- ▶ **Generators.** Indoor and mixed-light cultivation operations shall not rely on a generator as a primary source of power. Generators may be allowed, under certain conditions, if no grid power source or alternative power source to support both a legal dwelling unit and an indoor or mixed-light operation is available.
- ▶ **Compliance with applicable regulations and agency requirements.** Cannabis cultivation operations shall comply with all statutes, regulations, and requirements of the (1) California State Water Resources Control Board, Division of Water Rights, (2) North Coast Regional Water Quality Control Board Order No. 2015-0023,<sup>2</sup> (3) Fish and Game Code section 1602 (LSAA), and (4) State Water Resources Control Board (SWRCB) General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009-0009-DWQ.
- ▶ **DCC licensing.** Cannabis cultivation operations shall obtain the required license(s) from DCC pursuant to Division 10 of the California Business and Professions Code and its implementing regulations.

Section 10A.17.040 of the MCCR outlines general limitations of cannabis cultivation operations. They include but are not limited to:

- ▶ Location near youth facilities, schools, or parks;
- ▶ Required setbacks from neighboring uses;
- ▶ Emission of objectionable odors;
- ▶ Reliance on electrical grid and alternative energy sources;
- ▶ Exceedance of noise level standards set forth in County General Plan Policies DE 100, 101 and 103;
- ▶ Water usage and source;
- ▶ Fencing (i.e., visual shielding);
- ▶ Security; and
- ▶ Tree removal.

<sup>2</sup> State Water Resources Control Board (SWRCB) adopted the Cannabis Cultivation Policy–Principles and Guidelines for Cannabis Cultivation and the General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities on October 17, 2017, which effectively replaced the North Coast Regional Water Quality Control Board (NCRWQCB) Order. On February 5, 2019, SWRCB adopted updates to the Cannabis Cultivation Policy–Principles and Guidelines for Cannabis Cultivation and Cannabis Cultivation General Order (SWRCB Order WQ 2019-0001-DWQ), which became effective on April 16, 2019. Cannabis cultivation sites are subject to compliance with the General Requirements and Prohibitions found in Attachment A of SWRCB Order WQ 2019-0001-DWQ, which includes requirements (terms) that provide protections for biological resources, cultural and tribal cultural resources, and water resources.

## 2017 MENDOCINO COUNTY MEDICAL CANNABIS CULTIVATION REGULATION INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

On March 21, 2017, the Mendocino County Board of Supervisors also adopted an Initial Study/Mitigated Negative Declaration (IS/MND or 2017 IS/MND) and Mitigation Monitoring and Reporting Program (MMRP) for the Mendocino County Medical Cultivation Regulation. As described above, the Mendocino County Medical Cultivation Regulation has since been renamed to the MCCR as a result of the County approving multiple modifications for minor changes since adoption. Most recently, on May 22, 2023, the Mendocino County Board of Supervisors adopted an addendum (2023 Addendum) to the previously adopted 2017 IS/MND that approved an amended MMRP for amendments to the MCCR. The amendments remove the requirement to submit certain compliance documents as part of the initial application process, reducing the amount of information reviewed by Mendocino County as part of the application process while retaining the overall requirements of the ordinance for compliance with relevant statutes and regulations.

### 2.3 PROJECT OVERVIEW

As described above, the project consists of commercial cannabis cultivation licensing conducted under the Medicinal and Adult-Use Cannabis Regulation and Safety Act (MAUCRSA) in Mendocino County.

As of April 2023, there are 623 existing commercial cannabis cultivation sites, 23 of which have associated cannabis distribution transport-only operations within the unincorporated areas of Mendocino County that hold provisional state licenses (Figure 2-2) and that may therefore operate under MAUCRSA, on a conditional basis, for a limited time. DCC is considering whether to transition some or all of these provisional licenses to annual licenses (i.e., whether to issue annual licenses to some or all of these provisional licensees). Several of these licensed cannabis cultivation premises have prepared technical studies and CEQA documents (State CEQA Guidelines, Appendix G checklists that evaluate consistency with the impact conclusions of the 2017 IS/MND for the MCCR). Appendix B provides a summary of the 623 commercial cannabis cultivation sites and the distribution transport-only uses. DCC may also consider other annual licensing actions (e.g., the issuance of new, additional annual cultivation licenses) for future commercial cannabis cultivation within the unincorporated areas of Mendocino County.

Historic County licensing data indicates that implementation of the project (i.e., streamlining the annual licensing process) could result in a development potential of up to 1,075 new commercial cultivation licenses, 10 new processing licenses, and 40 distribution transport-only licenses that would be connected to an on-site cultivation operation within the unincorporated County.<sup>3</sup> The existing licensed sites that already operate within the unincorporated County are considered part of the existing environmental setting. For the purposes of this EIR, “existing licensed sites” assumes legal operations that have obtained a DCC-issued license. Refer to Chapter 3, “Approach to the Environmental Analysis,” for a discussion related to unlicensed operations within the unincorporated County.

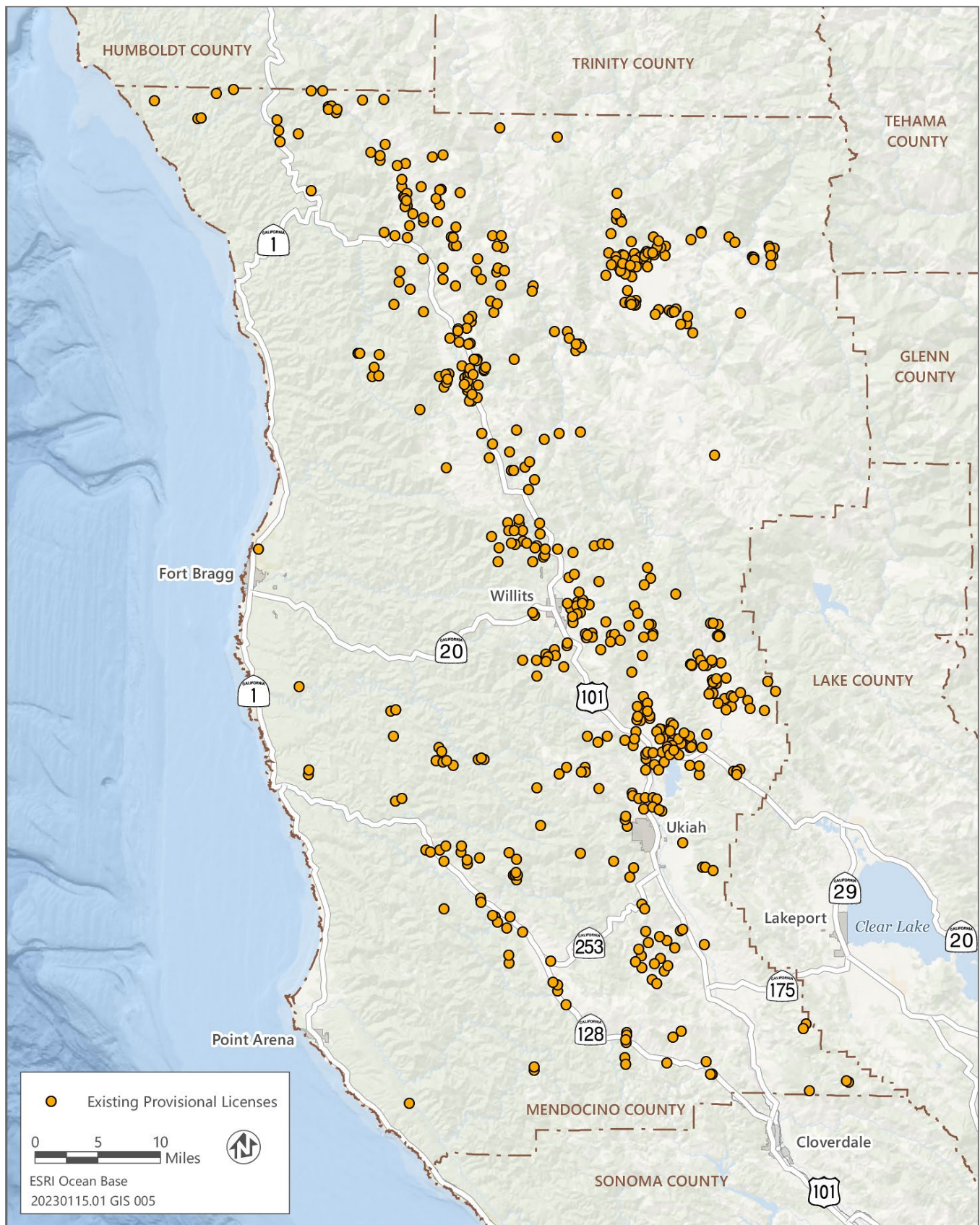
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<sup>3</sup> The MCCR does not provide licenses for stand-alone processing or distribution uses in Mendocino County. All cannabis processing and distribution must be conducted on-site of the cannabis cultivation premise.

## 2.4 PROJECT OBJECTIVES

The objectives of the project are to:

- ▶ Implement the California Department of Cannabis Control's (DCC's) cultivation licensure program in the County, in an effort to minimize the public health and safety risks associated with unlicensed commercial cannabis activity while promoting a robust and economically viable legal cannabis industry in the County;
- ▶ Effectively transition qualified existing provisional cannabis cultivation licenses to annual licenses through a streamlined cannabis licensing process to ensure that such provisional cannabis cultivation license holders complete the annual license process by the statutory timeframes identified in Business and Professions Code, section 26050.2;
- ▶ Provide a mechanism for future cannabis cultivation license applicants to obtain annual licenses through a streamlined cannabis licensing process;
- ▶ Ensure that cannabis cultivation by licensees is conducted in accordance with applicable state and local laws related to land conversion, air quality, electricity usage, water usage, water quality, biological resources, agricultural discharges, and similar matters;
- ▶ Protect natural and built resources in Mendocino County; and
- ▶ Minimize potential adverse effects of cannabis cultivation activities on the environment.



Source: Data received from Mendocino County in 2023; adapted by Ascent in 2023.

**Figure 2-2 Mendocino County—Existing Provisional Licenses**



## 2.5 INTENDED USES OF THIS EIR

As encouraged under CEQA, DCC intends to use this Program EIR to broadly evaluate countywide impacts and to streamline the environmental review and consideration of future cannabis operation applications. DCC plans to make full use of existing streamlining provided by CEQA, as well as emerging streamlining techniques that may become available later, as applicable. Subsequent to adoption of the EIR, applicants may apply for annual cannabis cultivation licenses without having to obtain provisional licenses. Individual applications for cannabis cultivation operations would be subject to further site-specific environmental review as applicable under CEQA in accordance with State CEQA Guidelines, section 15168(c), "Use with Later Activities." This section of the guidelines addresses environmental review of projects intended to be addressed in a program for which an EIR was prepared. DCC may determine that the environmental impacts of an individual application are adequately addressed in this EIR and that no further environmental review is required. However, DCC may also determine that an additional focused environmental review is required for an individual applicant. Preparation of a site-specific environmental review document, such as a negative declaration or mitigated negative declaration, would be required if DCC determines that the individual applicant would cause a significant environmental impact that was not examined in the EIR or would substantially increase the severity of a previously identified significant impact under State CEQA Guidelines, sections 15162 and 15168(c).

## 2.6 POTENTIAL PERMITS AND APPROVALS REQUIRED

The following permits/approvals would be required for subsequent individual cannabis cultivation operation applicants:

### State

- ▶ Department of Cannabis Control: Issuance of annual cannabis cultivation licenses
- ▶ California Department of Fish and Wildlife: Lake and Streambed Alteration Agreement (if applicable)
- ▶ State Water Resources Control Board or Regional Water Quality Control Board: Enrollment in an Order or Waiver of Waste Discharge Requirements
- ▶ State Water Resources Control Board, Division of Water Rights: Water right certification or Small Irrigation Use Registration (if applicable).
- ▶ California Air Resources Board: Portable Equipment Registration Certificate

### Local

- ▶ Mendocino County: Issuance of County licenses for new cultivation premises
- ▶ Mendocino County Air Quality Management District: Permit to Operate or other proof of engine registration

### 3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

This chapter is organized by environmental resource topic. Each resource topic is addressed in a separate section that presents an integrated discussion of the existing conditions (including environmental setting and regulatory setting) associated with the resource, potential environmental effects of the project (including direct and indirect impacts) on the resource, and mitigation measures to reduce significant effects.

#### APPROACH TO THE ENVIRONMENTAL ANALYSIS

This draft environmental impact report (Draft EIR) evaluates and discloses the environmental impacts associated with the Licensing of Commercial Cannabis Cultivation in Mendocino County Project, in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code (PRC) section 21000, et seq.) and the State CEQA Guidelines (CCR, title 14 (hereinafter, "State CEQA Guidelines"), section 15000, et seq.). Sections 3.1 through 3.17 of this Draft EIR present a discussion of regulatory background, existing conditions, environmental impacts associated with construction and operation of the project, mitigation measures to reduce the level of impact, and residual level of significance (i.e., after application of mitigation, including impacts that would remain significant and unavoidable after application of all feasible mitigation measures). Issues evaluated in these sections consist of the environmental topics identified for review in the notice of preparation (NOP) prepared for the project (see Appendix A of this Draft EIR). Chapter 4 of this Draft EIR, "Cumulative Impacts," presents an analysis of the project's impacts considered together with those of other past, present, and probable future projects producing related impacts, as required by section 15130 of the State CEQA Guidelines. Chapter 5, "Alternatives," presents a reasonable range of alternatives and evaluates the environmental effects of those alternatives relative to those of the proposed project, as required by section 15126.6 of the State CEQA Guidelines. Chapter 6, "Other CEQA Sections," includes an analysis of the project's growth inducing impacts, as required by PRC section 21100(b)(5).

Sections 3.1 through 3.17 of this Draft EIR each include the following components.

**Regulatory Setting:** This subsection presents information on the laws, regulations, plans, and policies that relate to the issue area being discussed. Regulations originating from the state and local levels are discussed as appropriate. Cannabis is identified as a Schedule 1 controlled substance under the federal Controlled Substance Act. Operations related to the growing and processing of cannabis are in violation of federal law. Federal agencies are prohibited from issuing permits or approvals for any operation that is in violation of federal law. Thus, compliance with federal permitting requirements that would usually address environmental impacts (e.g., filling of waters of the United States and incidental take authorization under the federal Endangered Species Act) is not legally possible.

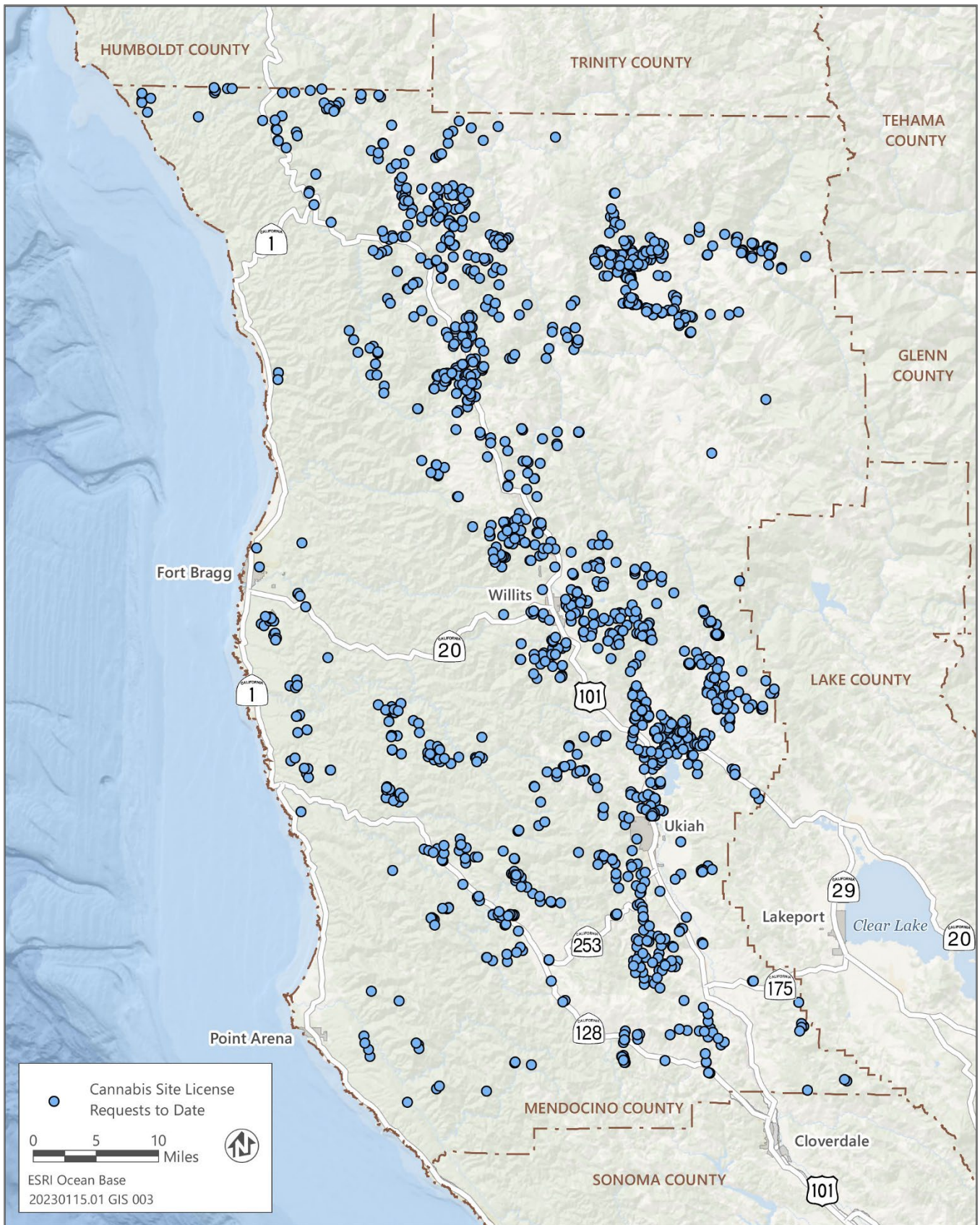
**Environmental Setting:** This subsection describes the existing environmental conditions in the County, pursuant to State CEQA Guidelines, section 15125. The environmental setting generally serves as the baseline against which environmental impacts are evaluated. State CEQA Guidelines, section 15125(a) states that the physical environmental conditions as they exist at the time the NOP is published normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant.

For the purposes of this Draft EIR, the description of the baseline conditions includes commercial cannabis cultivation sites that are locally authorized by Mendocino County and continue to operate under provisional licenses from the state while completing project-specific environmental review. Mendocino County approved its local commercial cannabis cultivation regulations on March 27, 2017, and subsequently began processing County cannabis cultivation licenses. The state began accepting applications and issuing temporary licenses for commercial cannabis activities on January 1, 2018. According to Mendocino County records as of April 2023, there have been 1,708 commercial cannabis cultivation license applications submitted since 2017 (Figure 3-1) (Mendocino County 2023). Of these County license applications, 1,319 application submittals have been submitted to DCC since 2018. Currently there are 623 provisional licenses and 19 annual licenses that have been issued by the state and are considered active (see Figure 3-1). The analysis also evaluates the potential impacts from some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license and may propose to expand their cultivation activities as they transition to annual licensure.

It is acknowledged that there are unlicensed cannabis cultivation sites located in the County, including cannabis cultivation sites located on state and federal lands. A complete inventory of unlicensed cannabis sites in the County has not been prepared by either Mendocino County or DCC. In September 2023, Ascent conducted a survey of approximately 30,000 acres of unincorporated, privately owned lands using geographic information system (GIS) mapping and satellite imagery to estimate the potential number of unlicensed cannabis cultivation sites in relation to licensed cannabis cultivation sites that appear to be operating. Using this sampling, Ascent identified that for every licensed cannabis cultivation site, there were approximately six unlicensed cultivation sites. According to this ratio, the unincorporated area of the County could contain roughly 3,850 unlicensed cannabis cultivation sites. This estimate is consistent with similar evaluations conducted in Trinity County and Humboldt County. Trinity County conducted an evaluation and mapping using satellite imagery and GIS mapping data in 2016 to estimate the extent of existing cultivation sites in the County. It was estimated, based on this mapping and County licenses through December 2018 (286 licenses), that Trinity County contained approximately 3,641 unlicensed cannabis cultivation sites (Trinity County 2020). In 2018, Humboldt County estimated the extent of total cannabis cultivation to range from 10,000 to 15,000 sites and that sites with County cannabis cultivation permit site applications consisted of 8 to 13 percent of this total (Humboldt County 2018).

Notably, California Department of Fish and Wildlife scientists have collected cultivation data in Mendocino County from 2016 to 2022. Figures 3-2 and 3-3 provide a summary of the changes in total cultivation area in the county from 2016 to 2022.

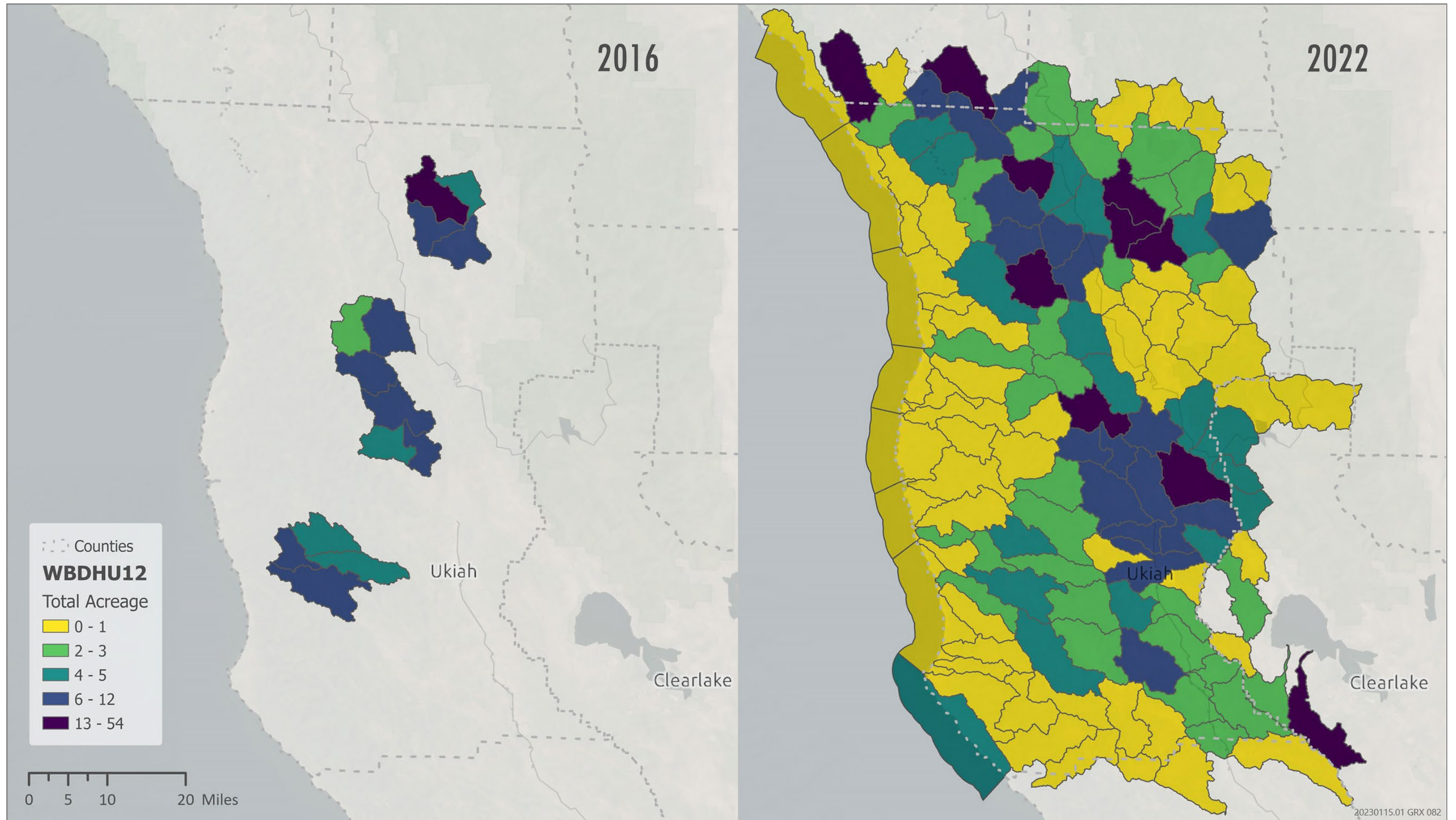
Cultivation operations that do not obtain a license from the DCC and Mendocino County are considered illegal. Enforcement activities targeting unlicensed cultivation operations are taken by the County in coordination with other agencies, including DCC, with the intent that such cultivation operations would be brought into compliance with County and state standards or closed. However, it is acknowledged that unlicensed cannabis cultivation sites would likely continue to occur in the County.



Source: Data received from Mendocino County in 2023; adapted by Ascent in 2023.

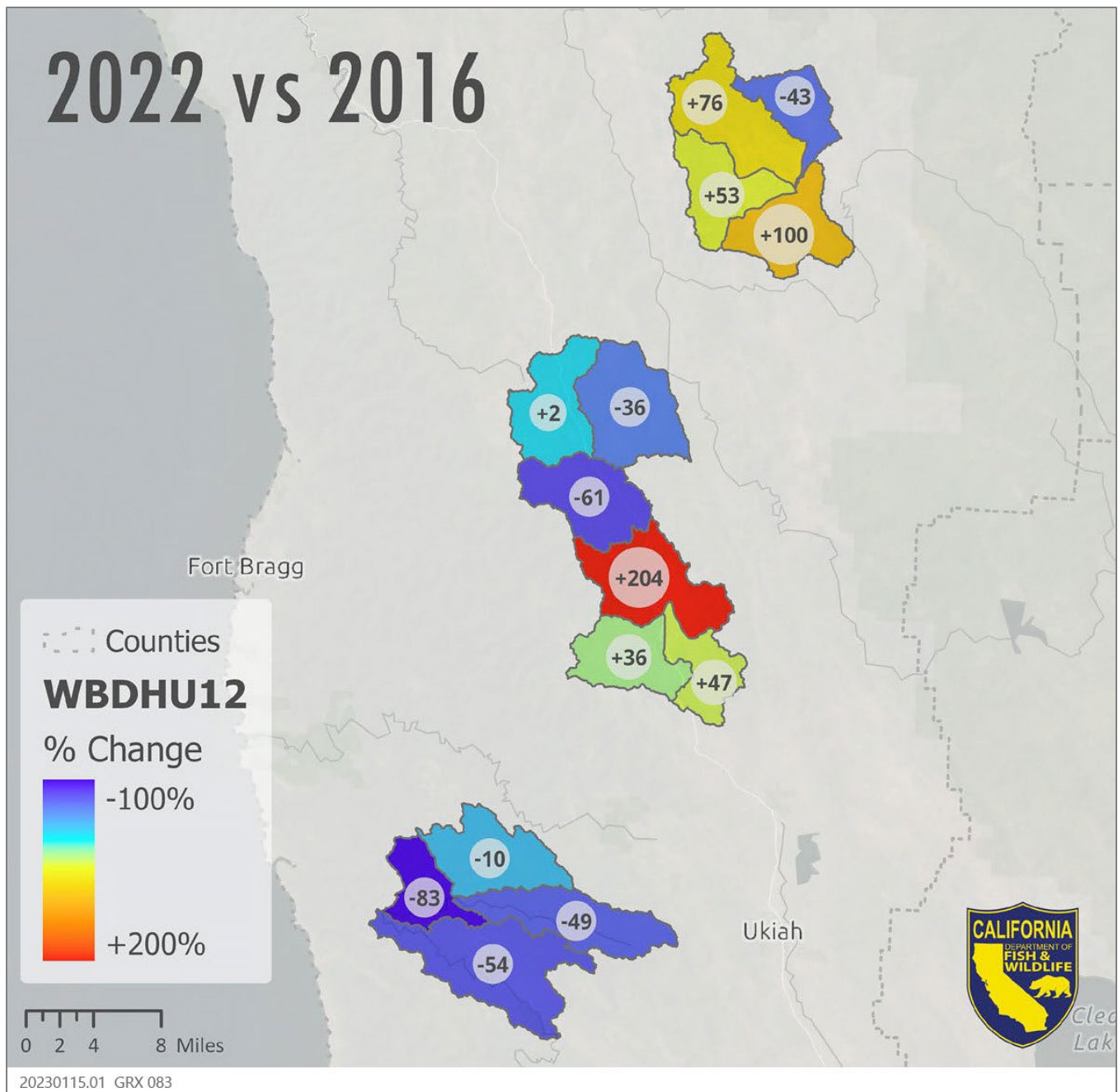
**Figure 3-1 Mendocino County Commercial Cannabis Cultivation License Requests Through June 2023**

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Source: Data provided in 2024 by CDFW; adapted by Ascent in 2024.

**Figure 3-2 Mendocino County Cannabis Cultivation by Watershed 2016 and 2022**



Source: Date provided in 2024 by CDFW.

**Figure 3-3 Mendocino County Cannabis Cultivation Change by Watershed 2016 and 2022**

Although this Draft EIR acknowledges the adverse environmental effects of continued illegal cannabis operations as part of the environmental baseline condition described in EIR sections 3.1 through 3.17, because they are existing (and illegal), they are not considered part of the project; in this context, they would not result in environmental effects associated with the project that would need to be mitigated. This is consistent with the requirements of CEQA, which is to consider the proposed project and existing case law, as further discussed below.

Section 15125(a) of the State CEQA Guidelines provides that the baseline physical conditions are the basis by which a lead agency determines whether an impact of a project is significant. The baseline physical conditions must reflect the “physical conditions existing at the time [the]

environmental analysis begins,” even if the current condition includes unauthorized or illegal activities that never received prior environmental review (*Center for Biological Diversity v. Dept. of Fish and Wildlife* (2015) 234 Cal.App.4th 214, 248 (citing *Communities for a Better Environment v. South Coast Air Quality Management District* (2010) 48 Cal.4th 310, 323); see also *Citizens for East Shore Parks v. State Lands Commission* (2011) 202 Cal.App.4th 549 (upholding a the use of a baseline which reflected the then-current conditions of a terminal project), *Fat v. County of Sacramento* (2002) 97 Cal.App.4th 1270 (holding that existing long-term unauthorized land use should be considered part of the baseline), *Riverwatch v. County of San Diego* (1999) 76 Cal.App.4th 1428 (holding that existing conditions was the proper baseline, despite prior illegal discing and habitat removal)). To that end, existing illegal cannabis cultivation operations are disclosed as part of the baseline condition in this Draft EIR, consistent with CEQA.

**Environmental Impacts and Mitigation Measures:** This subsection presents thresholds of significance and discusses the effects of the Mendocino County Cannabis Program on the existing environment, including the environment beyond the County boundaries, in accordance with State CEQA Guidelines, section 15126.2. The methodology for impact analysis is described, including the technical studies and other sources of substantial evidence upon which the analyses rely. The thresholds of significance are defined and explained, and those thresholds for which the project would have no impact are disclosed and dismissed from further evaluation. Project impacts and mitigation measures are numbered sequentially in each subsection (e.g., Impact 3.2-1, Impact 3.2-2, Impact 3.2-3, etc.). A summary impact statement precedes a more detailed discussion of each environmental impact. The discussion presents the analysis, rationale, and substantial evidence upon which conclusions are drawn, and the determination of the impact’s level of significance is presented in bold text. A “less-than-significant” determination indicates that implementing the project would not result in a substantial adverse change in the physical environment. A “significant” determination indicates that it would result in a substantial adverse change in the physical environment. A “potentially significant” determination indicates that implementing the project might result in a substantial adverse change if the impact were to occur but that there is uncertainty regarding if the impact would result. Potentially significant impacts are treated the same as significant impacts under CEQA in terms of procedural requirements and the need to identify feasible mitigation. Mitigation measures are identified, as feasible, to avoid, minimize, rectify, reduce, or compensate for significant and potentially significant impacts in accordance with State CEQA Guidelines, section 15126.4. Unless otherwise noted, the mitigation measures presented are recommended in this EIR for consideration by the DCC to adopt.

Where an existing law, regulation, or permit specifies mandatory and prescriptive actions about how to fulfill the regulatory requirement as part of the project definition, leaving little discretion in its implementation, and would avoid an impact or maintain it at a less-than-significant level, the environmental protection afforded by the regulation is considered before determining impact significance. Where existing laws or regulations specify a mandatory permit process for future projects, performance standards without prescriptive actions to accomplish them, or other requirements that allow substantial discretion in how they are accomplished, or have a substantial compensatory component, the level of significance is determined before applying the influence of the regulatory requirements. In this circumstance, the impact would be potentially significant or significant, and the regulatory requirements would be included as a mitigation measure.

This subsection also states whether the application of mitigation measures would reduce project impacts to a less-than-significant level. Significant and unavoidable impacts are



identified as appropriate in accordance with State CEQA Guidelines, section 15126.2(b). Significant and unavoidable impacts are also summarized in Chapter 6, “Other CEQA-Mandated Sections.”

**References:** The references cited in Sections 3.1 through 3.17 are presented in Chapter 8, “References,” organized by chapter or section number.

## NEW CANNABIS CULTIVATION USE ASSUMPTIONS

As described in Chapter 2, “Project Description,” this Draft EIR evaluates both the transition of existing provisional licensed cannabis cultivation operations into annual licensure as well as annual licensing actions for future cannabis cultivation applicants. Future cannabis cultivation applications would be limited to the following DCC license types based on Mendocino County Code section 10A.17.060. DCC processing and distribution transport-only licenses are also allowed in Mendocino County.<sup>1</sup>

- ▶ Outdoor Cultivation DCC Licenses:
  - Specialty Cottage Outdoor (Mendocino County license Type C)
  - Specialty Outdoor (Mendocino County license Type C and Type 1)
  - Small Outdoor (Mendocino County license Type 2)
- ▶ Indoor Cultivation DCC Licenses:
  - Specialty Cottage Indoor (Mendocino County license Type C-A)
  - Specialty Indoor (Mendocino County license Type C-A and Type 1A)
  - Small Indoor (Mendocino County license Type 2A)
- ▶ Mixed-Light Cultivation DCC Licenses:
  - Specialty Cottage Mixed-Light Tier 1 and Tier 2 (Mendocino County license Type C-B)
  - Specialty Mixed-Light Tier 1 and Tier 2 (Mendocino County license Type 1B)
  - Small Mixed-Light Tier 1 and Tier 2 (Mendocino County license Type 2B)
- ▶ Nursery DCC License (Mendocino County License Type 4 (limited to 22,000 square feet of total cannabis plant canopy))

Reasonably foreseeable future cannabis cultivation application requests over the next 20 years would consist of up to 1,075 new cultivation licenses, 10 new processing licenses, and 40 distribution transport-only licenses that would be connected to an on-site cultivation operation within the unincorporated County (Table 3.0-1).<sup>2</sup> Assumptions are based on total cannabis cultivation application requests received by Mendocino County since 2017, the current composition of cultivation sites/operations licensed by the DCC, state-licensed cannabis operations in other rural communities with similar rural land use characteristics (e.g., Humboldt and Trinity Counties), available cannabis application data, and other published information regarding cannabis operations. The future of cannabis cultivation operations in the County licensed by DCC may vary from what is set forth here because the cannabis business is market-driven and guided by unpredictable economic and regulatory forces. The assumptions

<sup>1</sup> Per Section 10A.17.020 of the MCCR, “Cultivation of cannabis” means any activity involving the planting, growing, harvesting, drying, curing, grading, or trimming or processing of cannabis.

<sup>2</sup> The MCCR does not provide licenses for stand-alone processing or distribution uses in Mendocino County. All cannabis processing and distribution must be conducted on-site of the cannabis cultivation premise.

in Table 3-1 provide the basis for the analysis of future licensed cannabis cultivation provided in this EIR. It is acknowledged that future cannabis cultivation applications may not require new facilities as they may include existing unlicensed cannabis cultivation sites or existing agricultural sites.

**Table 3-1 Future New Commercial Cannabis Cultivation Use Assumptions**

Feature	Outdoor	Cannabis Cultivation Operation License Type Mixed Light	Cannabis Cultivation Operation License Type Indoor	Nursery
Total cannabis canopy area by DCC license type <sup>1</sup>	Specialty cottage: ▶ 21 licenses – 1.21 acres Specialty: ▶ 127 licenses – 14.6 acres Small: ▶ 292 licenses – 44.10 acres <b>Total: 440 licenses – 59.91 acres</b>	Specialty cottage: ▶ 33 licenses – 1.89 acres Specialty: ▶ 88 licenses – 10.10 acres Small: ▶ 380 licenses – 87.24 acres <b>Total: 501 licenses – 99.23 acres</b>	Specialty cottage: ▶ 3 licenses – 0.03 acres Specialty: ▶ 5 licenses – 0.57 acres Small: ▶ 3 licenses – 0.69 acres <b>Total: 11 licenses – 1.29 acres</b>	Nursery ▶ 123 licenses – 56.47 acres <b>Total: 123 licenses – 56.47 acres</b>
Land area used to support the operation of cannabis cultivation outside of canopy area <sup>2</sup>	Specialty cottage: ▶ 21 licenses – 5.25 acres Specialty: ▶ 127 licenses – 55.88 acres Small: ▶ 292 licenses – 178.12 acres <b>Total: 440 licenses – 239.25 acres</b>	Specialty cottage: ▶ 33 licenses – 1.89 acres Specialty: ▶ 88 licenses – 10.10 acres Small: ▶ 380 licenses – 87.24 acres <b>Total: 501 licenses – 596.34 acres</b>	Specialty cottage: ▶ 3 licenses – 0.21 acres Specialty: ▶ 5 licenses – 1.00 acres Small: ▶ 3 licenses – 6.90 acres <b>Total: 11 licenses – 8.11 acres</b>	Nursery ▶ 123 licenses – 29.52 acres <b>Total: 123 licenses – 29.52 acres</b>
Estimated total building/structure area by license type <sup>3</sup>	Specialty cottage: ▶ 21 licenses – 48,300 square feet Specialty: ▶ 127 licenses – 292,100 square feet Small: ▶ 292 licenses – 788,400 square feet <b>Total: 440 licenses – 1,128,800 square feet</b>	Specialty cottage: ▶ 33 licenses – 82,500 square feet Specialty: ▶ 88 licenses – 510,400 square feet Small: ▶ 380 licenses – 5,472,000 square feet <b>Total: 501 licenses – 6,064,900 square feet</b>	Specialty cottage: ▶ 3 licenses – 10,500 square feet Specialty: ▶ 5 licenses – 30,000 square feet Small: ▶ 3 licenses – 45,000 square feet <b>Total: 11 licenses – 85,500 square feet</b>	Nursery ▶ 123 licenses – 504,300 square feet <b>Total: 123 licenses – 504,300 square feet</b>

Feature	Outdoor	Cannabis Cultivation Operation License Type Mixed Light	Cannabis Cultivation Operation License Type Indoor	Nursery
Estimated total number of permanent employees <sup>4</sup>	Specialty cottage: ▶ 10 employees Specialty: ▶ 124 employees Small: ▶ 375 employees <b>Total: 509 employees</b>	Specialty cottage: ▶ 16 employees Specialty: ▶ 86 employees Small: ▶ 742 employees <b>Total: 844 employees</b>	Specialty cottage: ▶ 8 employees Specialty: ▶ 14 employees Small: ▶ 8 employees <b>Total: 30 employees</b>	Nursery ▶ 480 employees  <b>Total: 480 employees</b>
Assumed number of harvests per year <sup>5</sup>	1	2	Harvested continuously throughout year through staging of plant production and lighting operations	N/A

- <sup>1</sup> Cannabis cultivation canopy area is the footprint of the cannabis plant area calculated in square feet and measured using physical boundaries of all area(s) that will contain mature plants at any point in time. 1,075 new cultivation licenses, 10 new processing licenses, and 40 distribution transport-only licenses were assumed based on total license applications submitted to Mendocino County since 2017 (1,708 applications). The allocation of future cultivation license type was based on the current number of allocated licenses issued by the DCC that are active.
- <sup>2</sup> The estimated land area used to support the operation of cannabis cultivation outside of canopy was based on satellite review of existing licensed cannabis cultivation sites and the average land area (Specialty Cottage Outdoor: 0.25 acres, Specialty Outdoor: 0.44 acres, Small Outdoor: 0.61 acres, Specialty Cottage Mixed-Light: 0.42 acres, Specialty Mixed-Light: 0.66 acres, Small Mixed-Light: 1.38 acres, Specialty Cottage Indoor: 0.07 acres, Specialty Indoor: 0.20 acres, Small Indoor: 2.30 acres, and Nursery: 0.24 acres).
- <sup>3</sup> Building/structure square footage was based on review of application materials and site plans for active licensed cultivation sites.
- <sup>4</sup> Permanent employment for outdoor and mixed-light operations assumes 8.5 employees per acre of cannabis canopy area based on the 2020 Trinity County cultivator survey results identified in the Trinity County Cannabis Program Final EIR (Trinity County 2020: Volume 2 Table 2-3). Permanent employment for indoor cultivation assumes approximately 2.7 employees per site Trinity County 2020: Volume 2 Table 2-3).
- <sup>5</sup> Harvest assumptions are based on the analysis provided in the Humboldt County Amendments to Humboldt County Code Regulating Commercial Cannabis Activities Project Draft EIR (Humboldt County 2017)

Values are rounded.

Source: Prepared by Ascent in 2023.

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## 3.1 AESTHETICS

This section provides a description of existing visual conditions, meaning the physical features that make up the visible landscape within unincorporated Mendocino County (project area), and an assessment of changes to those conditions that would occur with project implementation. The effects of the project on the visual environment are generally defined in terms of the project's physical characteristics and potential visibility, the extent to which the project's presence would change the perceived visual character and quality of the environment, and the expected level of sensitivity that the viewing public may have where implementing the project would alter existing views. The "Methodology" section, below, provides further detail on the approach used in this evaluation.

Several comment letters received in response to the notice of preparation (NOP) identified concerns related to adverse effects on and potential changes in aesthetic character, surrounding views, and light pollution. These issues are addressed in this section, as appropriate. All comments received in response to the NOP are presented in Appendix A of this EIR.

### 3.1.1 Regulatory Setting

#### FEDERAL

##### Wild and Scenic Rivers Act

The Wild and Scenic Rivers Act of 1968 was enacted to protect "certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural or other similar values." The act states that these rivers "shall be preserved in free-flowing condition, and...they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations" (16 US Code sections 1271–1287, Public Law 90-542). Protected rivers are designated as wild, scenic, or recreational rivers, and different segments of a given river may be designated with one or all of these classifications. California has approximately 189,454 miles of river, of which 2,072.7 miles are designated as wild or scenic, or 1.1 percent of the state's river miles (Wild and Scenic Rivers 2023). Sections of the Eel River in Mendocino County, the North, Middle, and South Forks of the river, as well as the Black Butte River and Cold Creek, are classified as wild, scenic, or recreational under the Wild and Scenic Rivers Act (Mendocino County 2008).

#### STATE

##### California Code of Regulations

CCR, title 4, Chapter 7, Article 2 ("Cultivation Site Requirements"), includes the following requirements for light sources at cultivation premises:

- ▶ CCR, title 4, section 16304(a)(6): Outdoor lighting used for safety or security purposes shall be shielded and downward facing.
- ▶ CCR, title 4, section 16304(a)(7): Lights used for indoor or mixed-light cultivation shall be shielded from sunset to sunrise to reduce nighttime glare.

California Energy Commission Building Energy Efficiency Standards for Outdoor Lighting CCR, title 24, Parts 1 and 6, Building Energy Efficiency Standards, adopted by the California Energy Commission (CEC) on November 5, 2003, includes requirements for outdoor lighting. These standards are updated periodically. The last update took effect January 1, 2023.

The outdoor lighting standards vary according to lighting zone. The allowed lighting power is based on the brightness of existing lighting in the surrounding area because eyes adapt to darker surrounding conditions, and less light is needed to properly see. Providing greater power than is needed potentially leads to debilitating glare and to an increasing spiral of brightness because overbright projects become the surrounding conditions for future projects, causing future projects to unnecessarily consume energy and contribute to light pollution.

The California Energy Commission defines the boundaries of lighting zones based on US Census Bureau boundaries for urban and rural areas as well as the legal boundaries of wilderness and park areas. The smallest amount of power is allowed in Lighting Zone 1, and increasingly more power is allowed in Lighting Zones 2, 3, and 4. By default, government-designated parks, recreation areas, and wildlife preserves are included in Lighting Zone 1; rural areas are included in Lighting Zone 2; and urban areas are included in Lighting Zone 3. Lighting Zone 4 is a special use district that may be adopted by a local government.

#### California Scenic Highway Program

The California Scenic Highway Program was created by the California Legislature in 1963 and is managed by the California Department of Transportation. The goal of this program is to preserve and protect scenic highway corridors from changes that would affect the aesthetic value of the land adjacent to highways. A highway may be designated “scenic” depending on how much of the natural landscape travelers can see, the scenic quality of the landscape, and the extent to which development intrudes on travelers’ enjoyment of the view.

No highways in Mendocino County are officially designated under the California Scenic Highway Program. However, portions of State Routes (SRs) 1, 20, and 128 and US 101 are considered eligible for designation under the program (Caltrans 2023). For the purpose of this analysis, they will be treated as scenic resources.

#### California Public Resources Code Section 5077.5

California Public Resources Code section 5077.5 establishes “heritage corridors” for their historical, natural, or conservation education significance. There are two designated heritage corridors within the County: North Coast Heritage Corridor (consisting of SR 1 and a segment of US 101 north of its junction with SR 1), and the Tahoe-Pacific Heritage Corridor (consisting of SR 20 and a segment of US 101 from the junction north of Calpella to the SR 20 in Willits).

## LOCAL

#### Mendocino County General Plan

Policies pertaining to aesthetics can be found in Chapter 3 (“Development Element”), Chapter 4 (“Resource Management Element”), and Chapter 6 (“Community-Specific Policies”) of the Mendocino County General Plan (Mendocino County 2021). Specific policies pertaining to viewsheds and lighting are presented below:

- ▶ **Policy DE-85:** Viewshed preservation shall be considered when development is located in a highly scenic environment, adjacent to or atop a ridgeline or hill, and in similar settings.

- ▶ **Policy DE-89:** Reduce excessive artificial light and off-site light impacts while maintaining nighttime safety, security, and productivity.
- ▶ **Policy RM-90:** Conserve the county’s hillside vegetation (consistent with fire safety standards) by incorporating density transfers, clustering, small building sites, shared improvements, and other measures that:
  - Are compatible with the natural terrain and hydrology.
  - Conserve continuous critical habitats, oak woodlands, and natural vegetation.
  - Minimize visual impacts.
- ▶ **Policy RM-131:** Protect the scenic values of the county’s natural and rural landscapes, scenic resources, and areas of significant natural beauty.
- ▶ **Policy RM-133:** Protect the outstanding values of designated river corridors within the State Wild and Scenic River System by limiting land use and site development impacts (including grading and vegetation removal but not including regulated timber harvesting).
- ▶ **Policy RM-135:** Maintain and enhance scenic values through development design principles and guidelines, including the following:
  - Development scale and design should be subordinate to and compatible with the setting.
  - Reduce the visual impacts of improvements and infrastructure.
  - Minimize disturbance to natural features and vegetation but allow selective clearing to maintain or reveal significant views.
- ▶ **Policy RM-137:** The County shall seek to protect the qualities of the nighttime sky and reduce energy use by requiring that outdoor nighttime lighting is directed downward, kept within property boundaries, and reduced both in intensity and direction to the level necessary for safety and convenience.

#### Ukiah Valley Area Plan

The Community Design Element of the Ukiah Valley Area Plan contains the following policies related to aesthetics (Mendocino County 2011):

#### Section 4, “Community Design”

**Policy CD2.1:** Enhance the visual appearance of the City-County transition areas, the Valley’s gateways, State Street, and U.S. Highway 101 within the Valley.

**Policy CD2.2:** Reduce excessive artificial light to maintain the quality of life throughout the Ukiah Valley.

#### Brooktrails Township Specific Plan

The Specific Plan Element of the Brooktrails Township Specific Plan contains the following policies related to aesthetics (Mendocino County 2002):

#### Chapter 2, “Specific Plan”

**5.2:** Minimize light pollution. Minimize the nuisance of light to neighbors. Encourage residents to shade outdoor lighting to prevent light from entering roadways to avoid creating a hazard. Some major intersections may need lighting for traffic safety purposes.

## Mendocino County Cannabis Regulation

The adopted Mendocino County Cannabis Regulation (MCCR) contains the following requirements related to aesthetics:

### Section 10A.17.040 General Limitations on Cultivation of Cannabis

The following limitations shall apply to all cultivation of cannabis in Mendocino County, including but not limited to cultivation pursuant to a Permit issued under this Chapter or an exemption provided for Section 10A.17.030. Cultivation of cannabis shall also be subject to all applicable restrictions of Mendocino County Code Chapter 20.242.

- (A) The cultivation of cannabis in Mendocino County, in any amount or quantity by any entity, shall not be allowed in the following areas:
- (1) Within one thousand (1,000) feet of a youth-oriented facility, a school, or a park as defined herein that is in existence at the time a CCBL is initially applied for.
  - (2) Outdoors or using mixed light within one hundred (100) feet of any occupied legal residential structure located on a separate legal parcel; provided, however, that on January 1, 2020, this setback shall be increased to two hundred (200) feet for all CCBL applications but shall not apply to renewals of CCBL's originally issued before that date.
  - (5) Outdoors or using mixed light within fifty (50) feet from any adjoining legal parcel under separate ownership or access easement (whichever is most restrictive); provided, however, that on January 1, 2020, this setback shall be increased to one hundred (100) feet for all CCBL applications but shall not apply to renewals of CCBL's originally issued before that date.

Any indoor cultivation sites that comply with paragraph (A)(1) shall also be subject to the following:

- (a) Indoor cultivation sites shall comply with the building property line setback established by the zoning district in which the cultivation site is located.
  - (b) The cultivation of cannabis within an accessory structure shall be allowed subject to the development requirements of the zoning district in which it is located and to requirements of Chapter 20.164—Accessory Use Regulations except, notwithstanding Section 20.164.010: (a) the cultivation of cannabis in an accessory structure is not permitted prior to the construction of the legal dwelling unit on the parcel, if a legal dwelling unit is required by this Chapter, and (b) cultivation of cannabis shall only be allowed on the same parcel as the dwelling unit, if required.
  - (c) Indoor cultivation sites for individuals desiring to cultivate cannabis for adult use pursuant to Section 10A.17.030(C) shall also be subject to the following limitation: cultivation sites located within a private residence that is a rental unit, as that term is defined by County Code section 20.008.050, shall not be located in any indoor space other than a garage or accessory structure.
- (E) All lights used for the indoor or mixed light cultivation of cannabis shall be fully contained within structures or otherwise shielded to fully contain any light or glare involved in the cultivation process. Security lighting shall be motion activated and all outdoor lighting shall be shielded and downcast or otherwise positioned in a manner that will not shine light or allow light glare to exceed the boundaries of the legal parcel upon which they are placed.
- (H) All cannabis grown in Mendocino County (excluding indoor growing) must be within a secure fence of at least six (6) feet in height that fully encloses the garden area. The fence must include a lockable gate that is locked at all times when a qualified patient, caregiver or Cannabis Cultivation Business License (CCBL) Holder (or their agent) is not in the



immediate area. Said fence shall not violate any other ordinance, code section or provision of law regarding height and their location restrictions and shall not be constructed or covered with plastic or cloth except shade cloth may be used on the inside of the fence.

### 3.1.2 Environmental Setting

Mendocino County is a rural agricultural county with nine unincorporated communities (Anderson Valley/Boonville Area, Round Valley/Covelo Area, Fort Bragg Area, Hopland/Sanel Valley Area, Laytonville Area, Potter Valley Area, Redwood Valley Area, Little Lake Valley Area, and Ukiah Valley Area) and the incorporated cities of Fort Bragg, Point Arena, Ukiah, and Willits. Because of its varied topography, the County offers a range of scenic features, including forests, wilderness areas, rivers and other waterways, recreation areas, rural communities, and scenic roadways.

## SCENIC FEATURES OF THE COUNTY

### Forests and Wilderness Areas

Mendocino County features large areas of forest and wilderness that support various vegetative communities. It also features stands of redwoods and Douglas-firs that extend inland from the Pacific Coast Ranges. Redwood forests generally occur within 25 miles of the coast on cool, moist slopes and along streams. Redwood forests are generally found in the coastal watersheds that drain directly into the Pacific Ocean and in the upper reaches of watersheds that drain into the Eel and Russian Rivers. Several state parks, natural reserves, and forests are located in the County, including the Navarro River Redwoods State Park, Montgomery Woods State Natural Reserve, Mailliard Redwoods State Natural Reserve, and Mendocino National Forest. The Mendocino National Forest, which occupies approximately 913,306 acres, is approximately 65 miles long and 35 miles wide, spreading across portions of Mendocino, Colusa, Lake, Glenn, Tehama, and Trinity Counties. Vegetation types include mixed conifer forests, oak woodlands and savanna, chaparral, annual and perennial grass glades, and wet meadows (Mendocino County 2008).

### Coastline

Located along the northern coast of California, the County offers coastal views and viewpoints for scenic vistas from US 101, beaches, state parks, and designated access points. The County has 130 miles of coastline, making the Mendocino coast a heavily used tourist and recreational area. Mendocino County's Local Coastal Program consists of the Coastal Element of the General Plan, Gualala Town Plan, Mendocino Town Plan, Coastal Zoning Code (Division II of Title 20 of Mendocino County Code), and Town of Mendocino Zoning Code (Division III of Title 20 of Mendocino County Code). The Mendocino County Local Coastal Program outlines development and resource protection policies and standards as well as permitted uses in areas considered to be scenic resources along the coast. Commercial cannabis cultivation is prohibited within the coastal zone of Mendocino County.

### Rivers and Other Waterways

Five watercourses in the County have been designated as wild and scenic rivers under the federal Wild and Scenic River Act: the Eel River, the Middle Fork of the Eel River, the South Fork of the Eel River, the Black Butte River, and Cold Creek (see Section 3.1.1, "Regulatory Setting"). There are numerous water features in the unincorporated areas of the County. Two of the largest rivers in the County are the Eel River and the Russian River. Other features

include Van Arsdale Reservoir in Potter Valley and Lake Mendocino, located northeast of the City of Ukiah. As mentioned above, Mendocino County includes 130 miles of coastline along the Pacific Ocean. The Mendocino coast offers a variety of scenic water features, such as tide pools, estuaries, and lagoons. Wetlands, including freshwater and saltwater marshes and seasonal wetlands, are generally located near rivers and streams (Mendocino County 2008).

### Recreation Areas

The unincorporated portion of the County includes numerous federal, state, and county parks that offer short- and long-distance views of the valleys from atop ridgelines, as well as a mix of varying vegetation and wildlife. The Mendocino County parks system, which includes seven parks and two public access areas, is operated and maintained by the Facilities and Fleet Division of the General Services Agency. The three state parks and four state recreation areas in the County are operated and maintained by the California Department of Parks and Recreation. The largest recreational areas in the County are Mendocino National Forest, managed by the US Forest Service, and Cow Mountain Recreation Area, managed by the US Bureau of Land Management (Mendocino County 2008).

### Scenic Farmlands

Agricultural lands in Mendocino County are found primarily on the valley floors and lower elevations. Presently, agricultural land in production in the County consists of vineyards, pear and apple orchards, row crops, nurseries, and pastures. Agricultural lands are generally considered scenic because they contain little urban development and feature vegetation of many varieties. Structures supporting agricultural operations, such as barns and farmhouses, are often considered aesthetically pleasing in their architectural design and setting (Mendocino County 2008).

## VISUAL CHARACTERISTICS OF CURRENT COMMERCIAL CANNABIS OPERATIONS IN THE COUNTY

Although commercial cannabis operations are located countywide, there is a concentration of commercial cannabis cultivation operations in the northern and eastern portions of the County, near US 101, as shown in Figure 2-2 in Chapter 2, "Project Description." Outdoor and mixed-light commercial cannabis cultivation in the County is generally located in remote rural residential and agricultural land areas that are exposed (i.e., clear of trees and other vegetation that would obstruct sunlight and harvest operations). On-site commercial cannabis cultivation features typically include a nursery/greenhouse(s), hoop houses, water storage tanks and ponds, storage buildings for equipment and materials, solar panels, and employee/caretaker housing similar in appearance to other agricultural uses. Figures 3.1-1a and 3.1-1b provide examples of the visual character of mixed-light and outdoor cultivation sites in Mendocino County, while Figures 3.1-1c through 3.1-1f provide aerial images of mixed-light and outdoor commercial cannabis cultivation in Mendocino County that illustrates the intensity of commercial cannabis cultivation activities and massing of structures as compared to the surrounding areas. Commercial cannabis cultivation sites are usually screened, either through natural topography and vegetation in the area or through installed mechanisms, such as fencing, to shield the sites from public view along roadways. In addition, some sites include open-wired fencing that borders the perimeter of the overall commercial cannabis operation.



Source: Photo provided by DCC in 2024.



Source: Photo provided by DCC in 2024.

**Figure 3.1-1a**      **Examples of the Visual Character of Mixed-Light Commercial Cannabis Cultivation Sites**

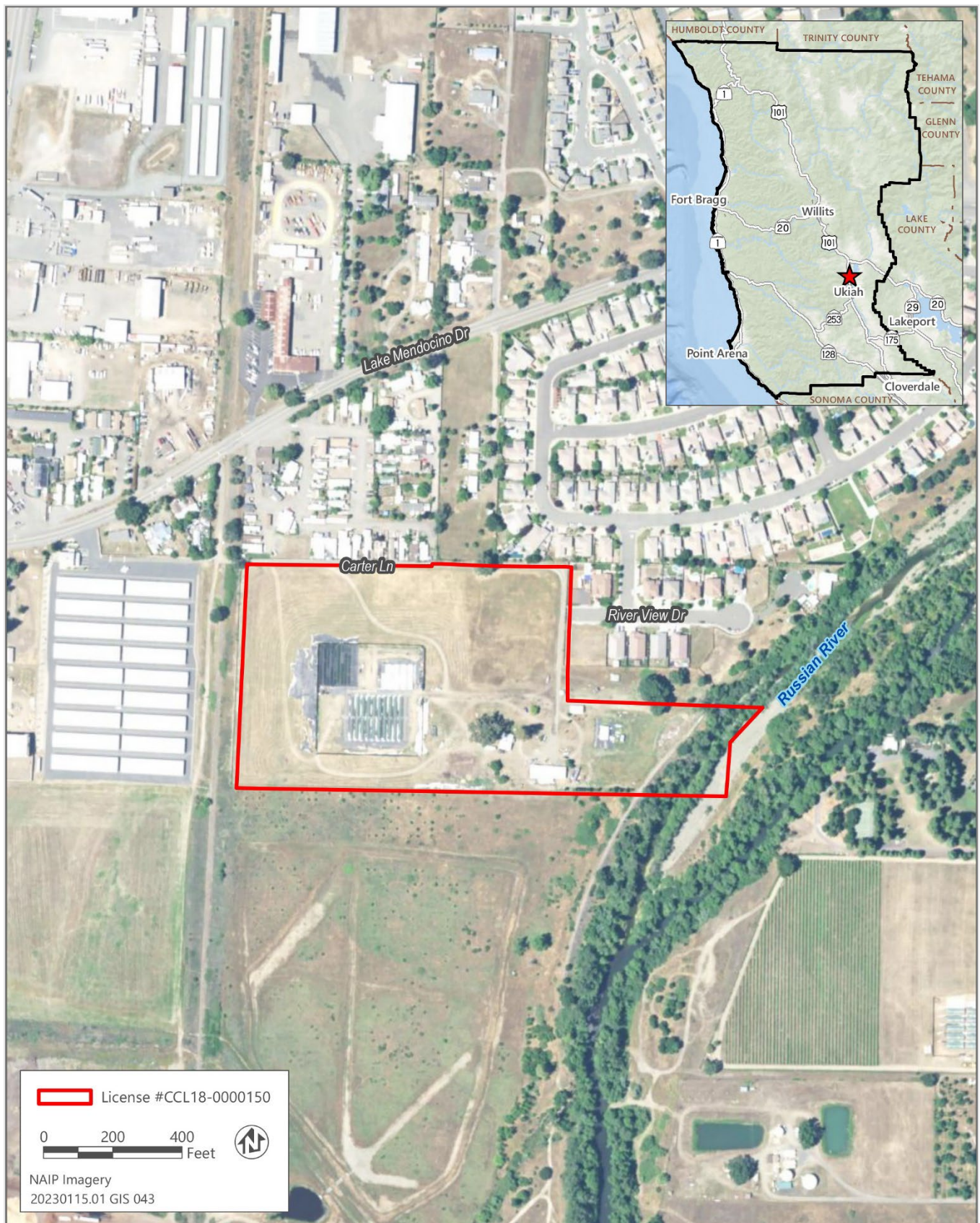


Source: Photo provided by DCC in 2024.



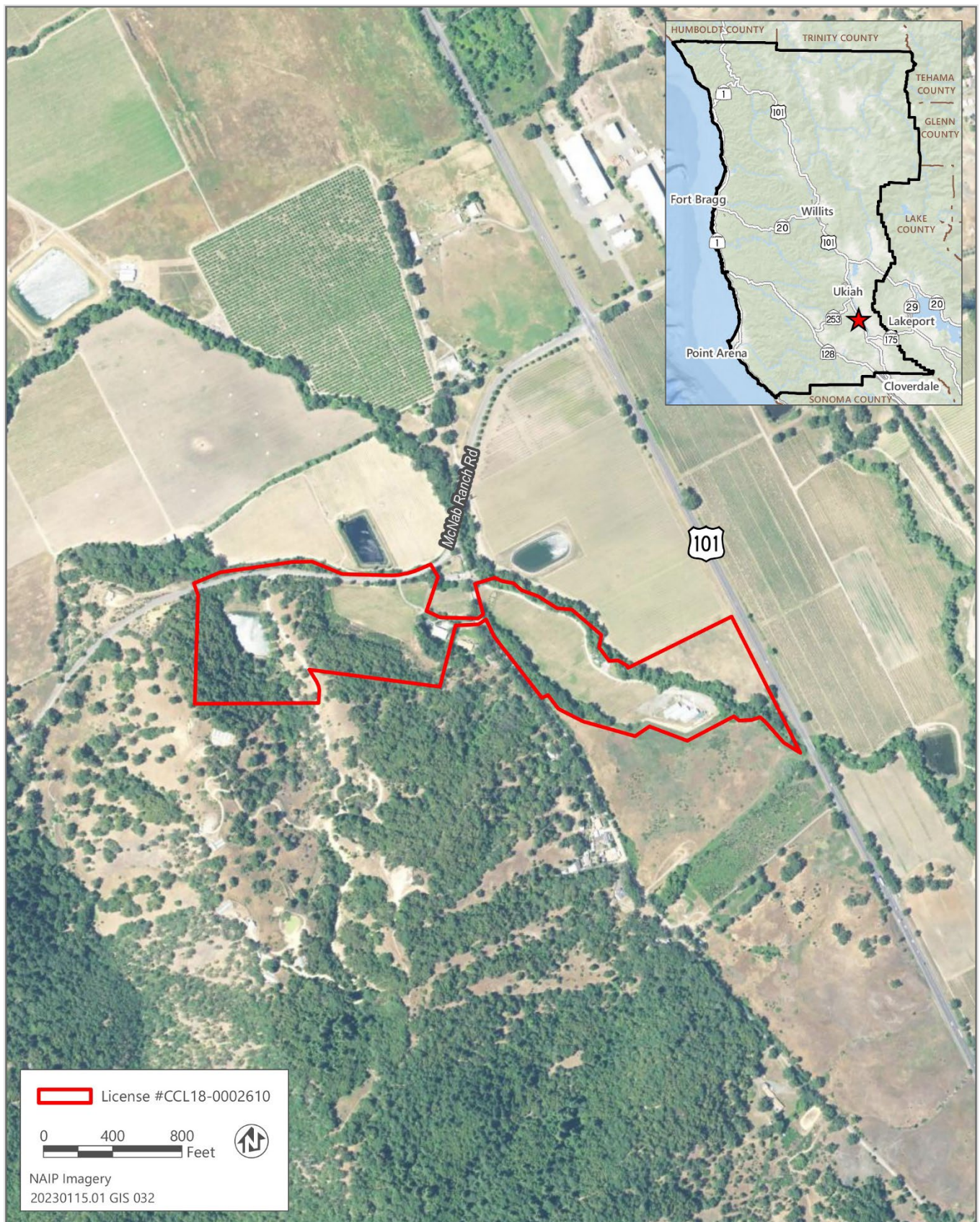
Source: Photo provided by DCC in 2024.

**Figure 3.1-1b**      **Examples of the Visual Character of Outdoor Commercial Cannabis Cultivation Sites**

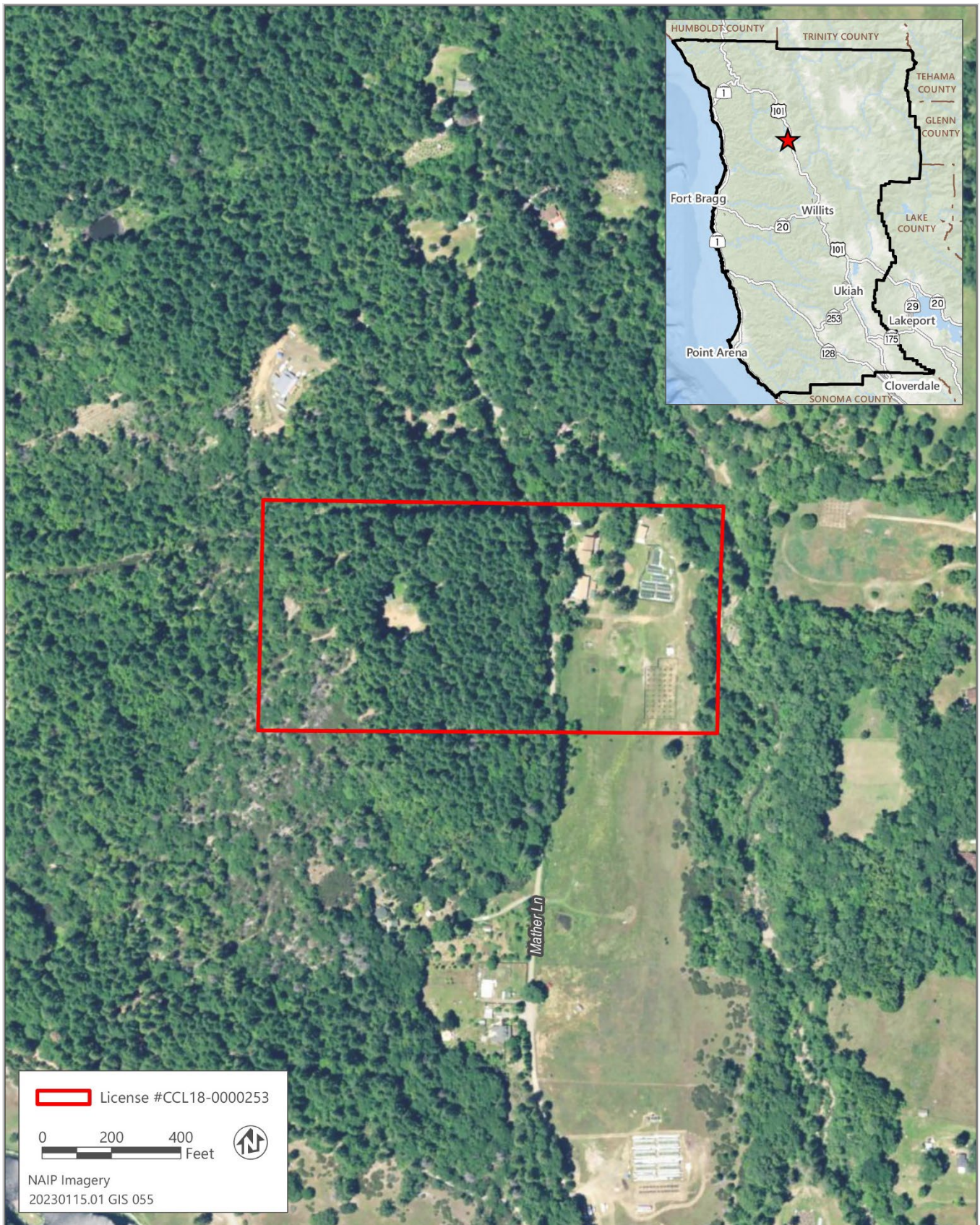


Source: Data received from Mendocino County in 2023; adapted by Ascent in 2023.

**Figure 3.1-1c** Provisional License CCL18-0000150, Small Mixed-Light Commercial Cannabis Cultivation Site

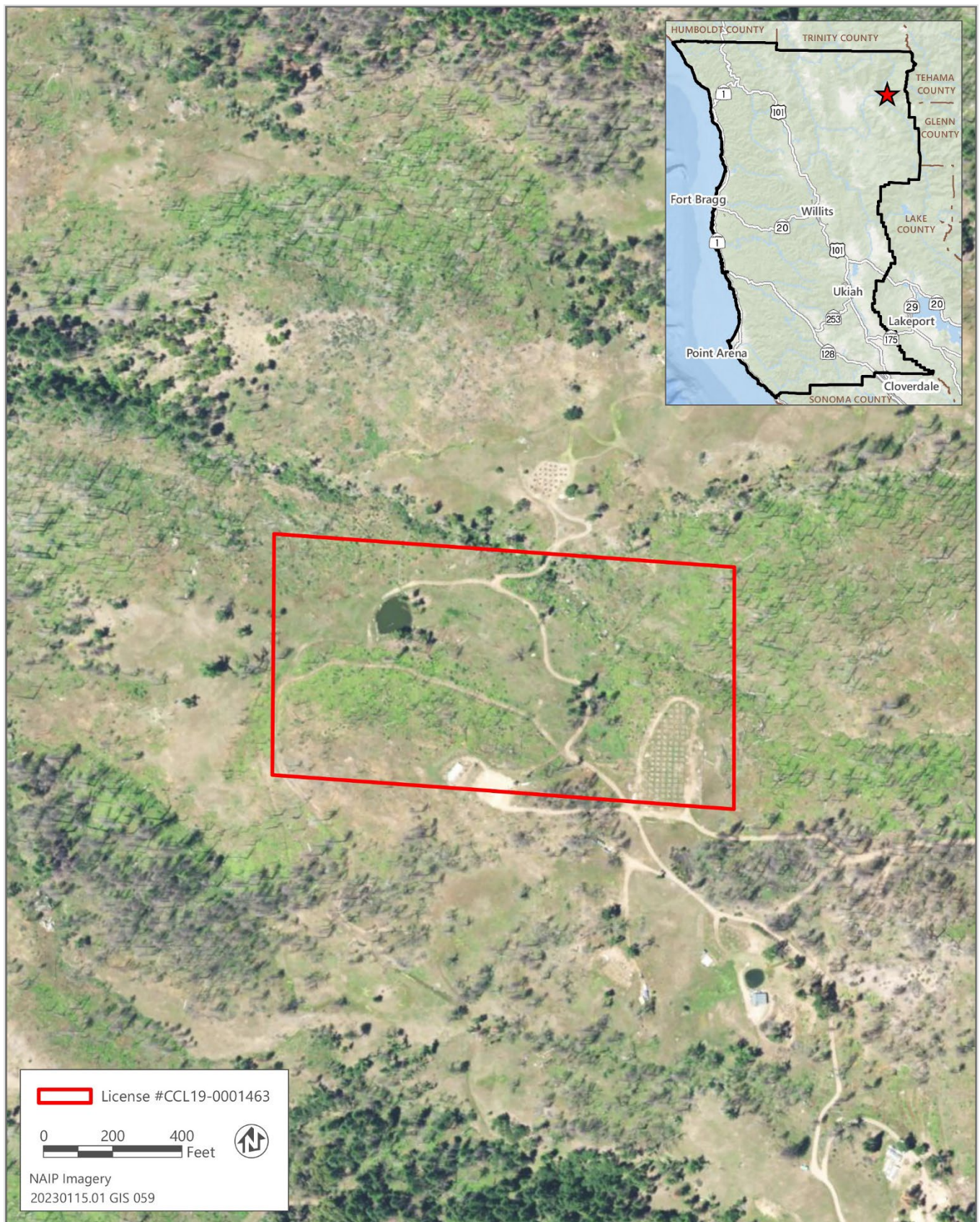


**Figure 3.1-1d** Provisional License CCL18-0002610, Small Mixed-Light Commercial Cannabis Cultivation Site



Source: Data received from Mendocino County in 2023; adapted by Ascent in 2023.

**Figure 3.1-1e** Provisional License CCL18-0000253, Specialty Outdoor Commercial Cannabis Cultivation Site



Source: Data received from Mendocino County in 2023; adapted by Ascent in 2023.

**Figure 3.1-1f** Provisional License CCL19-0001463, Outdoor Commercial Cannabis Cultivation Site



### 3.1.3 Environmental Impacts and Mitigation Measures

#### METHODOLOGY

Characterizations of visual changes and determinations of whether they would be adverse are highly subjective undertakings. Any two people can draw different conclusions about the nature and severity of visual changes.

Depending on the extent to which a project would adversely alter the visual character and quality of the environment, a significant visual or scenic impact may occur. As noted above, portions of SRs 1, 20, and 128 and US 101 are recognized as scenic roadways (even if they are not officially designated as such) and are treated as scenic resources in this analysis. Because sections of the Eel River, such as the Middle and South Forks, are recognized under the Wild and Scenic Rivers Act, these sections of the river are also treated as scenic resources in this analysis.

This assessment of potential effects on Mendocino County's aesthetic resources qualitatively considers the potential visual changes to commercial cannabis operations to attain annual cultivation licensing under DCC, in addition to changes resulting from the development of new commercial cannabis cultivation sites and associated processing and distribution uses that may receive annual licensing from the DCC. Community- and parcel-level analyses cannot be performed because the location of future commercial cannabis cultivation sites are unknown. Therefore, this analysis is based on existing visual characteristics of current commercial cannabis cultivation sites, assumptions regarding further alteration of the visual character of the County related to new commercial cannabis cultivation sites, and requirements under existing local and state commercial cannabis regulations that limit changes to aesthetic conditions.

The analysis focuses on whether implementation of the project would result in alteration of the visual quality, characteristics, or resources in the unincorporated County, as well as the scale or degree to which potential changes would result in a substantial obvious and disharmonious modification of the overall existing visual character of the unincorporated County.

#### THRESHOLDS OF SIGNIFICANCE

An impact on aesthetics, light, and glare would be significant if implementation of the project would:

- ▶ have a substantial adverse effect on a scenic vista;
- ▶ damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- ▶ substantially degrade the existing visual character or quality of public views of the site and its surroundings within nonurbanized areas or conflict with applicable zoning and other regulations governing scenic quality within urbanized areas; or
- ▶ create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

## ISSUES NOT DISCUSSED FURTHER

All the issues identified in the thresholds of significance are addressed in the following analysis.

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Impact 3.1-1: Have a Substantial Adverse Effect on a Scenic Vista

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Commercial cannabis cultivation sites in the County that would occur under the project could alter localized views of scenic vistas. However, the limitations on size, coverage, and location of commercial cannabis cultivation provided under State and local regulations would limit the potential for commercial cannabis-related uses to alter or have a substantial adverse visual impact on scenic vistas. Commercial cannabis operations are aesthetically not substantially different in appearance from similar agricultural and rural land uses in the County. As a result, this impact would be **less than significant**.

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As described in Section 3.1.2, “Environmental Setting,” Mendocino County has a variety of natural aesthetic features and offers many scenic vistas and resources that are visible from key travel routes, including locations along the coast, and recreational sites. Scenic resources associated with Mendocino County include features such as mountains, forests, agricultural lands, routes and roadways, and wild and scenic rivers. Because of the various scenic features that are present, scenic vistas and resources can be identified in most parts of the County. Potential visual effects associated with cultivation activities under the project would generally include the presence of cultivation structures and operation of equipment along scenic viewsheds, which may be temporary or permanent. Views of commercial cannabis sites in the County are often screened from public view either by the varying topography and vegetation, which naturally screens some cultivation activities, or through use of solid wood fencing. Although the visual quality of commercial cannabis cultivation is not substantially different than that of other agricultural operations in the County that include vineyards, nurseries, and orchards when located in areas of agricultural operation, cultivation that occurs in forested areas and livestock grazing areas can be more visually prominent because the operation is visually dissimilar. Commercial cannabis cultivation is prohibited within the coastal zones of Mendocino County; therefore, the project would have no impact on the coastal scenic vistas.

#### Existing Provisionally Licensed Sites

Figures 3.1-1a and 3.1-1b show representative cultivation sites in Mendocino County that reflect how commercial cannabis cultivation sites in Mendocino County generally appear, while Figures 3.1-1c through 3.1-1f provide aerial images of mixed-light and outdoor commercial cannabis cultivation in Mendocino County that illustrates the intensity of commercial cannabis cultivation activities and massing of structures as compared to the surrounding areas. Existing provisionally licensed commercial cannabis cultivation premises in Mendocino County are required to transition to an annual license issued by DCC. Existing provisionally licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations include structures and features similar to those used for other agricultural activities. These include water storage ponds, accessory structures (e.g., storage sheds, barns, and nurseries), caretaker housing, fencing, and roads. These structures and feature types are common within scenic vistas and are components of the rural and agricultural landscape character of the County. Existing provisionally licensed commercial cannabis cultivation premises structures and features are not anticipated to be substantially altered through the

annual licensing process and would not adversely alter the existing rural/agricultural landscape character of a scenic vista. These sites would be required to continue to comply with MCCR section 10A.17.040(H) that requires fencing of the garden (cultivation) area, and section 10A.17.040(K) that prohibits the removal of any commercial species trees as defined by CCR, title 14, section 895.1, commercial species for the Coast Forest District and Northern Forest District, any oak species, or tan oak trees that could be considered scenic. These provisions would retain trees and provide fencing that would provide continued screening of cultivation sites from public views. For these reasons, this impact would be less than significant for existing provisionally licensed sites would retain the extent of their existing licensed commercial cannabis cultivation.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation operations features would still be similar to those associated with other agricultural activities common within scenic vistas and along the state highways and therefore would not adversely alter the rural/agricultural landscape character of a scenic vista. Expansion of existing commercial cannabis cultivation sites would still be required to comply with MCCR section 10A.17.040(H) that requires fencing of the garden (cultivation) area, and section 10A.17.040(K) that prohibits the removal of any commercial species trees as defined by CCR, title 14, section 895.1, commercial species for the Coast Forest District and Northern Forest District, any oak species, or tan oak trees. The MCCR also limits commercial cannabis cultivation and nursery sites to 22,000 square feet of commercial cannabis canopy per site that would apply to expanded commercial cannabis cultivation sites. These provisions would retain trees and provide fencing that would provide continued screening of cultivation sites from public views. For these reasons, this impact would be less than significant.

#### Future Licensed Sites

Future licensed sites in Mendocino County, like existing sites in the County, would be required to obtain annual commercial cultivation licenses as well as annual licenses for processing and distribution transport-only operations through DCC. Implementation of the project could include new structures associated with commercial cannabis cultivation, processing, and/or distribution transport-only operations. The structures and feature types associated with commercial cannabis cultivation operations would be similar to those associated with other agricultural activities common within scenic vistas and along the state highways and therefore would not adversely alter the rural/agricultural landscape character of a scenic vista. These new cultivation sites would be required to comply with MCCR section 10A.17.040(H) that requires fencing of the garden (cultivation) area, and section 10A.17.040(K) that prohibits the removal of any commercial species trees as defined by CCR, title 14, section 895.1, commercial species for the Coast Forest District and Northern Forest District, any oak species, or tan oak trees. The MCCR also limits commercial cannabis cultivation and nursery sites to 22,000 square feet of commercial cannabis canopy per site. These provisions would retain trees and provide fencing that would provide continued screening of cultivation sites from public views. For these reasons, this impact would be less than significant.

#### Summary

As described above, existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites would blend with the existing character of the County's scenic vistas and would comply with MCCR

requirements for fencing and tree retention. As such, commercial cannabis cultivation sites would not visually conflict with the rural/agricultural landscape character that are components of the County's scenic resources. For these reasons, the impact on scenic vistas or resources would be **less than significant**.

#### Mitigation Measures

No mitigation is required for this impact.

#### Impact 3.1-2: Substantially Damage Scenic Resources, Including, but Not Limited to, Trees, Rock Outcroppings, and Historic Buildings within a State Scenic Highway

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Commercial cannabis cultivation sites in the County that would occur under the project could alter scenic resources within a state scenic highway. Because portions of SRs 1, 20, and 128 and US 101 are considered eligible for official designation under the California Scenic Highway Program, for the purpose of this EIR, they are considered as scenic resources. State and local regulations, which include screening and tree retention requirements, would limit the potential for commercial cannabis-related uses to substantially degrade scenic resources within state scenic highways. This impact would be **less than significant**.

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No highways in Mendocino County are officially designated under the California Scenic Highway Program. However, portions of SRs 1, 20, and 128 and US 101 are considered eligible for designation (Caltrans 2023). For the purpose of this analysis, they will be treated as scenic resources. Scenic resources associated with Mendocino County include features such as mountains, forests, agricultural lands, routes and roadways, and wild and scenic rivers. Because of the various scenic points and viewsheds that are present, scenic resources can be identified in most parts of the County. Potential visual effects associated with cultivation activities under the project would generally include the presence of cultivation structures and operation of equipment near scenic resources, which may be temporary or permanent. Views of commercial cannabis sites in the County and along state scenic highways are often screened from public view either by the varying topography and vegetation, which naturally screens some cultivation activities, or through use of solid wood fencing. As discussed in Impact 3.1-1, above, although the visual nature of commercial cannabis cultivation is not substantially different than that of similar agricultural operations, cultivation that occurs in forested areas and livestock grazing areas can be more visually prominent because the operation is visually dissimilar. Commercial cannabis cultivation is prohibited within the coastal zones of Mendocino County; therefore, the proposed project would have no impact on the scenic highways within the coastal zone.

#### Existing Provisionally Licensed Sites

As shown in Figure 2-2 of Chapter 2, "Project Description," existing provisionally licensed commercial cannabis cultivation sites are located along SR 1, 20, and 128, and US 101. Figures 3.1-1a and 3.1-1b show representative cultivation sites in Mendocino County that reflect how commercial cannabis cultivation sites in Mendocino County generally appear, while figures 3.1-1c through 3.1-1f provide aerial images of mixed-light and outdoor commercial cannabis cultivation sites in Mendocino County that illustrates the intensity of commercial cannabis cultivation activities and massing of structures as compared to the surrounding areas. Existing provisionally licensed commercial cannabis cultivation sites in Mendocino County are required to transition to annual licenses issued by DCC. Existing provisionally licensed commercial cannabis cultivation operations include structures and features similar to those used for other agricultural activities. These include water storage ponds, water tanks that

may include mixing tanks for cannabis irrigation, accessory structures (e.g., storage sheds, barns, and nurseries), caretaker housing, fencing, support structures for processing and distribution activities, and roads. These structures and feature types are common within scenic vistas and are components of the rural and agricultural landscape character of the County. Thus, commercial cannabis cultivation site structures and features are not anticipated to be substantially altered through the annual licensing process and would not adversely alter the existing rural/agricultural landscape character as viewed from a scenic highway. These sites are required to continue to comply with MCCR section 10A.17.040(H) that requires fencing of the garden (cultivation) area, and section 10A.17.040(K) that prohibits the removal of any commercial species trees as defined by CCR, title 14, section 895.1, commercial species for the Coast Forest District and Northern Forest District, any oak species, or tan oak trees. These provisions would retain trees and provide fencing that would provide continued screening of commercial cannabis cultivation sites from public views along scenic highways. For these reasons, this impact would be less than significant.

It is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation operations features would still be similar to those associated with other agricultural activities common within scenic vistas and along the state highways and therefore would not adversely alter the rural/agricultural landscape character of a scenic vista. Expansion of existing commercial cannabis cultivation sites would still be required to comply with MCCR and CCR requirements identified above. The MCCR also limits commercial cannabis cultivation and nursery sites to 22,000 square feet of commercial cannabis canopy per site that would apply to expanded commercial cannabis cultivation sites. These provisions would retain trees and provide fencing that would provide continued screening of cultivation sites from public views. For these reasons, this impact would be less than significant.

#### Future Licensed Sites

Implementation of the project could include new structures associated with new licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations which have the possibility to be visible from scenic highways. The structures and feature types associated with new commercial cannabis cultivation sites would be similar to those associated with other agricultural activities common along the eligible scenic highways and therefore would not adversely alter views along scenic highways. These new cultivation sites would be required to comply with MCCR section 10A.17.040(H) that requires fencing of the garden (cultivation) area, and section 10A.17.040(K) that prohibits the removal of any commercial species trees as defined by CCR, title 14, section 895.1, commercial species for the Coast Forest District and Northern Forest District, any oak species, or tan oak trees. The MCCR also limits commercial cannabis cultivation and nursery sites to 22,000 square feet of commercial cannabis canopy per site. These provisions would retain trees and provide fencing that would provide continued screening of cultivation sites from views along scenic highways. For these reasons, this impact would be less than significant.

#### Summary

As described above, existing and future commercial cannabis cultivation sites would blend with the existing character scenic highways and would comply with MCCR requirements for fencing and tree retention. For these reasons, impacts related to scenic highways would be **less than significant**.

## Mitigation Measures

No mitigation is required for this impact.

### Impact 3.1-3: Substantially Degrade the Existing Visual Character or Quality of Public Views of the Site and Its Surroundings

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Operation of existing provisionally licensed commercial cannabis cultivation sites and licensing of new commercial cannabis cultivation sites under the project would be visually consistent with the existing rural and agricultural character of the County. Commercial cannabis operations are not substantially different in appearance from other agricultural operations. This impact would be **less than significant**.

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As described above, the visual character of Mendocino County includes features such as mountains, forests, agricultural lands, routes and roadways, and wild and scenic rivers.

#### Existing Provisionally Licensed Sites

As stated for Impact 3.1-1, existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would be consistent with the existing visual character of the County and would not conflict with or degrade the rural/agricultural landscape character. These sites are required to continue to comply with MCCR section 10A.17.040(H) that requires fencing of the garden (cultivation) area, and section 10A.17.040(K) that prohibits the removal of any commercial species trees as defined by CCR, title 14, section 895.1, commercial species for the Coast Forest District and Northern Forest District, any oak species, or tan oak trees. These provisions would retain trees and provide fencing that would provide continued screening of cultivation sites that maintain the County's current rural/agricultural landscape character. For these reasons, this impact would be less than significant.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation operations features would still be similar to those associated with other agricultural activities common within scenic vistas and along the state highways and therefore would not adversely alter the rural/agricultural landscape character of a scenic vista. Expansion of existing commercial cannabis cultivation sites would still be required to comply with MCCR and CCR requirements identified above. The MCCR also limits commercial cannabis cultivation and nursery sites to 22,000 square feet of commercial cannabis canopy per site that would apply to expanded commercial cannabis cultivation sites. These provisions would retain trees and provide fencing that would provide continued screening of cultivation sites from public views. For these reasons, this impact would be less than significant.

#### Future Licensed Sites

Construction activities associated with the development of new commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations may include tree removal and/or clearing of vegetation; grading of terrain to construct new roads (or reclaim abandoned ones), water storage ponds, and areas for cultivation; and construction and installation of new structures, including greenhouses, water storage tanks, and residential dwellings. During construction, equipment including haul trucks and excavators, materials stockpiles, partially constructed buildings, and environmental protection measures, such as

runoff control, may be visible on individual sites for limited periods. Regulations under the MCCR would apply to all new cultivation sites. In accordance with the regulations, new cultivation sites must maintain identified setbacks from sensitive land uses. The use of these setbacks would buffer adjoining land uses from the temporary impacts of construction. Therefore, construction activities associated with future licensed sites under the project would have a less-than-significant impact on the visual character and quality of the County.

As stated for Impact 3.1-1, new licensed commercial cannabis cultivation sites would include structures and feature types similar to those associated with other agricultural activities common along the eligible scenic highways and therefore would not adversely alter views along scenic highways. These new licensed commercial cannabis cultivation sites would be required to comply with MCCR section 10A.17.040(H) that requires fencing of the garden (cultivation) area, and section 10A.17.040(K) that prohibits the removal of any commercial species trees as defined by Title 14 CCR section 895.1, commercial species for the Coast Forest District and Northern Forest District, any oak species, or tan oak trees. The MCCR also limits commercial cannabis cultivation and nursery sites to 22,000 square feet of commercial cannabis canopy per site. These provisions would retain trees and provide fencing that would provide screening of cultivation sites maintain the County's current rural/agricultural landscape character. For these reasons, this impact would be less than significant.

### Summary

As described above, existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites would blend with the existing character scenic highways and would comply with MCCR requirements for fencing and tree retention. For these reasons, visual character impacts would be **less than significant**.

### Mitigation Measures

No mitigation is required for this impact.

### Impact 3.1-4: Create a New Source of Substantial Light or Glare That Would Adversely Affect Day or Nighttime Views in the Area

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Existing provisionally licensed commercial cannabis cultivation sites and future commercial cannabis cultivation sites licensed under the project could involve the use of artificial lighting. State and local regulations would include lighting standards to address nighttime lighting and glare impacts. This impact would be **less than significant**.

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Commercial cannabis cultivation sites are known to use light sources for cultivation of the commercial cannabis plant (on-site nurseries, commercial nurseries, mixed-light cultivation, and indoor cultivation), in addition to nighttime lighting associated with operation and security for all cultivation types. If not adequately controlled, these light sources can create substantial light and glare impacts, adversely affecting neighboring land uses and wildlife. Wildlife impacts associated with the addition of substantial light and glare is further discussed in Section 3.5, "Biological Resources." Depending on the location, lighting used for outdoor and/or mixed-light cultivation purposes could create additional ambient lighting of varying degrees in the area and be intrusive to off-site locations and neighboring residents.

### Existing Provisionally Licensed Sites

The use of artificial light in structures at night can emit a glow of light that can disturb adjoining land uses as well as result in impacts to wildfire. All existing provisionally licensed commercial

cannabis cultivation types and associated processing and/or distribution transport-only operations can involve the use of outdoor lighting for operations and security. Existing provisionally licensed commercial cannabis cultivation sites would continue to be required to comply with MCCR section 10A.17.040(E) would ensure that cultivation operations using artificial lighting shall be fully contained within structures or otherwise be shielded. Compliance with the annual license would also require that outdoor lights used for safety or security purposes for cultivation sites are shielded and downward facing as well as cultivation artificial lighting is shielded from sunset to sunrise to reduce nighttime glare (CCR, title 4, section 16304). As a result, light and glare impacts associated with existing provisionally licensed commercial cannabis cultivation sites would not be expected to occur. Therefore, this impact would be less than significant.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation operations features would still be required to comply with MCCR and CCR requirements identified above for lighting. For these reasons, this impact would be less than significant.

#### New Licensed Sites

As described above for existing provisionally licensed sites, new licensed commercial cannabis cultivation sites and nurseries may use artificial lighting for operations. New licensed commercial cannabis cultivation sites would continue to be required to comply with MCCR section 10A.17.040(E) would ensure that cultivation operations using artificial lighting shall be fully contained within structures or otherwise be shielded. Compliance with the annual license would also require that outdoor lights used for safety or security purposes for cultivation sites are shielded and downward facing as well as cultivation artificial lighting is shielded from sunset to sunrise to reduce nighttime glare (CCR, title 4, section 16304). As a result, light and glare impacts associated with new licensed commercial cannabis cultivation sites would not be expected to occur. Therefore, this impact would be less than significant.

#### Summary

As described above, existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites would be required to comply with section 10A.17.040(E) of the MCCR and CCR, title 4, section 16304 that would require shielding of lighting to avoid off-site lighting impacts. For these reasons, the impact related to light and glare would be **less than significant**.

#### Mitigation Measures

No mitigation is required for this impact.



## 3.2 AGRICULTURE AND FORESTRY RESOURCES

This section evaluates the potential agriculture and forestry resource impacts associated with implementation of the project. Policies and regulations related to agriculture and forestry resources and existing agriculture and forestry resource characteristics are described.

Comment letters submitted in response to the notice of preparation (NOP) for this EIR identified issues pertaining to adverse effects on nearby agricultural uses, impacts on Williamson Act contract lands, and conversion of timberland uses. These issues are addressed below. Additional comments identified concerns related to the clearing of forest areas and subsequent grading for commercial cannabis cultivation sites related to biological resource and watershed impacts. The reader is referred to Section 3.5, “Biological Resources,” and Section 3.10, “Hydrology and Water Quality,” for evaluation of these impacts. All comments received in response to the NOP are presented in Appendix A of this EIR.

### 3.2.1 Regulatory Setting

#### FEDERAL

##### Federal Insecticide, Fungicide, and Rodenticide Act

Pesticides are regulated under the Federal Insecticide, Fungicide, and Rodenticide Act by the US Environmental Protection Agency (EPA). This includes labeling and registration of pesticides as to how they may be used. EPA delegates pesticide enforcement activities in California to the California Department of Pesticide Regulation (CDPR), under CCR, title 3 and the California Food and Agriculture Code. CDPR registers pesticides for use in California, and licenses pesticide applicators and pilots, advisors, dealers, brokers, and businesses.

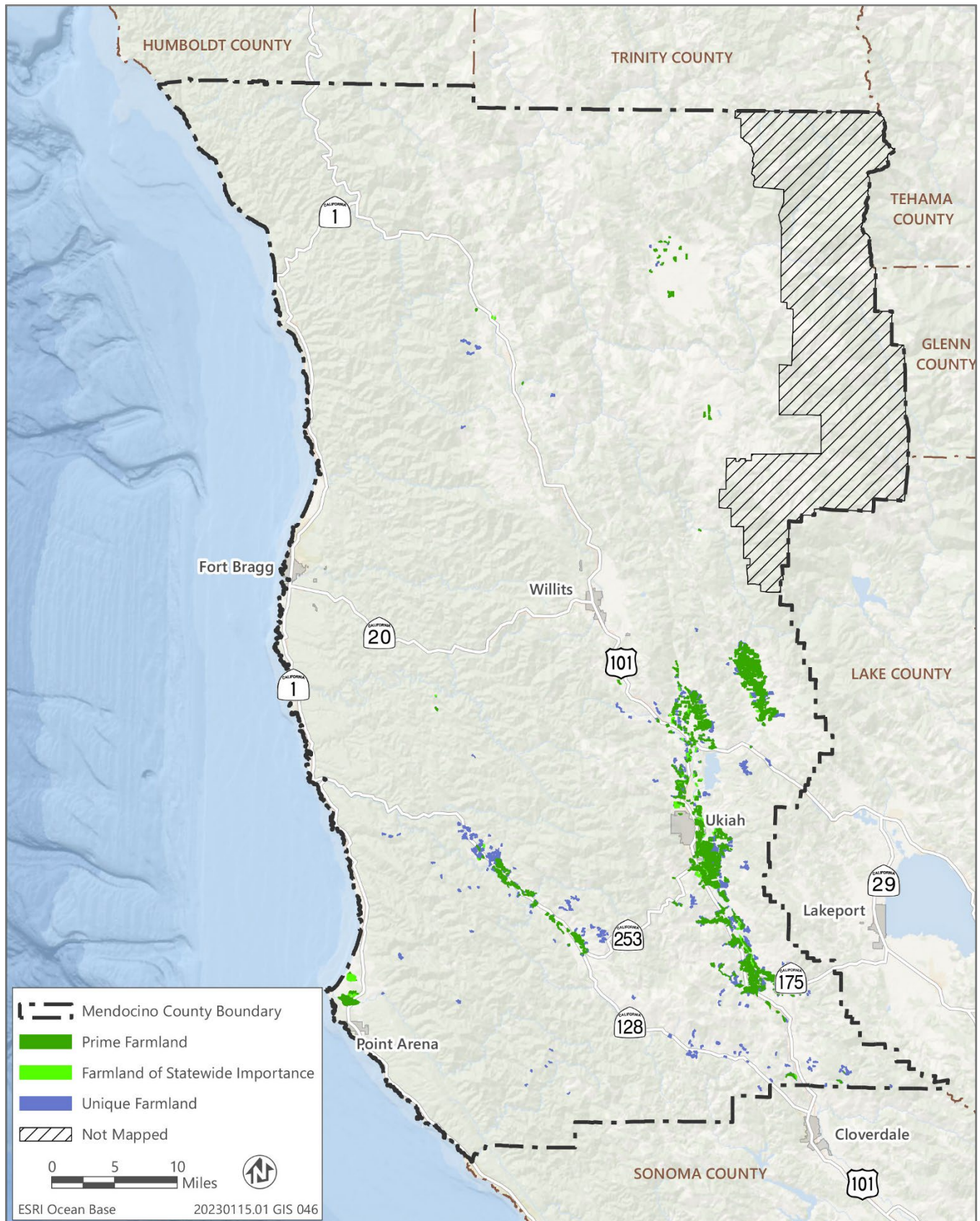
#### STATE

##### Farmland Mapping and Monitoring Program

The California Department of Conservation (DOC) has the primary responsibility for reporting statewide farmland data and trends. Prime Farmland, Farmland of Statewide Importance, and Unique Farmland are the lands most suitable for agriculture and often are referred to collectively as Important Farmland. DOC’s Farmland Mapping and Monitoring Program (FMMP) categorizes and maps Important Farmland every 2 years based on information from local agencies. In addition, counties may, at their discretion, establish criteria for the designation of Farmland of Local Importance and consider other lands in their jurisdiction as important agricultural lands. Figure 3.2-1 identifies areas of Important Farmland in the County.

##### California Land Conservation Act of 1965

The California Land Conservation Act of 1965, better known as the Williamson Act, created a program that counties can use to prevent viable agricultural land from being converted to urban uses. It involves providing tax incentives to property owners to keep their land in agricultural production. The act provides an arrangement wherein private landowners voluntarily restrict their land to agricultural and compatible open space uses under a contract with the County, known as a land conservation contract or Williamson Act contract, in exchange for property tax relief.



Source: Data downloaded from the California Department of Conservation in 2023; adapted by Ascent in 2023.

**Figure 3.2-1 Important Farmland in Mendocino County**

The Williamson Act contract is an enforceable restriction on land and is binding on successors to both the landowner and the local government. The minimum term for a contract is 10 years, and the contract is automatically renewed annually unless one of the parties gives advanced notice of nonrenewal. Contracts may be canceled immediately, terminating the restriction to agricultural uses, only if the local legislative body finds that termination or canceling of the contract would be consistent with the act and in the public interest.

### Cannabis as an Agricultural Product

Business and Professions Code section 26060(a) defines medical and adult-use commercial cannabis as agricultural products.

### California Department of Pesticide Regulation Guidance

Detailed implementing regulations for the California Department of Pesticide Regulation (DPR) pesticide regulatory program are codified in CCR, title 3, Division 6. DPR oversees state pesticide laws, including pesticide labeling, and is vested by EPA to enforce federal pesticide laws in California. DPR also oversees the activities of the county agricultural commissioners related to enforcement of pesticide regulations and related environmental laws and regulations locally. These regulations include permitting requirements and limitations on the use of “restricted” pesticides (pesticides considered to be dangerous to human health or the environment if not used correctly) and non-restricted pesticides that may require permitting or must be handled consistent with the pesticide’s specifications.

State law allows DPR to place controls on restricted pesticides, limiting their use to trained individuals, and then only at times and places approved by the county agricultural commissioners.

DPR assesses potential dietary (food and drinking water), workplace, residential, and ambient air exposures, and considers both the exposure pathway (the course a pesticide takes from its source to the person) as well as the exposure route (how the pesticide enters the body). This evaluation is described in the Exposure Assessment Document (EAD).

DPR’s human health risk assessments include hazard identification, dose-response assessment, exposure assessment, and risk characterization. These components of risk assessment are then incorporated into a risk characterization document (RCD). Hazard identification determines if there are toxic effects caused by a pesticide. The dose-response assessment identifies the amount of pesticide at which these effects occur. The exposure assessment determines the amount of pesticide that people are exposed to during a specific period (short-, intermediate-, and long-term) and in what situations (work, home, and outdoor environments). The exposure assessment also identifies who is most vulnerable, such as farmworkers, children, and women of childbearing age. Risk characterization determines the exposure levels at which harmful effects will not be caused. Draft EADs and RCDs undergo external peer review by scientists at the Office of Environmental Health Hazard Assessment and EPA.

In addition, DPR oversight includes:

- ▶ Licensing of pesticide professionals;
- ▶ Site-specific permits required before restricted-use pesticides may be used in agriculture;
- ▶ Strict rules to protect workers and consumers;
- ▶ Mandatory reporting of pesticide use by agricultural and pest control businesses;

- ▶ Environmental monitoring of water and air; and
- ▶ Testing of fresh produce for pesticide residues.

The regulations require that employers of pesticide workers provide protective clothing, eyewear, gloves, respirators, and any other required protection, and require employers to ensure that protective wear is worn according to product labels during application. The regulations also require that employers provide field workers with adequate training in pesticide application and safety; communicate pesticide-related hazards to field workers; ensure that emergency medical services are available to field workers; and ensure adherence to restricted-entry intervals between pesticide treatments (CCR, title 3, section 6764). DPR requires that the application of pesticides or other pest control in connection with the indoor or outdoor cultivation of commercial cannabis complies with Division 6 (commencing with section 11401) of the Food and Agricultural Code and its implementing regulations (CCR, title 3, section 6000 et seq.).

### Pesticide Use in Commercial Cannabis Cultivation

Cannabis pests vary according to cultivar (variety), whether the plants are grown indoors or outdoors, and where the plants are grown geographically. Pesticides legal for use on commercial cannabis must have active ingredients that are exempt from residue tolerance requirements and are either exempt from registration requirements or registered for a use that is broad enough to include use on cannabis. Residue tolerance requirements are set by EPA for each pesticide on each food crop and is the amount of pesticide residue allowed to remain in or on each treated crop with “reasonable certainty of no harm.” Some pesticides are exempted from the tolerance requirements when they are found to be safe. Some of these pesticides are bacterial-based insect pathogens (e.g., *Bacillus thuringiensis*) or biofungicides (e.g., *Bacillus subtilis*, *Gliocladium virens*). Active ingredients exempt from registration requirements are mostly food-grade essential oils such as peppermint oil or rosemary oil.

### California Public Resources Code

“Agricultural land” is defined in PRC section 21060.1 as “prime farmland, farmland of statewide importance, or unique farmland, as defined by the United States Department of Agriculture land inventory and monitoring criteria, as modified for California.”

“Forest land” is defined in PRC section 12220(g) as “land that can support 10% native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.”

“Timberland” is defined in PRC section 4526 as “land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis after consultation with the district committees and others.”

“Timberland Production Zone” is defined in Government Code section 51104(g) as “an area which has been zoned pursuant to section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as

defined in subdivision (h). With respect to the general plans of cities and counties, ‘timberland preserve zone’ means ‘timberland production zone.’”

### California Government Code

The following California Government Code definitions are applicable to the project:

- ▶ Government Code section 51104(g) defines “timberland production zone” (TPZ) as an area that has been zoned pursuant to section 51112 or 51113 and that is devoted to and used for growing and harvesting timber or for growing and harvesting timber and compatible uses. Compatible uses are defined under Government Code section 51104(h) and include the construction and maintenance of electric transmission facilities.
- ▶ Government Code section 51112 identifies situations that would warrant a decision that a parcel is not devoted to and used for growing and harvesting timber or for growing and harvesting timber and compatible uses.
- ▶ Government Code section 51113 allows the opportunity for a landowner to petition that his or her land be zoned timberland production.
- ▶ Government Code section 51201(c)(5) defines “prime agricultural land” as land that has returned from the production of unprocessed agricultural plant products with an annual gross value of not less than \$200 per acre for 3 of the previous 5 years.

### Z’berg-Nejedly Forest Practice Act of 1973

The Z’berg-Nejedly Forest Practice Act of 1973 (FPA) (PRC sections 4511–4517) established the California Board of Forestry and Fire Protection, whose mandate is to protect and enhance the state’s unique forest and wildland resources. This mandate is carried out through enforcement of the California Forest Practice Rules (CCR, title 14, Chapters 4, 4.5, and 10). The California Department of Forestry and Fire Protection (CAL FIRE) enforces the laws that regulate logging on nonfederal lands in California. Additional rules enacted by the California Board of Forestry and Fire Protection are also enforced to protect forest and wildland resources.

### Z’berg-Warren-Keene-Collier Forest Taxation Reform Act of 1976

According to the Z’berg-Warren-Keene-Collier Forest Taxation Reform Act (Government Code sections 51110–51119.5), enacted in 1976, counties must provide for the zoning of land used for growing and harvesting timber as TPZs. A TPZ is a 10-year restriction on the use of land and replaced the use of agricultural preserves (Williamson Act contracts) on timberland. Land use under a TPZ is restricted to growing and harvesting timber and to compatible uses approved by the County. In return, taxation of timberland under a TPZ is based only on such restrictions in use.

### California Timberland Productivity Act of 1982

The California Timberland Productivity Act of 1982 (California Government Code sections 51100–51104) identifies the benefits of the state’s timberlands and acknowledges the threat of timberland loss through land use conversions. The law identifies policies intended to preserve timberland, including policies to maintain an optimum amount of timberland, discourage premature conversion, discourage expansion of urban land uses into timberlands, and encourage investments in timberland. The law establishes TPZs on all qualifying timberland, which is devoted to and used for growing and harvesting timber or for growing and harvesting timber and compatible uses. The law also provides that timber operations conducted in a

manner consistent with forest practice rules (FPA) shall not be or become restricted or prohibited because of any land use in or around the locality of those operations.

### California Forest Practice Rules

The California Forest Practice Rules of 2012 define the timber harvest activities regulated under CCR, title 14, chapters 4, 4.5, and 10, and under the FPA (PRC, Division 4, Chapter 8). CAL FIRE is the enforcing agency responsible for ensuring that logging and other forest harvesting activities are conducted in a manner that preserves and protects fish, wildlife, forests, and streams.

Before any harvesting activities occur, landowners must prepare a timber harvest plan (THP) that outlines the timber proposed for harvesting, the methods of harvesting, and the steps that will be taken to prevent damage to the environment. THPs are required to be prepared by Registered Professional Foresters. When a timberland owner proposes to carry out a project that would result in timberland being converted to a nontimber growing use, the owner must secure a Timberland Conversion Permit from CAL FIRE. Projects that would result in the conversion of less than 3 acres of timberland may qualify for an exemption from this provision.

### CAL FIRE Forest Legacy Program

The Forest Legacy Program protects environmentally important forest land threatened with conversion to non-forest uses. Protection of California's forests through this program ensures that they continue to provide such benefits as sustainable timber production, wildlife habitat, recreation opportunities, watershed protection, and open space. Intact forests also contribute substantially to the storage and sequestration of carbon. Under this competitive grant program, CAL FIRE purchases or accepts donations of conservation easements or fee title of productive forest lands to encourage their long-term conservation. The primary tool that CAL FIRE uses to conserve forest lands in perpetuity is permanent Working Forest Conservation Easements (WFCEs). WFCEs do more than just restrict development and conversion on a property. They protect forest values by concentrating on sustainable forest practices that provide economic value from the land and encourage long-term land stewardship.

### State Water Resources Control Board Order WQ 2023-0102-DWQ

Attachment A (General Requirements and Prohibitions) of the State Water Resources Control Board (SWRCB) Order WQ 2023-0102-DWQ, General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities (Attachment A, Section 1, General Requirements and Prohibitions), includes the following requirements (terms) for state-licensed cultivation sites related to agriculture and forestry resources:

1. Prior to commencing any cannabis cultivation activities, including cannabis cultivation land development or alteration, the cannabis cultivator shall comply with all applicable federal, state, and local laws, regulations, and permitting requirements, as applicable, including but not limited to the following:
  - The Clean Water Act (CWA) as implemented through permits, enforcement orders, and self-implementing requirements. When needed per the requirements of the CWA, the cannabis cultivator shall obtain a CWA section 404 (33 U.S.C. section 1344) permit from the United States Army Corps of Engineers and a CWA section 401 (33 U.S.C. section 1341) water quality certification from the State Water Board or the Regional Water Board with jurisdiction. If the CWA permit cannot be obtained, the cannabis cultivator shall contact the appropriate Regional Water Board or State Water Board prior

to commencing any cultivation activities. The Regional Water Board or State Water Board will determine if the cannabis cultivation activity and discharge is covered by the Requirements in the Policy and Cannabis General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities (Cannabis Cultivation General Order).

- The California Water Code as implemented through applicable water quality control plans (often referred to as Basin Plans), waste discharge requirements (WDRs) or waivers of WDRs, enforcement orders, and self-implementing requirements issued by the State Water Resources Control Board (State Water Board) or Regional Water Quality Control Boards (Regional Water Boards).
  - All applicable state, city, county, or local regulations, ordinances, or license requirements including, but not limited to those for cannabis cultivation, grading, construction, and building.
  - All applicable requirements of the California Department of Fish and Wildlife (CDFW).
  - All applicable requirements of CAL FIRE, including the Board of Forestry.
  - California Environmental Quality Act and the National Environmental Policy Act.
2. If applicable, cannabis cultivators shall obtain coverage under all of the following:
- The State Water Board’s Construction Storm Water Program and any successors, amendments, or revisions thereto when applicable.
  - Activities performed in areas subject to CCR, title 14, chapter 4. Forest Practices (Forest Practice Rules) shall be implemented consistent with the permitting, licensing, and performance standards of the Forest Practice Rules, and the Requirements of this Policy, whichever is more Stringent.
7. A California Licensed Timber Operator (LTO)<sup>3</sup> shall be used if any commercial tree species are to be removed from the cannabis cultivation site. All timberland conversions shall be permitted and compliant with the Forest Practice Rules and CAL FIRE permitting requirements.
30. In timberland areas, cannabis cultivators shall not remove commercial tree species or other vegetation within 150 feet of fish bearing water bodies or 100 feet of aquatic habitat for non-fish aquatic species (e.g., aquatic insects) prior to obtaining all applicable permits required from CAL FIRE, CDFW (i.e., LSA Agreement), and/or the Regional Water Board Executive Officer.

#### California Code of Regulations - California Department of Cannabis Control Medicinal and Adult-Use Commercial Cannabis Regulations

CCR, title 4, division 9 includes standards related to the use and allowable levels of pesticides for cannabis that are summarized below. The reader is also referred to Section 3.9, “Hazards and Hazardous Materials,” regarding pesticide use.

#### CCR, Title 4, Section 15011(a)(12)

All cultivator license types except processors, require a signed attestation that states the commercial cannabis business shall contact the appropriate county agricultural commissioner regarding requirements for legal use of pesticides on cannabis prior to using any of the active ingredients or products included in the pest management plan and shall comply with all pesticide law.

### CCR, Title 4, Section 15719: Residual Pesticide Testing

A licensed laboratory is required to analyze representative samples of cannabis and cannabis products to determine whether residual pesticides are present. A list of pesticides is divided into two categories and provided along with their action levels. The sample shall be deemed to have passed the residual pesticides testing if both or the following conditions are met: (1) the presence of any residual pesticide listed in Category I identified in section 15719 are not detected, and (2) the presence of any residual pesticide listed in in Category II in section 15719 does not exceed the indicated action levels.

### CCR, Title 4, Section 16307: Pesticide Use Requirements

Licensed cultivators are required to comply with all applicable pesticide statutes and regulations enforced by the Department of Pesticide Regulation. For all pesticides that are exempt from registration requirements, licensed cultivators are required to follow specific pesticide application and storage protocols.

### CCR, Title 4, Section 16310: Pest Management Plan

Licensed cultivators are required to develop a pest management plan that includes product name and active ingredient(s) of all pesticides to be applied to cannabis as well as any integrated pest management protocols, including chemical, biological, and cultural methods, that will be used to prevent and control pests on the cultivation site.

## LOCAL

### Mendocino County General Plan

The Mendocino County General Plan Resource Management Element provides the following policies regarding agriculture and forestry resources in Mendocino County (Mendocino County 2021a):

- ▶ **Policy RM-103:** Maintain extensive agricultural land areas and limit incompatible uses.
- ▶ **Policy RM-104:** The County supports policies and programs to maintain and enhance the viability of agricultural operations and retention of agricultural land.
- ▶ **Policy RM-107:** Support the diversification and expansion of the agricultural economic base.
- ▶ **Policy RM-110:** Maintain land use compatibility and minimize conflicts between agricultural and non-agricultural uses.
- ▶ **Policy RM-111:** Discretionary projects shall not undermine the integrity and economic viability of agricultural operations by causing or contributing to piecemeal land-use conversion, land fragmentation, urban encroachment, the introduction or concentration of incompatible uses on lands adjoining or within agricultural areas, or the extension of growth-inducing urban services such as public water or sewers.
- ▶ **Policy RM-112:** Discretionary projects and parcels created by land divisions shall be designed and sized to be compatible with contiguous lands classified as Agricultural Lands or Range Lands. Criteria include but are not limited to the following:
  - The number of ownerships and land-use intensities adjacent to parcels classified as Agricultural Lands or Range Lands shall be minimized.



- Projects shall be designed to reduce growth-inducing impacts and maintain a stable limit to urban development. Building envelopes, clustered development, and commercial, industrial, civic, and sensitive uses shall be designed with buffers or setbacks from lands classified as Agricultural Lands or Range Lands. Buffers are generally defined as a physical separation of 200–300 feet (depending on pesticide application impacts) with the potential for a reduced separation when a topographic feature, substantial tree-stand, landscaped berm, watercourse, or similar existing or constructed feature is provided and maintained.
- Potential conflicts related to noise, dust, odor, pesticide use, spraying, burning, lights, late or early hour activities, vandalism and trespass, and other issues associated with agricultural operations on agriculture zoned land shall be mitigated by the new discretionary project, respecting the County’s “Right to Farm” ordinance. Residential uses and subdivisions shall maintain a ten (10) acre minimum parcel size adjacent to lands under active Williamson Act contracts which are classified Agricultural or Range Lands. Parcels classified with a smaller minimum parcel size or zoned Planned Development or Clustering may exceed these densities, provided that the criteria in policies RM-101 to RM-112 are also employed to reduce impacts.
- ▶ **Policy RM-128:** The following guidelines shall apply to all projects (including land divisions) contiguous to lands designated as Forest Lands on the Land Use Map of this General Plan:
  - The number of ownerships and land-use intensities on adjacent parcels shall be minimized.
  - Building envelopes, clustered development, and commercial, industrial, civic, and sensitive uses on non-resource lands shall be designed with buffers or setbacks. Buffers shall generally be defined as a physical separation of 200 feet with the potential for a reduced separation when a topographic feature, substantial tree-stand, landscaped berm, watercourse or similar existing or constructed feature is provided and maintained.
  - Projects shall be designed to reduce growth-inducing impacts and maintain a stable limit to urban development.
  - The new discretionary project shall mitigate potential conflicts related to noise, dust, chemicals, spraying, burning, vandalism and trespass, and other forest management or timber operations issues.
  - Residential uses and subdivisions shall have a ten (10) acre minimum. Parcels classified with a smaller minimum parcel size or zoned Planned Development or Clustering may exceed these densities, provided that the criteria above are employed to reduce impacts.

### Mendocino County Policies and Procedures for Agricultural Preserves and Williamson Act Contracts

Pursuant to the California Land Conservation Act (Government Code section 51200 et seq.), the Mendocino County Board of Supervisors has adopted rules to govern the administration of the County’s agricultural preserve and open space program. These policies and procedures were amended in 2018 under County Resolution No. 18-050 that now identifies commercial cannabis cultivation as considered compatible with qualifying agricultural uses above on any Williamson Act contracted lands under section 9.5(E). The County determined that the use of contracted land for certain cannabis facilities as permitted by the Zoning Code as a compatible use will not

significantly compromise the long-term productive agricultural capability of contracted lands in agricultural preserves in Mendocino County (Mendocino County 2018).

### Mendocino County Cannabis Regulation

The Mendocino County Cannabis Regulation (MCCR) contains the following requirements related to agriculture and forestry resources:

#### Section 10A.17.040: General Limitations on Cultivation of Cannabis

The following limitations shall apply to all cultivation of cannabis in Mendocino County, including but not limited to cultivation pursuant to a Permit issued under this chapter or an exemption provided for section 10A.17.030. Cultivation of cannabis shall also be subject to all applicable restrictions of Mendocino County Code Chapter 20.242.

- ▶ (K) Prohibition of Tree Removal. Removal of any commercial tree species as defined by CCR, title 14, section 895.1, Commercial Species for the Coast Forest District and Northern Forest District, and the removal of any true oak species (*Quercus* sp.) or Tan Oak (*Notholithocarpus* sp.) for the purpose of developing a cannabis cultivation site is prohibited. This prohibition shall not include the pruning of any such trees for maintenance, or the removal of such trees if necessary to address safety or disease concerns. For purposes of this section 10A.17.040(K), “for the purpose of developing a cultivation site” shall mean the alteration, grading, removal, or other development of land to create, or expand, a cultivation site, as that term is defined in section 10A.17.020.

#### Section 10A.17.070: Requirements for All Cannabis Cultivation Business Licenses

Unless specifically exempted, in addition to compliance with all other requirements of this chapter, all Cannabis Cultivation Business Licenses Holder’s shall comply with the requirements of this section.

- ▶ (A) Zoning Districts. Cultivation of cannabis shall only be permitted on legal parcels that comply with the applicable zoning districts and parcel sizes as provided in Chapter 20.242.
- ▶ (E) Dwelling Unit Requirement. Legal parcels with a cultivation site are also required to have a dwelling unit; provided, however, that this requirement shall not apply to legal parcels within the following zoning districts: Upland Residential (U-R), Agricultural (A-G), Rangeland (R-L), Forest Land (F-L), Timberland Production (TPZ), Limited Industrial (1-1), General Industrial (1-2) Pinoleville Industrial (P-1). In addition, legal conforming parcels in Rural Residential, lot size ten (10) acres (R-R:L-10), shall also be exempt from the dwelling unit requirement of this paragraph, upon issuance of an administrative permit pursuant to Chapter 20.242.

### Mendocino County Zoning Code

The Mendocino County Zoning Code establishes several zoning districts associated with agricultural land uses: Agricultural Lands, Range Lands, Forest Lands, Remote Resource Lands, Public Lands, and Open Space. The purpose of the agricultural zones is to allow for land uses that support and enhance agriculture land uses in the unincorporated area of the County.

As described in Mendocino County Zoning Code section 20.052.010, allowed agricultural use types include the full range of cultivated agriculture, such as the on-site production of plant and animal products by agricultural methods, as well as agricultural commercial uses, agricultural industrial uses, and agricultural residential uses serving the rural areas. Section 20.052.010 also includes agricultural land uses and operations that include processing of agricultural

products, as well as commercial uses, such as permanent produce stands, agricultural chemical/fertilizer sales, wineries, and breweries, and industrial uses, such as regional processing facilities (e.g., wine).

Mendocino County Agricultural Commissioner Pesticide Application Protection Standards  
In addition to DPR pesticide handling requirements, the Mendocino County agricultural commissioner has identified the following requirements to protect adjacent land areas (Mendocino County 2012):

- ▶ Protection of Person, Animals and Property
  - An applicator, prior to and while applying a pesticide, shall evaluate the equipment to be used, meteorological conditions, the property to be treated, and surrounding properties to determine the likelihood of harm or damage.
- ▶ To help prevent the possibility of drift, no pesticide application shall be made or continued when any of the following conditions exist:
  - There is a reasonable possibility of contamination of the bodies or clothing of persons not involved in the application process;
  - There is a reasonable possibility of damage to nontarget crops, animals, or other public or private property; or
  - There is a reasonable possibility of contamination of nontarget public or private property, including the creation of a health hazard, preventing normal use of such property.

### 3.2.2 Environmental Setting

#### AGRICULTURAL RESOURCES

The County has approximately 745,314 acres committed to agricultural uses with the largest concentration of agricultural activity in river valleys and along tributaries of the Russian and Eel Rivers (Mendocino County 2008).

##### Agricultural Productivity

By California standards, Mendocino County's agricultural production is small. The County produced approximately \$200.6 million of the state's \$22.5 billion of annual farm goods in 2021. Mendocino County's 2021 Crop Report identified the following as top agricultural commodities (Mendocino County 2021b):

- ▶ Wine grapes (\$84.5 million),
- ▶ Timber (\$67.1 million),
- ▶ Cattle and calves (\$18.5 million),
- ▶ Pears (\$10.7 million),
- ▶ Commercial fishing (\$9.1 million),
- ▶ Pasture (\$6.8 million),
- ▶ Rangeland (\$3.9 million), and
- ▶ Nursery (\$1.8 million).

Mendocino County was ranked 34th in the state for gross value for agricultural production, including timber, in 2021 (CDFA 2022).

#### Prime and Nonprime Agricultural Lands

The land best suited for a wide range of agricultural crops is called Prime Farmland. The FMMP provides a consistent and impartial analysis of agricultural land use and land use changes throughout California. The modern soil surveys produced by the US Natural Resources Conservation Service are the basis for the FMMP. Mendocino County is included in the latest FMMP released by DOC. Prime agricultural land makes up approximately 0.9 percent of all the classified farmland in the County, (see Figure 3.2-1). Grazing land makes up the majority of classified farmland throughout the County, comprising of approximately 85 percent of all farmland (Mendocino County 2008).

#### Commercial Cannabis Cultivation

Mendocino County is located in the Emerald Triangle (Mendocino, Humboldt, and Trinity Counties), considered by many to be the epicenter of domestic commercial cannabis cultivation in the United States if not the world. For much of history, growing cannabis was an illicit, clandestine, contraband activity, and it is still prohibited by federal criminal law. However, in 1996, California voters passed the “Compassionate Use Act,” making California one of the first governments in the world to officially legalize cannabis for medical use (UCLA 2022). As a consequence, its cultivation developed in remote rural locations, dispersed in relatively small areas on large tracts of land. The primary value of these remote locations to illicit growers is concealment and difficult access to law enforcement.

## FORESTED AREAS AND TIMBERLANDS

Mendocino County contains more than 1.3 million acres of unreserved commercial forest land (see Figures 3.5-1 and 3.5-2 in Section 3.5, “Biological Resources”), covering approximately 58 percent of the County’s total land area. In these forest lands are public lands, including national forests and state reserves. County lands zoned TPZ are shown in Figure 3.2-2. Forest resources, much like agricultural resources, are dependent on the quality of the climate and soils. Mendocino County’s mild and wet climate is conducive to timber production.

Mendocino County’s 2021 Crop Report identified timber production as the County’s highest-value agricultural commodity at \$67,128,681 (Mendocino County 2021b). (The County ranked seventh in the state in timber volumes and produced approximately 4.8 percent of the state’s total timber harvest in 2021.)

Approximately 46 percent of Mendocino County is in National Forest land managed by the US Forest Service and in Timber Protection Zones. Other forests are located on land managed by the Bureau of Land Management and other public agencies (Mendocino County 2008). Additional existing forestry resources in the County, as illustrated in Figures 3.5-1 and 3.5-2, include Montgomery Woods State Natural Reserve, located along the Coastal Range, and Mailliard Redwoods State Natural Reserve, located along the Garcia River and adjacent watersheds.



Source: Data downloaded from the California Department of Conservation in 2023; adapted by Ascent in 2023.

**Figure 3.2-2 Timber Production Zone in Mendocino County**

## Forest Types

Trees are generally classified as hardwood (including oak, alder, and other deciduous or broadleaf species) or softwood (including fir, spruce, pine, redwood and all other coniferous or needle-bearing species), although some “hardwoods” are softer than softwoods. Land cover types, including forest types, are described under “Environmental Setting” in Section 3.5, “Biological Resources.” Montane hardwood and redwood are the dominant forest types of the County consisting of approximately 1,009,267 acres of the County (Figures 3.5-1 and 3.5-2 and Table 3.5-2).

## Timberland Conversion from Commercial Cannabis Cultivation

The remote nature of most of the County has historically helped attract and conceal commercial cannabis cultivation. Clandestine cannabis operations throughout the County have contributed to the conversion of timberland on private and public lands. Forest land in portions of the County that have been cleared for commercial cannabis cultivation are apparent from satellite images available through Google Earth.

## 3.2.3 Environmental Impacts and Mitigation Measures

### METHODOLOGY

The analysis below evaluates potential agriculture and forestry impacts associated with implementation of the project. The analysis focuses specifically on actions that could result in the use of agricultural lands for commercial cannabis operations, conversion of designated TPZs and other forest lands, and conflicts with policies and regulations intended to protect farmland and timberlands. The reader is referred to Chapter 2, “Project Description,” for a description of the proposed regulation of commercial cannabis operations and the anticipated extent of new commercial cannabis operations.

### THRESHOLDS OF SIGNIFICANCE

An impact related to agriculture and forestry resources would be significant if implementation of the project would:

- ▶ Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
- ▶ Conflict with existing zoning for agricultural use or a Williamson Act contract;
- ▶ Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g));
- ▶ Result in the loss of forest land or conversion of forest land to non-forest use; or
- ▶ Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.

## ISSUES NOT DISCUSSED FURTHER

All the issues identified in the thresholds of significance are addressed in the following analysis.

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Impact 3.2-1: Convert Farmland to Nonagricultural Use or Conflict with Existing Zoning for Agricultural Use or a Williamson Act Contract

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Implementation of the project could result in an increase in expanded or new licensed commercial cannabis cultivation sites in unincorporated Mendocino County. Business and Professions Code section 26060(a) defines medical and adult-use cannabis as agricultural products. Because commercial cannabis is defined by the state as an agricultural product, the project would not result in conversion of farmland to nonagricultural uses, nor conflict with existing zoning for agricultural use or a Williamson Act contract. Additionally, the MCCR and Mendocino County policies allow commercial cannabis cultivation sites on agricultural lands, including Williamson Act contracted lands, including allowable zoning designations for existing and future cultivation activities within the County, including land zoned for agricultural uses. There would be **no impact** on conversion of farmland to nonagricultural use or conflict with zoning for agricultural use or a Williamson Act contract.

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Important farmland (Prime, Farmland of Statewide Importance, and Unique Farmland) has been mapped by the state for Mendocino County (see Figure 3.2-1). Commercial cannabis is defined by the state as an agricultural product (Business and Professions Code section 26060(a)), and therefore, commercial cannabis cultivation sites in agricultural areas would not result in conversion to a nonagricultural use. The commercial cannabis cultivation process involves the same practices as other agricultural products generated currently in the County. These similar practices include:

- ▶ Cultivation of the crop through a growth medium (soil), light, water, and nutrients
- ▶ Harvesting and processing of the crop for sale

The MCCR regulates the extent of commercial cannabis cultivation sites that are allowed on agriculturally zoned lands. Table 2 of the MCCR prohibits Specialty Mixed-Light (County license Type 1B) and Small Indoor (County license Type 2A) commercial cannabis cultivation licensed uses in agriculturally zoned land areas. The Mendocino County Policies and Procedures for Agricultural Preserves and Williamson Act Contracts identifies cannabis commercial cannabis cultivation as compatible with qualifying agricultural uses above) on any Williamson Act contracted lands under section 9.5(E).

Potential concerns regarding conflicts with adjoining agricultural uses consist of pesticide usage that may adversely affect neighboring agricultural operations. As described in Section 3.2.1, "Regulatory Setting," pesticides used on commercial cannabis cultivation sites are restricted to those with active ingredients that are exempt from residue tolerance requirements and are either exempt from registration requirements or registered for a use that is broad enough to include use on commercial cannabis cultivation sites. Some of these pesticides are bacterial-based insect pathogens (e.g., *Bacillus thuringiensis*) or biofungicides (e.g., *Bacillus subtilis*, *Glucoladium virens*). Active ingredients exempt from registration requirements are mostly food-grade essential oils such as peppermint oil or rosemary oil. The use of restricted

pesticides on commercial cannabis cultivation is prohibited. Harvested commercial cannabis is required to pass laboratory tests for pesticides.

DPR places controls on pesticides based on the results of risk characterization studies and documentation that limits their use to trained individuals. As described in Section 3.2.1, “Regulatory Setting,” the Mendocino County Agricultural Commissioner has identified the following requirements to protect adjacent land areas from pesticide drift (Mendocino County 2012):

- ▶ Protection of Person, Animals and Property
  - An applicator, prior to and while applying a pesticide, shall evaluate the equipment to be used, meteorological conditions, the property to be treated, and surrounding properties to determine the likelihood of harm or damage.
- ▶ To help prevent the possibility of drift, no pesticide application shall be made or continued when any of the following conditions exist:
  - There is a reasonable possibility of contamination of the bodies or clothing of persons not involved in the application process;
  - There is a reasonable possibility of damage to nontarget crops, animals, or other public or private property; or
  - There is a reasonable possibility of contamination of nontarget public or private property, including the creation of a health hazard, preventing normal use of such property.

Technical studies have confirmed the effectiveness of the use of buffers and drift-reducing spray nozzles, limiting speed of application, and wind speeds to address pesticide drift (Rasmussen et al. 2011; Egan et al. 2014; Al Heidary et al. 2014). Thus, these requirements and associated controls are effective in avoiding pesticide drift impacts.

#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations that transition to annual licensure or the expansion of cultivation activities since issuance of their provisional licenses would not result in any potential impact on agricultural lands or uses because operations are generally not anticipated to be altered through the annual licensing process.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. Expansion of existing commercial cannabis cultivation sites would still be subject to MCCR regulations that addresses the extent of commercial cannabis cultivation sites that are allowed on agriculturally zoned lands. As noted above, the Mendocino County Policies and Procedures for Agricultural Preserves and Williamson Act Contracts identifies cannabis commercial cannabis cultivation as compatible with qualifying agricultural uses above) on any Williamson Act contracted lands under section 9.5(E). Thus, expansion of existing provisionally licensed commercial cannabis cultivation sites would not result in any significant impacts or conflicts with agricultural uses.



### Future Licensed Sites

As noted above, future new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations in Mendocino County would be regulated by the MCCR, Mendocino County Policies and Procedures for Agricultural Preserves and Williamson Act Contracts, and DCC and Mendocino County Agricultural Commissioner requirements regarding the use of pesticides. Commercial cannabis cultivation is considered by the state and Mendocino County to be compatible with agricultural land uses. Therefore, there would be no impact to agricultural lands or uses would occur.

### Summary

Since both existing and future licensed commercial cannabis cultivation sites within the unincorporated County would not convert or conflict with agricultural uses, nor conflict with Williamson Act contracts and agricultural zoning, **no impact** would occur.

### Mitigation Measures

No mitigation is required for this impact.

### **Impact 3.2-2: Convert Substantial Forest Land, Conflict with or Cause Rezoning of Forest Land or Timberland Production Zone, or Involve Other Changes in the Existing Environment Which, Because of Their Location or Nature, Could Result in Substantial Conversion of Forest Land to Non-Forest Use**

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Existing provisionally licensed commercial cannabis cultivation and expanded or new licensed commercial cannabis cultivation sites could lead to the clearing of forest areas and conflict with timber production activities. However, existing and new licensed commercial cannabis cultivation sites would be required to comply with MCCR and Attachment A (General Requirements and Prohibitions) of the SWRCB Order WQ 2023-0102-DWQ (Section 1) which includes protection measures for timber resources. This impact would be **less than significant**.

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Forest land represents approximately 58 percent of the County (1.3 million acres). Implementation of the project could result in new commercial cannabis cultivation activities throughout the unincorporated County. Licensed commercial cannabis operations under the project would be generally excluded from lands zoned TPZ, as well as public lands including Mendocino National Forests and coastal State Reserves. These protected areas make up the majority of the forest conditions in the County (Figures 3.2-2, 3.5-1, and 3.5-2). The MCCR provides a list (Tables 1 and 2) of allowable zoning districts for commercial cannabis cultivation uses for both existing and future commercial cannabis cultivation sites.

### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual licensure would not result in new conversion of timberland areas or conflicts with timber production activities as operations are not generally anticipated to be altered through the annual licensing process.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. Expansion of existing commercial cannabis cultivation sites would still be required to comply with MCCR section 10A.17.040(K), which prohibits the removal of any commercial species trees as defined by CCR, title 14, section 895.1, commercial species for the Coast

Forest District and Northern Forest District, any oak species, or tan oak trees. The MCCR also limits commercial cannabis cultivation and nursery sites to 22,000 square feet of commercial cannabis canopy per site, which would apply to expanded commercial cannabis cultivation sites.

Therefore, there would be no impact on timberland resources or uses from existing provisionally licensed commercial cannabis cultivation sites.

#### Future Licensed Sites

New licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations could result in additional loss of forest lands and timber resources. However, the MCCR prohibits new commercial cannabis cultivation sites in Timber Production Zone areas. New licensed commercial cannabis cultivation sites would also be required to comply with MCCR section 10A.17.040(K), which prohibits the removal of any commercial species trees as defined by CCR, title 14, section 895.1, commercial species for the Coast Forest District and Northern Forest District, any oak species, or tan oak trees. As a result, substantial loss of forest lands and timber resources would not occur, and this impact would be less than significant.

#### Summary

As described above, existing and future commercial cannabis cultivation sites would comply with allowable zoning districts for commercial cannabis cultivation uses as provided in the MCCR that preclude the substantial loss of forest lands and timber resources. Therefore, this impact would be **less than significant**.

#### Mitigation Measures

No mitigation is required for this impact.

## 3.3 AIR QUALITY

This section includes a summary of applicable regulations, a discussion of existing air quality conditions, and an analysis of potential construction- and operation-related air quality impacts caused by proposed development of the project. Mitigation is identified as necessary to reduce significant air quality impacts to the extent feasible.

Air quality comments received on the NOP included odor and exposure to naturally occurring asbestos (NOAs). Odor impacts are addressed in this section, while NOAs are addressed in Section 3.9, "Hazards and Hazardous Materials." All comments received in response to the NOP are presented in Appendix A of this EIR.

### 3.3.1 Regulatory Setting

Air quality in the project area is regulated through the efforts of various federal, state, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, planning, policymaking, education, and a variety of programs. The agencies responsible for improving the air quality in the North Coast Air Basin (NCAB), where unincorporated Mendocino County is located, are discussed below.

#### FEDERAL

##### US Environmental Protection Agency

The US Environmental Protection Agency (EPA) has been charged with implementing national air quality programs. EPA's air quality mandates draw primarily from the federal Clean Air Act (CAA) (42 U.S.C. section 7401 et seq.), which was enacted in 1970. The most recent major amendments were made by Congress in 1990. EPA's air quality efforts address both criteria air pollutants and hazardous air pollutants (HAPs).

##### Criteria Air Pollutants

The CAA required EPA to establish national ambient air quality standards (NAAQS) for common air pollutants found all over the United States, referred to as criteria air pollutants. EPA has established primary and secondary NAAQS for the following criteria air pollutants: ozone, carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), respirable particulate matter with an aerodynamic diameter of 10 micrometers or less (PM<sub>10</sub>), fine particulate matter with an aerodynamic diameter of 2.5 micrometers or less (PM<sub>2.5</sub>), and lead. Criteria air pollutants are compounds that, at certain concentrations, can cause harm to human and animal health and the environment. Extensive scientific and economic research has been conducted to evaluate the specific concentrations where these pollutants may cause harm to health and environment and are reflected in EPA's NAAQS (Table 3.3-1). The primary standards protect public health, and the secondary standards protect public welfare.

The CAA also required each state to prepare a state implementation plan (SIP) for attaining and maintaining the NAAQS. The federal Clean Air Act Amendments of 1990 added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. EPA is responsible for reviewing all SIPs to determine whether they conform to the mandates of the CAA and its amendments, and whether implementation will achieve air quality goals. If EPA determines a SIP to be inadequate, EPA may prepare a federal implementation plan that imposes additional control measures. If an

approvable SIP is not submitted or implemented within the mandated time frame, sanctions may be applied to transportation funding and stationary air pollution sources in the air basin.

California's SIP is updated periodically to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins as reported by their jurisdictional agencies. The current SIP is a compilation of plans and regulations that govern how the region and state will comply with the CAA requirements to attain and maintain the NAAQS for ozone and PM<sub>2.5</sub>.

**Table 3.3-1 National and California Ambient Air Quality Standards**

Pollutant	Averaging Time	California (CAAQS) <sup>a, b</sup>	National (NAAQS) <sup>c</sup>	
			Primary <sup>b, d</sup>	Secondary <sup>b, e</sup>
Ozone	1-hour	0.09 ppm (180 µg/m <sup>3</sup> )	—	Same as primary standard
	8-hour	0.070 ppm (137 µg/m <sup>3</sup> )	0.070 ppm (147 µg/m <sup>3</sup> )	
Carbon monoxide (CO)	1-hour	20 ppm (23 mg/m <sup>3</sup> )	35 ppm (40 mg/m <sup>3</sup> )	Same as primary standard
	8-hour	9 ppm <sup>f</sup> (10 mg/m <sup>3</sup> )	9 ppm (10 mg/m <sup>3</sup> )	
Nitrogen dioxide (NO <sub>2</sub> )	Annual arithmetic mean	0.030 ppm (57 µg/m <sup>3</sup> )	53 ppb (100 µg/m <sup>3</sup> )	Same as primary standard
	1-hour	0.18 ppm (339 µg/m <sup>3</sup> )	100 ppb (188 µg/m <sup>3</sup> )	—
Sulfur dioxide (SO <sub>2</sub> )	24-hour	0.04 ppm (105 µg/m <sup>3</sup> )	—	—
	3-hour	—	—	0.5 ppm (1300 µg/m <sup>3</sup> )
	1-hour	0.25 ppm (655 µg/m <sup>3</sup> )	75 ppb (196 µg/m <sup>3</sup> )	—
Respirable particulate matter (PM <sub>10</sub> )	Annual arithmetic mean	20 µg/m <sup>3</sup>	—	Same as primary standard
	24-hour	50 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>	
Fine particulate matter (PM <sub>2.5</sub> )	Annual arithmetic mean	12 µg/m <sup>3</sup>	9.0 µg/m <sup>3</sup>	15.0 µg/m <sup>3</sup>
	24-hour	—	35 µg/m <sup>3</sup>	Same as primary standard
Lead <sup>f</sup>	Calendar quarter	—	1.5 µg/m <sup>3</sup>	Same as primary standard
	30-day average	1.5 µg/m <sup>3</sup>	—	—
	Rolling 3-month average	—	0.15 µg/m <sup>3</sup>	Same as primary standard
Hydrogen sulfide	1-hour	0.03 ppm (42 µg/m <sup>3</sup> )	No national standards	
Sulfates	24-hour	25 µg/m <sup>3</sup>		
Vinyl chloride <sup>f</sup>	24-hour	0.01 ppm (26 µg/m <sup>3</sup> )		
Visibility-reducing particulate matter	8-hour	Extinction of 0.23 per km		

Notes: µg/m<sup>3</sup> = micrograms per cubic meter; km = kilometers; ppb = parts per billion; ppm = parts per million.

<sup>a</sup> California standards for ozone, carbon monoxide, SO<sub>2</sub> (1- and 24-hour), NO<sub>2</sub>, particulate matter, and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in CCR, title 17, section 70200.

<sup>b</sup> Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25 degrees Celsius (°C) and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

<sup>c</sup> National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic means) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. The PM<sub>10</sub> 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m<sup>3</sup> is equal to or less than one. The PM<sub>2.5</sub> 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact the US Environmental Protection Agency for further clarification and current federal policies.

<sup>d</sup> National primary standards: The levels of air quality necessary, with an adequate margin of safety to protect public health.

<sup>e</sup> National secondary standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

<sup>f</sup> The California Air Resources Board has identified lead and vinyl chloride as toxic air contaminants with no threshold of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

Source: CARB 2016.

EPA has established a number of emission standards for on- and off-road heavy-duty diesel engines used in trucks and other equipment. This was done in part because diesel engines are a significant source of oxides of nitrogen (NO<sub>x</sub>), PM<sub>10</sub>, and PM<sub>2.5</sub>, and because the EPA has identified diesel particulate matter (diesel PM) as a probable carcinogen. Implementation of the heavy-duty diesel on-road vehicle standards and the nonroad diesel engine standards is estimated to reduce particulate matter and NO<sub>x</sub> emissions from diesel engines up to 95 percent in 2030, when the heavy-duty vehicle fleet is completely replaced with newer heavy-duty vehicles that comply with these emission standards.

In concert with the diesel engine emission standards, EPA regulations have also substantially reduced the amount of sulfur allowed in diesel fuels. The sulfur contained in diesel fuel is a significant contributor to the formation of particulate matter in diesel-fueled engine exhaust. The new standards reduced the amount of sulfur allowed by 97 percent for highway diesel fuel (from 500 parts per million by weight (ppmw) to 15 ppmw) and by 99 percent for off-highway diesel fuel (from about 3,000 ppmw to 15 ppmw). The low sulfur highway fuel (15 ppmw sulfur), also called ultra-low sulfur diesel, is currently required for use by all vehicles in the United States. All the aforementioned federal diesel engine and diesel fuel requirements have been adopted by California, in some cases with modifications making the requirements more stringent or the implementation dates sooner.

#### Hazardous Air Pollutants and Toxic Air Contaminants

The toxic air contaminants (TACs), or in federal parlance, HAPs, are a defined set of airborne pollutants that may pose a present or potential hazard to human health. A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations.

A wide range of sources, from industrial plants to motor vehicles, emit TACs. The health effects associated with TACs are quite diverse and generally are assessed locally, rather than regionally. TACs can cause long-term health effects, such as cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage, or short-term acute effects, such as eye watering, respiratory irritation (a cough), running nose, throat pain, and headaches.

For evaluation purposes, TACs are separated into carcinogens and noncarcinogens based on the nature of the physiological effects associated with exposure to the pollutant. Carcinogens are assumed to have no safe threshold below which health impacts would not occur. This contrasts with criteria air pollutants for which acceptable levels of exposure can be determined and for which the ambient standards have been established (see Table 3.3-1). Cancer risk from TACs is expressed as excess cancer cases per one million exposed individuals, typically over a lifetime of exposure.

EPA regulates HAPs through its National Emission Standards for Hazardous Air Pollutants. The standards for a particular source category require the maximum degree of emission reduction that the EPA determines to be achievable, which is known as the Maximum Achievable Control Technology standards. These standards are authorized by section 112 of

the 1970 [CAA](#) and the regulations are published in 40 Code of Federal Regulations ([CFR](#)) Parts 61 and 63.

## STATE

### California Air Resources Board

The California Air Resources Board (CARB) is the agency responsible for coordinating and providing oversight of state and local air pollution control programs in California and for implementing the California Clean Air Act (CCAA) (Health and Safety Code section 39000 et seq.). The CCAA, which was adopted in 1988, required CARB to establish the California ambient air quality standards (CAAQS) (see Table 3.3-1).

### Criteria Air Pollutants

CARB has established CAAQS for sulfates, hydrogen sulfide, vinyl chloride, visibility-reducing particulate matter, and the above-mentioned federally regulated criteria air pollutants. In most cases, the CAAQS are more stringent than the NAAQS. Differences in the standards are generally explained by the health effects studies considered during the standard-setting process and the interpretation of the studies. In addition, the CAAQS incorporate a margin of safety to protect sensitive individuals.

The CCAA requires that all local air districts in the state endeavor to attain and maintain the CAAQS by the earliest date practical. The CCAA specifies that local air districts should focus particular attention on reducing the emissions from transportation and areawide emission sources. The CCAA also provides air districts with the authority to regulate indirect sources, such as vehicle movement and residential, commercial, and industrial development.

### Toxic Air Contaminants

TACs in California are regulated primarily through the Tanner Air Toxics Act (Assembly Bill (AB) 1807, Chapter 1047, Statutes of 1983) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (Hot Spots Act) (AB 2588, Chapter 1252, Statutes of 1987). AB 1807 sets forth a formal procedure for CARB to designate substances as TACs. Research, public participation, and scientific peer review are required before CARB can designate a substance as a TAC. To date, CARB has identified more than 21 TACs and adopted EPA's list of HAPs as TACs. Most recently in 1998, diesel PM was added to CARB's list of TACs.

After a TAC is identified, CARB then adopts an airborne toxics control measure for sources that emit that particular TAC. If a safe threshold exists for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If no safe threshold exists, the measure must incorporate the best available control technology for toxics to minimize emissions.

The Hot Spots Act requires that facilities that emit toxic substances above a specified level prepare an inventory of toxic emissions, prepare a risk assessment if emissions are significant, notify the public of significant risk levels, and prepare and implement risk reduction measures.

CARB has adopted diesel exhaust control measures and more stringent emissions standards for various transportation-related mobile sources of emissions, including transit buses, and off-road diesel equipment (e.g., tractors, generators). Over time, the replacement of older vehicles will result in a vehicle fleet that produces substantially lower levels of TACs than under current conditions. Mobile-source emissions of TACs (e.g., benzene, 1-3-butadiene, diesel PM) have been reduced significantly over the last decade and will be reduced further in California

through a progression of regulatory measures (e.g., Low Emission Vehicle/Clean Fuels and Phase II reformulated gasoline regulations) and control technologies. With the implementation of CARB's Risk Reduction Plan and other regulatory programs, it is estimated that emissions of diesel PM will be less than half of those in 2010 by 2035 (CARB n.d.). CARB's Airborne Toxic Control Measure (ATCM) for Diesel Particulate Matter from Portable Engines Rates 50 Horsepower (hp) or Greater also subjects diesel-powered generators exceeding 50 hp through local permitting requirements that reduce the generation of diesel PM. In 2021, CARB approved a measure that will require most newly manufacturing small off-road engines, including leaf blowers, lawn mowers, and other equipment to be zero emission starting in 2-2024. Portable generators, including those in recreational vehicles, would be required to meet more stringent standards in 2024 and meet zero-emission standards starting in 2028. Adopted regulations are also expected to continue to reduce formaldehyde emissions emitted by cars and light-duty trucks. As emissions are reduced, it is expected that risks associated with exposure to the emissions will also be reduced.

## LOCAL

### Mendocino County Air Quality Management District Criteria Air Pollutants

The Mendocino County Air Quality Management District (MCAQMD) has air quality regulatory jurisdiction in Mendocino County. All projects are subject to adopted MCAQMD rules and regulations in effect at the time of construction. The following specific rules may be applicable to the construction of the project:

#### **Rule 1-240 – Permit to Operate**

- a. **Permit to Operate Required.** A person shall not operate or use any stationary source, the use of which may cause the issuance of air contaminants or the use of which may reduce or control the issuance of air contaminants, without first obtaining a written permit from the Air Pollution Control Officer or except as provided in Rule 1-240(b).

#### **Rule 1-400 - General Limitations**

- a. **Public Nuisance:** A person shall not discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or that endanger the comfort, repose, health or safety of any such persons or the public or that cause or have a natural tendency to cause injury or damage to business or property, (Health and Safety Code Section 41700).

The limitations of Rule 1-400(a) do not apply to odors emanating from agricultural operations necessary for the commercial growing of crops or the raising of fowl or animals, as may be exempted in California Health and Safety Code Section 41705.

#### **Rule 1-430 - Fugitive Dust Emissions**

This rule prohibits the handling, transportation, or open storage of materials, or the conduct of other activities in such a manner that allows or may allow unnecessary amounts of particulate matter to become airborne except under the following circumstances:

- a. Reasonable precautions shall be taken to prevent particulate matter from becoming airborne, including, but not limited to, the following provisions:

1. Covering open bodied trucks when used for transporting materials likely to give rise to airborne dust.
  2. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials.
  3. The screening of all open-outdoor sandblasting and similar operations.
  4. The use of water or chemicals for the control of dust during the demolition of existing buildings or structures.
- b. The following airborne dust control measures shall be required during all construction operations, the grading of roads, or the clearing of land
1. All visibly dry disturbed soil road surfaces shall be watered to minimize fugitive dust emissions.
  2. All unpaved surfaces, unless otherwise treated with suitable chemicals or oils, shall have a posted speed limit of 10 miles per hour.
  3. Earth or other material that has been transported by trucking or earth moving equipment, erosion by water, or other means onto paved streets shall be promptly removed.
  4. Asphalt, oil, water or suitable chemicals shall be applied on materials stockpiles, and other surfaces that can give rise to airborne dusts.
  5. All earthmoving activities shall cease when sustained winds exceed 15 miles per hour.
  6. The operator shall take reasonable precautions to prevent the entry of unauthorized vehicles onto the site during non-work hours.
  7. The operator shall keep a daily log of activities to control fugitive dust.

#### Mendocino County General Plan

The following policies of the Mendocino County General Plan (General Plan), which was adopted in 2009 and has received updates to various sections of the General Plan as recently as 2021, would apply to the project:

- ▶ **Policy RM-36:** The County shall work to maintain 'attainment status' for state and federal air quality standards that are currently met and work toward attainment for currently exceeded standards.
  - **Action Item RM-36.2:** Continue to refer complaints about fumes, smoke, dust and other potential stationary or non-point airborne pollutants to Mendocino County Air Quality Management District for investigation.
- ▶ **Policy RM-38:** Public and private development shall not exceed Mendocino County Air Quality Management District emission standards.
- ▶ **Policy RM-39:** The County shall work to reduce or mitigate particulate matter emissions resulting from development, including emissions from wood-burning devices.
- ▶ **Policy RM-42:** Reduce dust generation from unpaved roads.
  - **Action Item RM-42.1:** Adopt road standards that reduce dust and other impacts from unpaved roads.



- **Action Item RM-42.2:** Consider imposition of an impact fee for development utilizing unpaved roads dedicated to funding projects that reduce particulate matter emissions (i.e., paving or dust-suppression).
- **Action Item RM-42.3:** Work with agencies and organizations to develop programs to improve and reduce emissions from unpaved roads.
- ▶ **Policy RM-44:** Reduce the effects of earth-moving, grading, clearing, and construction activities on air quality.
  - **Action Item RM-44-1:** Continue to inform applicants about Mendocino County Air Quality Management District dust control and grading requirements.
- ▶ **Policy RM-47:** Reduce or eliminate exposure of persons, especially sensitive populations, to air toxins.
- ▶ **Policy RM-48:** Minimize the exposure of sensitive uses, such as residences, schools, daycare, group homes, or medical facilities, to industrial uses, transportation facilities, or other sources of air toxins.

Mendocino County Code of Ordinances - Mendocino Cannabis Cultivation Regulation  
 The Mendocino Cannabis Cultivation Regulation (MCCR) include the following requirements regarding air quality:

Section 10A.17.040: General Limitations on Cultivation of Cannabis

(C) The outdoor, indoor or mixed light cultivation of cannabis shall not propagate objectionable odors which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any of those persons or the public.

(D) The indoor or mixed-light cultivation of cannabis shall rely on the electrical grid or some form of alternative energy source. The indoor or mixed-light cultivation cannabis shall not rely on a generator as a primary source of power.

Section 10A.17.070: Requirements for all Cannabis Cultivation Business Licenses (CCBLs)

(F) Generators. The indoor or mixed-light cultivation of cannabis shall not rely on a generator as a primary source of power.

(1) If no grid power source is available and there is not an alternative power source supporting both any required legal dwelling unit and the indoor or mixed-light CCBL operations, a generator may be used only under the following conditions: (1) the CCBL Holder shall install an alternative power source that will meet at least one-half ( $\frac{1}{2}$ ) of the combined power requirements by the expiration of four (4) years from the date of initial application for a CCBL pursuant to this Chapter and (2) it will be a condition of the renewal of a CCBL at the end of such four (4) year period that the cultivator commit, in writing, to expand their alternative power source to fully meet the combined needs of the cultivation operations and any required legal dwelling unit within two years. If a generator is being used pursuant to the conditions set forth in this paragraph, CCBL Holder shall have conducted an analysis of the noise levels produced by the generator at full operational speed, showing compliance with Mendocino County General Plan Policies DE100, 101 and 103. This analysis shall be performed by an accredited acoustical engineer or using some other mechanism or device as provided for on a list to be prepared and published by the Department. All generators shall be, at a minimum,

equipped with the manufacturer's specified muffler; if compliance with Policies DE100, 101 and 103 requires additional measures, the generator shall be equipped with such measures, which may include a hospital- grade muffler and/or a structure to enclose the generator designed for sound suppression.

(2) If a generator is used to support any aspect of a cultivation operation with a CCBL, (excluding the conditions set forth in paragraph (1) above), it shall be as a secondary or back-up power source. The use of the generator shall only be allowed when the primary alternative power source is unable to provide its normal output and generate sufficient power to meet the needs of the cultivation operation and the legal dwelling unit. The Owner's Manual and/or Operation Manual (or operational fact sheet) providing the operational characteristics and maintenance schedule for the generator shall be on-site and available for review.

(P) All buildings, including greenhouses, used for the cultivation of cannabis pursuant to an "artificial light" permit (generally Type C-A, Type 1-A, Type 2-A and Nursery as applicable), shall be equipped with filtered ventilation systems, permitted by the Mendocino County Air Quality Management District (MCAQMD) which rely on Activated Carbon Filtration, Negative Ion Generation, Ozone Generation or other odor control mechanism demonstrated to be effective in reducing cannabis odors.

(U) CCBL Holders shall obtain as may be required all approvals and permits required by the Mendocino County Air Quality Management District (MCAQMD) pursuant to state and federal laws, MCAQMD regulations, adopted air quality plans, MCAQMD policies and other applicable statutes.

#### Section 20.242.070: Planning Approval Required to Cultivate Cannabis

(C) Administrative Permit. In accordance with the Administrative Permit review procedure listed in Chapter 20.192, the Zoning Administrator shall approve, conditionally approve or deny an Administrative Permit for cannabis cultivation sites based on the following special findings.

(3) The cannabis cultivation will avoid or minimize odor and light impact on residential uses.

(D) Minor Use Permit. In accordance with the Use Permit review procedure listed in Chapter 20.196, the Zoning Administrator or the Planning Commission shall approve, conditionally approve, or deny a Minor Use Permit for a cannabis cultivation site based on findings in Section 20.196.020 and the following special findings:

(3) The proposed cannabis cultivation site will avoid or minimize odor and light impact on residential uses.

### 3.3.2 Environmental Setting

Project activities would be located in the NCAB. The NCAB includes all of Mendocino, Humboldt, Trinity, and Del Norte Counties and northern Sonoma County (north of the City of Santa Rosa). The ambient concentrations of air pollutant emissions are determined by the amount of emissions released by the sources of air pollutants and the atmosphere's ability to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, atmospheric stability, and sunlight. Therefore, existing air quality conditions in the area are determined by such natural factors as topography, meteorology, and climate, in

addition to the amount of emissions released by existing air pollutant sources, as discussed separately below.

## CLIMATE, METEOROLOGY, AND TOPOGRAPHY

In general, the climate of northern coastal California is characterized by cool summers and mild winters with frequent fog and significant amounts of rain. In coastal areas, the ocean helps to moderate temperatures year-round. Further inland, the summers are hotter and drier and the winters colder and snowier. At high elevations in inland areas, it is cool in summer and snowier in winter. December and January are the wettest months in Mendocino County with an average of 7–8 inches of precipitation per month.

Atmospheric conditions, such as wind speed, wind direction, and air temperature gradients, interact with the physical features of the landscape to drive the movement and dispersal of air pollutant emissions. In the NCAB, dominant winds exhibit a seasonal pattern, especially in coastal areas. In the summer months, strong north to northwesterly winds are common, and during winter, storms from the South Pacific increase the percentage of days with winds from southerly quadrants. Wind direction often assumes a daily pattern in the river canyons that empty into the Pacific. In the morning hours, cool air from higher elevations flows down the valleys, whereas later in the day, as the lower elevation air heats up, this pattern is reversed, and the airflow heads up the canyon. These airflows are often quite strong. Offshore and onshore flows are also common along the coast and associated with pressure systems in the area. Onshore flows frequently bring foggy, cool weather to the coast, whereas offshore flows often blow fog away from the coast and bring sunny, warm days.

Temperature inversions, whereby higher-elevation warm air traps cold air near the surface, occur frequently. Two temperature inversions affect the region: elevated inversions and ground-based inversions. Elevated inversions are caused by marine air penetration and/or subsidence (sinking air caused by strong high-pressure systems). Ground-based inversions occur when cold night air sinks into the valley from ridge tops. Inversions create a very stable layer of air because vertical mixing is prevented near the surface. During late fall and winter, ground-based inversions (the most restrictive of vertical mixing) often occur during clear, cold nights and are weakened or “burned off” by the sun. Extreme inversions may last days to weeks and allow stagnant air to become dense with air emissions, sometimes to unhealthy levels.

In the NCAB, air quality is predominantly influenced by the climatic regimes of the Pacific. In summer, warm ground surfaces draw cool air in from the coast, creating frequent thick fogs along the coast and making northwesterly winds common. In winter, when precipitation is high, surface wind directions are highly variable, and weather is more affected by oceanic storm patterns.

## CRITERIA AIR POLLUTANTS

Concentrations of emissions from criteria air pollutants are used to indicate the quality of the ambient air. A brief description of key criteria air pollutants in the NCAB and their health effects is provided below. Criteria air pollutants are ozone, CO, NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and lead. Mendocino County’s attainment status under the CAAQS and NAAQS is shown in Table 3.3-2.

**Table 3.3-2 Mendocino County Attainment Status**

Pollutant	National Ambient Air Quality Standard	California Ambient Air Quality Standard
Ozone	Unclassified/attainment (8-hour) <sup>1</sup>	Attainment
Respirable particulate matter (PM <sub>10</sub> )	Unclassified/attainment	Attainment
Fine particulate matter (PM <sub>2.5</sub> )	Unclassified/attainment <sup>2, 3</sup>	Attainment
Carbon monoxide (CO)	Attainment	Attainment
Nitrogen dioxide (NO <sub>2</sub> )	Unclassified/attainment	Attainment
Sulfur dioxide (SO <sub>2</sub> )	Attainment	Attainment
Lead (particulate)	Attainment	Attainment
Hydrogen sulfide	No federal standard	Unclassified
Sulfates	No federal standard	Attainment
Visibility-reducing particles	No federal standard	Unclassified
Vinyl chloride	No federal standard	Unclassified

Note: This table represents the attainment status of Mendocino County, which is one of the five counties in the NCAB (i.e., Mendocino, Humboldt, Trinity, and Del Norte Counties and northern Sonoma County). Some portions of the County are in nonattainment of some criteria air pollutants.

<sup>1</sup> 2015 Standard.

<sup>2</sup> 2012 Standard.

<sup>3</sup> 2006 Standard

Sources: EPA 2023a; CARB 2022a.

### Ozone

Ozone is a photochemical oxidant (a substance whose oxygen combines chemically with another substance in the presence of sunlight) and the primary component of smog. Ozone is not directly emitted into the air but is formed through complex chemical reactions between precursor emissions of reactive organic gases (ROG) and NO<sub>x</sub> in the presence of sunlight. ROG are volatile organic compounds (VOCs) that are photochemically reactive. For the purposes of CEQA analyses, ROG and VOCs are terms used interchangeably and represent the same group of emissions. ROG emissions result primarily from incomplete combustion and the evaporation of chemical solvents and fuels. NO<sub>x</sub> are a group of gaseous compounds of nitrogen and oxygen that result from the combustion of fuels. Emissions of ROG and NO<sub>x</sub> decreased from 2000 to 2020 by 73 percent and are projected to continue decreasing by 90 percent by 2037 (CARB 2022b). This is largely due to more stringent motor vehicle standards and cleaner-burning fuels.

Acute health effects of ozone exposure include increased respiratory and pulmonary resistance, cough, pain, shortness of breath, and lung inflammation. Chronic health effects include permeability of respiratory epithelia and possibility of permanent lung impairment (EPA 2023b).

### Nitrogen Dioxide

NO<sub>2</sub> is a brownish, highly reactive gas that is present in all urban environments. The major human-made sources of NO<sub>2</sub> are combustion devices, such as boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines. Combustion devices emit primarily nitric oxide (NO), which reacts through oxidation in the atmosphere to form NO<sub>2</sub>. The combined emissions of NO and NO<sub>2</sub> are referred to as NO<sub>x</sub> and are reported as equivalent NO<sub>2</sub>. Because NO<sub>2</sub> is formed and depleted by reactions associated with photochemical smog

(ozone), the NO<sub>2</sub> concentration in a geographical area may not be representative of the local sources of NO<sub>x</sub> emissions (EPA 2023b).

Acute health effects of exposure to NO<sub>x</sub> include coughing, difficulty breathing, vomiting, headache, eye irritation, chemical pneumonitis, pulmonary edema, breathing abnormalities, cyanosis, chest pain, rapid heartbeat, and death. Chronic health effects include chronic bronchitis and decreased lung function (EPA 2023b).

### Particulate Matter

Respirable particulate matter with an aerodynamic diameter of 10 micrometers or less is referred to as PM<sub>10</sub>. PM<sub>10</sub> consists of particulate matter emitted directly into the air, such as fugitive dust; soot; smoke from mobile and stationary sources, construction operations, and fires; natural windblown dust; and particulate matter formed in the atmosphere by reaction of gaseous precursors (CARB 2013).

PM<sub>10</sub> pollution can result in damage to vegetation and is often responsible for much of the haze regarded as smog. In addition, controlled human exposure studies have shown that exposure to elevated levels of PM<sub>10</sub> causes adverse health effects, especially related to the inhibition of lung functions and an increase in respiratory and cardiovascular afflictions, as well as cancer risks. PM<sub>10</sub> causes a greater health risk than larger particles because fine particles are too small for the natural filtering process of the human body and can more easily penetrate the defenses of the human respiratory system. Individuals with preexisting respiratory or cardiovascular disease are especially susceptible to the adverse effects of PM<sub>10</sub> exposure, as are asthmatic children and the elderly. Children exposed to high concentrations of PM<sub>10</sub> for prolonged periods also exhibit decreased immune function. Additionally, associations between long-term exposure to PM<sub>10</sub> and adverse cognitive effects, such as faster cognitive decline, including memory and attention span loss, are being further examined by health researchers.

Fine particulate matter includes a subgroup of smaller particles that have an aerodynamic diameter of 2.5 micrometers or less (referred to as PM<sub>2.5</sub>). Because PM<sub>2.5</sub> is smaller than PM<sub>10</sub>, it can more deeply penetrate the human body through inhalation, allowing many chemicals harmful to human health to be carried to internal organs. Long-term exposure to these particulates can increase the chance of chronic respiratory disease and cause lung damage and irregular heartbeat. Short-term exposure can aggravate respiratory illnesses, such as bronchitis and asthma, and cause heart attacks and arrhythmias in people with heart disease. Additionally, an estimated 9,000 people die prematurely each year in California as a result of PM<sub>2.5</sub> exposure (CARB 2013). A safe threshold for PM<sub>2.5</sub> has not been established, and research indicates that health effects exist at low concentrations.

### Odors

Odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). Odor is inherently complex because it is often caused by a mixture of chemical substances and has subjective components associated with human perception by the olfactory senses. Odorants (odor-causing chemicals) are often complex mixtures of chemical substances, and even slight changes in the chemical composition of the mixtures can greatly affect how humans perceive a particular odor. Some odors can also be caused by very minute levels of odorants (sometimes in the parts-per-trillion range) that can be detected by human noses but are well below instrumental or laboratory detection levels. Human noses, on the other hand, are well-adapted at distinguishing specific odors in complex environments.

The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals can smell very minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; an odor that is offensive to one person may be perfectly acceptable to another (e.g., fast food restaurant). It is important to also note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity. Traditional odor sources of concern include wastewater treatment plants, sanitary landfills, composting facilities, recycling facilities, petroleum refineries, chemical manufacturing plants, painting operations, rendering plants, and food packaging plants.

### Cannabis Odor Research

The typical smell of cannabis originates from roughly 140 different terpenes. A terpene is a volatile, unsaturated hydrocarbon that is found in essential oils of plants, especially conifers and citrus trees. Some terpenes are identified explicitly in research (myrcene, pinene, limonene). The “skunk” odor is primarily volatile thiols. Cannabis contains alpha-linolenic acid, which may break down under ultraviolet rays of sunlight into methyl and butyl thiols. (Yolo County 2019)

Some researchers define an “odor activity value” (OAV), which is the chemical compound concentration divided by the chemical compound odor detection threshold (which is a literature-based value). A higher OAV could mean a more significant odor. One shortcoming of the OAV is that the quality of the odor detection thresholds may be low. Highly odorous compounds in low concentrations, that may have a more potent OAV, include nonanal, decanol, o-cymene, and benzaldehyde. In other research findings, it is believed the majority of the odor in cannabis flowers is linked to pinene, limonene, and terpinolene. Terpenes that are commonly identified and/or thought to warrant further evaluation for odor impacts include myrcene, pinene, limonene, b-caryophyllene, terpinolene, nonanal, decanol, o-cymene, and benzaldehyde. (Yolo County 2019)

Currently, there is not a clear or consistent numerical threshold to use for cannabis odors. Because odor is a perception-based phenomenon and involves complex mixtures of substances rather than singular chemical molecules, it is important to evaluate odors comprehensively (in terms of odor) rather than breaking down individual chemical compounds of the odor. Dispersion modeling has been conducted to determine the distance from which cannabis odor may be detected. The results of modeling by Kern County indicated that specific cannabis compounds may be detectable at a distance of 2 miles or more depending on weather conditions (Kern County 2017). Nevada County released an EIR (State Clearinghouse No. 2018082023) for its Commercial Cannabis Cultivation Ordinance in 2019 and identified in their odor detection modeling identified cannabis odors could be detected in some circumstances between 100 feet and as far 1 mile from the source of the odor (Nevada County 2019).

When cannabis is grown in enclosed, indoor environments (buildings and greenhouses), odor-causing chemicals are concentrated and have been found to generate significant odors within the air space. Cannabis grown in greenhouses can generate odor with strengths ranging from 30,000 to 50,000 odor units (First Canadian Odour Conference. 2018).

### Public Health/Nuisance Issues

A review of recent scientific publications identified no studies that evaluated the health effects associated with exposure to cannabis odors. An evidence brief prepared by Public Health Ontario (Public Health Ontario 2018) states that “most substances responsible for odors in the outdoor air are not present at levels that can cause long-term health effects. However, exposure to unpleasant odors may affect an individual’s quality of life and sense of well-being.” This statement was made in reference to odors in general and not cannabis odors in particular. The City of Denver prepared a Cannabis Environmental Best Management Practices document (City of Denver 2018), which states that “the rate of VOC [volatile organic compound] emissions from cannabis cultivation facilities is relatively unknown.... [T]hese VOCs from the cannabis industry typically do not pose a direct threat to human health.” Although research is limited, it is anticipated that the concentration of cannabis odors is not significant enough to create a public health concern for off-property residential receptors.

### Cannabis Odor Issues in Mendocino County

Mendocino County has not had odor issues with licensed commercial cannabis cultivation premises that triggered notices of violation. However, Mendocino County Code Enforcement has received odor complaints during the cannabis harvest season, more specifically during the months of September and October (Miller, pers. comm., 2024).

## 3.3.3 Environmental Impacts and Mitigation Measures

### METHODOLOGY

The analysis of potential impacts on air quality resources resulting from project implementation is based on the information provided previously in Section 3.3.2, “Environmental Setting.” Regional and local criteria air pollutant emissions and associated impacts, as well as impacts from TACs, CO concentrations, and odors, were assessed in accordance with MCAQMD-recommended methodologies. The project’s emissions are compared to MCAQMD-adopted thresholds. Actions that would result in emissions of air pollution include ground disturbance from construction of storage ponds; installation of irrigation systems and water storage; road and building construction; extension of electrical facilities and infrastructure; fencing, planting, and harvest activities; and operation of artificial lights and generators.

As further discussed below, potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations could result in an increase in emissions from short-term construction-related activities and their long-term operation. As recommended by MCAQMD, the California Emissions Estimator Model (CalEEMod) Version 2022.1.1.17 computer program was used to estimate emissions of criteria air pollutants and precursors associated with the construction and operation of the types and sizes of indoor, outdoor, mixed-light, and commercial nursery cultivation uses that could be licensed in the future. Because on-site processing or distribution transport-only operations are incorporated into the construction and operation of commercial cannabis cultivation sites, no separate modeling was conducted. The modeling provided below summarizes the potential emissions generated from the construction and operation of typical outdoor, mixed-light, indoor, and commercial nursery cannabis cultivation uses. The reader is referred to Chapter 4, “Cumulative Impacts,” for a cumulative construction and operational air quality analysis factoring the estimated extent of future

commercial licensed commercial cannabis cultivation sites described in Section 3.0, “Approach to the Environmental Analysis.”

Construction emissions were estimated for the construction of each commercial cannabis cultivation type using the acreage provided in Table 3.0-1, “Future Cannabis Cultivation Use Assumptions.”

Operational emissions were also estimated for each commercial cannabis cultivation type and associated uses (processing and distribution). CalEEMod was used to estimate on-site operational emissions, including emissions generated by off-road equipment, maintenance activity, and fertilizer application. CalEEMod energy consumption rates were adjusted to account for energy efficiency improvements from the 2019 California Energy Code as a conservative assumption. Default energy consumption for electricity was used. Off-road equipment includes utility vehicles (e.g., John Deere Gator) used for commercial cannabis cultivation sites. Mobile-source emissions were estimated using the daily trip rate (3,726 trips per day) with the default trip length assumed in CalEEMod.

As described in Section 3.3.2, “Environmental Setting,” odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person’s reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). Odor is inherently complex because it is often caused by a mixture of chemical substances and has subjective components associated with human perception by the olfactory senses. Thus, the impact analysis qualitatively evaluates the potential of cannabis uses to create odors that cause a public nuisance or adversely affect nearby residents or businesses.

## THRESHOLDS OF SIGNIFICANCE

Appendix G of the State CEQA Guidelines includes the following criteria for assessing an air quality impact:

- ▶ Would the project conflict with or obstruct implementation of the applicable air quality plan?
- ▶ Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?
- ▶ Would the project expose sensitive receptors to substantial pollutant concentrations?
- ▶ Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

MCAQMD has issued a recommendation that lead agencies use the adopted Bay Area Air Quality Management District’s (BAAQMD’s) CEQA thresholds in Mendocino County, with few exceptions (e.g., indirect source review for new stationary source emissions, stationary source emissions level, CO standards). Therefore, MCAQMD’s thresholds, which resemble BAAQMD’s guidance, have been applied in this analysis. The MCAQMD’s air quality thresholds of significance are tied to achieving or maintaining attainment designations with the NAAQS and CAAQS, which are scientifically substantiated, numerical concentrations of criteria air pollutants considered to be protective of human health. Construction and operation of a typical outdoor, mixed-light, indoor, and commercial nursery cannabis cultivation use would have a significant impact related to air quality such that human health would be adversely affected if it would (MCAQMD 2010 n.d.):



- ▶ Cause construction-generated criteria air pollutant or precursor emissions to exceed 54 pounds per day (lb/day) of ROG and NO<sub>x</sub>, 82 lb/day for PM<sub>10</sub> exhaust, and 54 lb/day for PM<sub>2.5</sub> exhaust, or substantially contribute to emissions concentrations (e.g., PM<sub>10</sub>, PM<sub>2.5</sub>) that exceed the applicable NAAQS or CAAQS;
- ▶ Result in a net increase in indirect long-term operational criteria air pollutant or precursor emissions that exceed 180 lb/day of ROG, 42 lb/day of NO<sub>x</sub>, 82 lb/day of PM<sub>10</sub>, and 54 lb/day of PM<sub>2.5</sub>, or substantially contribute to emissions concentrations (e.g., PM<sub>10</sub>, PM<sub>2.5</sub>) that exceed the applicable NAAQS or CAAQS;
- ▶ Result in a net increase of stationary maximum annual emissions of 40 tons per year (tpy) of ROG and NO<sub>x</sub>, 15 tpy of PM<sub>10</sub>, and 10 tpy of PM<sub>2.5</sub>, or substantially contribute to emissions concentrations that exceed the applicable NAAQS or CAAQS;
- ▶ Not implement the BAAQMD's Basic Construction Mitigation Measures for dust emissions (e.g., PM<sub>10</sub> and PM<sub>2.5</sub>);
- ▶ Result in long-term operational local mobile-source CO emissions exceeding 125 tpy that would violate or contribute substantially to concentrations that exceed the 1-hour CAAQS of 20 parts per million (ppm) or the 8-hour CAAQS of 9 ppm;
- ▶ Result in an incremental increase in cancer risk (i.e., the risk of contracting cancer) greater than 10 in one million at any off-site receptor and/or a noncarcinogenic hazard index of 1.0 or greater; or
- ▶ Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The reader is referred to Chapter 4, "Cumulative Impacts," for a cumulative construction and operational air quality analysis factoring the estimated extent of future commercial cannabis cultivation licensing as described in the "New Cannabis Cultivation Use Assumptions" section in the introduction to this chapter.

## ISSUES NOT DISCUSSED FURTHER

MCAQMD recommends that local hotspots of CO resulting from traffic congestion must be accounted for using a health-based screening approach. A nearby air district, BAAQMD, recommends screening criteria for CO hotspots that can be applied to the project as emissions of CO are generally similar statewide and have been applied here. Regarding the potential for CO "hot spots" at local intersections, these types of effects have the potential to occur only at intersections experiencing extremely high volumes of traffic. For instance, BAAQMD has determined that CO hot spots have the potential to occur only at intersections that experience a traffic volume greater than 44,000 vehicles per hour (BAAQMD 2022). Operational activities for all new facilities would not be anticipated to generate more than 3,726 employee-based trips per day as explained in Section 3.15, "Transportation." Moreover, the commercial cannabis operations would be generally spread throughout the County. Thus, it would not be anticipated that vehicle trips generated by commercial cannabis cultivation operations would result in congestion at any intersection that experiences high volumes of vehicles or long wait times. For these reasons, additional trips associated with new cannabis operations would not contribute substantially to traffic congestion at affected intersections such that local CO "hot spots" occur in exceedance of the CAAQS or NAAQS.

Construction and operation of the new licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations may involve the use of diesel-powered equipment that emit diesel PM. However, the amount of construction activity at any single location would not be intensive (i.e., approximately one piece of off-road equipment being used at a time), would be temporary, and would not take place at the same site for longer than a few months. Operational activities would not include any major sources of TACs, and all operations would be required to comply with setback distances specified in the project (i.e., a minimum 350-foot buffer between operations and existing residential land uses). Given the minimal construction activities required for the project, the lack of newly introduced major sources of TACs, and the setback requirements, the construction and operation of new cannabis facilities would not expose existing receptors to substantial TAC concentrations.

Mendocino County is in attainment for all criteria air pollutants and precursors. Individual commercial cannabis cultivation sites may include backup diesel generators but would not include new stationary sources (e.g., smokestack operations permitted through the air district subject to best available control technology) that could potentially exceed established emissions limits for ROG, NO<sub>x</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, CO, or SO<sub>2</sub>.

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Impact 3.3-1: Generate Short-Term Construction-Related Emissions of ROG, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>

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Construction related to the potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution operations could result in emission of ROG, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> from the operation of heavy-duty equipment, vendor and worker commute trips, and application of architectural coatings. From a project-level, construction of individual licensed commercial cannabis cultivation sites would not generate construction emissions of ROG, NO<sub>x</sub>, PM<sub>10</sub> exhaust, or PM<sub>2.5</sub> exhaust exceeding MCAQMD's average daily mass emissions thresholds of significance. Because the project's emissions of these pollutants would not exceed MCAQMD's average daily mass emissions thresholds, this impact would be **less than significant**.

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#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation uses transitioning to annual licensure are not anticipated to be altered through the annual licensing process, so no new construction air quality impacts are expected. For this reason, this impact would be less than significant for existing provisionally licensed sites would retain the extent of their existing licensed commercial cannabis cultivation.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. The extent of the construction associated with the expansion at each individual commercial cannabis cultivation site is not known. However, these construction air pollutant emissions would be no greater than construction emissions identified for new commercial cannabis cultivation sites identified in Table 3.3-3 because they would not involve the development of a completely new commercial cannabis cultivation site. As shown in this table, these emissions would not exceed air pollutant emission thresholds. Thus, this impact would be less than significant.

### Future Licensed Sites

Development of future licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could require earthwork and use of heavy-duty off-road equipment that would generate exhaust emissions and fugitive dust. Generally, the intensity of construction activity would be similar to that associated with a residential renovation or building addition project. Construction of individual outdoor commercial cannabis cultivation operations could involve the clearing of vegetation, grading, and other earth disturbance activities to establish a grow area; the laying of a gravel pad to support the containers in which the cannabis is planted; installation of a water storage tank or pond; and construction of structures. Construction of individual indoor and mixed-light cultivation operations would involve the construction of a greenhouse or grow buildings, as well as a water storage tank or pond, utilities, and supporting structures.

Based on similar commercial cannabis cultivation construction projects, the construction of new individual licensed commercial cannabis cultivation operations was assumed to last approximately 7 months at each commercial cannabis cultivation site, and heavy-duty off-road equipment would be used for approximately 22 weeks at each single new commercial cannabis cultivation operation. Emissions of fugitive PM<sub>10</sub> and PM<sub>2.5</sub> dust would be generated primarily by ground disturbance during site preparation and grading and would vary as a function of such parameters as travel on unpaved roads, soil silt content, soil moisture, wind speed, and the size of the disturbance area. PM<sub>10</sub> and PM<sub>2.5</sub> would also be emitted in vehicle and equipment exhaust.

Emissions were estimated for each new commercial cannabis cultivation type using the range of assumed future cannabis cultivation sites identified in Table 3.0-1 and based on anticipated daily construction activities. Table 3.3-3 presents the levels of criteria air pollutants and precursors that would be emitted by this level of construction activity based on modeling using the construction module of CalEEMod. Refer to Appendix C for detailed modeling input parameters and results.

**Table 3.3-3 Criteria Air Pollutant and Precursor Emissions Associated with Construction of Each New Individual Commercial Cannabis Cultivation Type<sup>1</sup>**

Commercial Cannabis Cultivation Type	ROG (lb/day)	NO <sub>x</sub> (lb/day)	PM <sub>10</sub> (Exhaust) (lb/day)	PM <sub>2.5</sub> (Exhaust) (lb/day)
Outdoor	2	14	8	<1
Mixed light	2	14	8	4
Indoor	1	10	6	3
Nursery	1	10	57	8
<b>MCAQMD threshold of significance</b>	<b>54</b>	<b>54</b>	<b>82</b>	<b>54</b>

Notes: ROG = reactive organic gases; NO<sub>x</sub> = oxides of nitrogen; PM<sub>10</sub> = respirable particulate matter with aerodynamic diameter of 10 micrometers or less; PM<sub>2.5</sub> = fine particulate matter with aerodynamic diameter of 2.5 micrometers or less; lb/day = pounds per day; MCAQMD = Mendocino County Air Quality Management District.

<sup>1</sup> The emissions estimates presented here summarize winter emissions, wherein emissions are highest due to atmospheric conditions.

Source: Modeling conducted by Ascent in 2024.

As shown in Table 3.3-3, construction of typical outdoor, mixed-light, indoor, and commercial cannabis cultivation sites would not generate daily levels of ROG, NO<sub>x</sub>, PM<sub>10</sub>, or PM<sub>2.5</sub> that exceed applicable average mass emission thresholds. The addition of these pollutants, which are below the identified thresholds, would therefore not result in an increase in ambient concentrations of ozone in the NCAB. As summarized in Section 3.3-2, "Environmental Setting," above, human exposure to ozone may cause acute and chronic health impacts,

including coughing, pulmonary distress, lung inflammation, shortness of breath, and permanent lung impairment. By evaluating emissions against MCAQMD's mass emission thresholds, the construction of future commercial cannabis cultivation sites would likely not contribute to the health complications associated with exposure to increased concentrations of ozone and PM<sub>10</sub>. Construction activities resulting from the project would not contribute substantially to the NCAB's nonattainment status for PM<sub>10</sub> and nor increase in the potential for adverse health impacts to occur from exposure to ozone and PM<sub>10</sub>. For these reasons, this impact would be less than significant.

### Summary

Construction of potentially expanded existing provisionally licensed and future licensed commercial cannabis cultivation sites would generate emissions below MCAQMD's average daily emissions threshold and would, therefore, not result in a significant contribution of pollution to the NCAB. For these reasons, this impact would be **less than significant**.

### Mitigation Measures

No mitigation is required.

### Impact 3.3-2: Generate Long-Term Operational Emissions of ROG, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>

Operation of existing provisionally licensed, expansion of existing provisionally licensed, and operation of new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could generate operational emissions of criteria air pollutants and ozone precursors exceeding MCAQMD's average daily mass emissions thresholds of significance. Because operational emissions of criteria air pollutants and ozone precursors from individual commercial cannabis cultivation sites would not be greater than MCAQMD's daily mass emissions threshold, this impact would be **less than significant**.

### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual licensure are part of the existing ambient air quality conditions and are not anticipated to be altered through the annual licensing process. Additionally, existing provisionally licensed sites would be required to meet the standards established in section 10A.17.040(U) of the MCCR, which requires maintenance of stationary source (e.g., generator use) permits required by MCAQMD.

Existing provisionally licensed commercial cannabis cultivation premises in Mendocino County are required to transition to an annual license issued by DCC. Existing provisionally licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations currently generate direct emissions of criteria air pollutants similar to those used for other agricultural activities. These include, but are not limited to, the combustion of natural gas for heating and emergency generators, use of consumer products and fertilizers, application of architectural coatings, and use of heavy-duty equipment for agricultural purposes. Existing provisionally licensed commercial cannabis cultivation operations are not anticipated to be substantially altered through the annual licensing process and would not generate additional emissions above baseline conditions. For this reason, this impact would be less than significant for existing provisionally licensed sites would retain the extent of their existing licensed commercial cannabis cultivation.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. The extent of the construction associated with the expansion at each individual commercial cannabis cultivation site is not known. However, additional air pollutant emissions would be no greater than operational emissions identified for new commercial cannabis cultivation sites identified in Table 3.3-4, because they would not involve the operation of a completely new commercial cannabis cultivation operation. As shown in this table, these emissions would not exceed air pollutant emission thresholds. Thus, this impact would be less than significant.

### Future Licensed Sites

Development of future licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could result in operational emissions of ROG, NO<sub>x</sub>, PM<sub>2.5</sub>, and PM<sub>10</sub>. The sources of these emissions would be the same as for existing provisionally licensed commercial cannabis cultivation operations (i.e., worker commute trips, landscaping equipment usage). Table 3.3-4 presents the levels of criteria air pollutants and precursors associated with operation of new licensed commercial cannabis operations for individual commercial cannabis cultivation operations (i.e., outdoor, mixed-light, indoor, and nursery). Emissions were estimated for each commercial cannabis cultivation type using the range of assumed future cannabis cultivation sites identified in Table 3.0-1.

**Table 3.3-4 Criteria Air Pollutant and Precursor Emissions Associated with Operation of Each New Individual Commercial Cannabis Cultivation Type**

Emissions Sectors	ROG (lb/day)	NO <sub>x</sub> (lb/day)	PM <sub>10</sub> (lb/day)	PM <sub>2.5</sub> (lb/day)
Outdoor	1	<1	7	1
Mixed light	2	<1	7	1
Indoor	1	<1	2	<1
Nursery	<1	<1	2	<1
<b>MCAQMD threshold of significance</b>	<b>180</b>	<b>42</b>	<b>82</b>	<b>54</b>

Notes: ROG = reactive organic gases; NO<sub>x</sub> = oxides of nitrogen; PM<sub>10</sub> = respirable particulate matter with aerodynamic diameter of 10 micrometers or less; PM<sub>2.5</sub> = fine particulate matter with aerodynamic diameter of 2.5 micrometers or less; lb/day = pounds per day; MCAQMD = Mendocino County Air Quality Management District.

Source: Modeling conducted by Ascent in 2023.

As shown in Table 3.3-4, operation of typical outdoor, mixed-light, indoor, and commercial cannabis cultivation sites would not generate levels of ROG, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> that exceed applicable MCAQMD's mass emission thresholds.

Long-term operational emissions of criteria air pollutants and precursors could violate or substantially contribute to an existing or projected air quality violation and expose sensitive receptors to substantial pollutant concentrations such that adverse health impacts could occur. Therefore, because operation of individual outdoor, mixed-light, indoor, and commercial nursery cultivation sites would not exceed MCAQMD's thresholds of significance, the project's emissions would not adversely affect human health. Therefore, the project's contribution to operational criteria pollutants and precursors would not result in greater acute or chronic health impacts compared to existing conditions. This impact would be less than significant.

## Summary

Operation of potential expansion of existing provisionally licensed and future licensed commercial cannabis cultivation sites would generate emissions below MCAQMD's daily emissions threshold and would, therefore, not result in a significant contribution of pollution to the NCAB. For these reasons, this impact would be **less than significant**.

## Mitigation Measures

No mitigation is required.

### Impact 3.3-3: Expose a Substantial Number of People to Odors Considered Objectionable and That Have Adverse Effects

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The cultivation, processing, and distribution of cannabis by existing provisionally licensed, potentially expanded of existing provisionally licensed, and new licensed commercial cannabis cultivation sites could generate objectionable odors with adverse effects for residents and other sensitive land uses. This impact would be **significant and unavoidable**.

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As described in Section 3.3.2, "Environmental Setting," the typical smell of cannabis originates from roughly 140 different terpenes. A terpene is a volatile, unsaturated hydrocarbon that is found in essential oils of plants, especially conifers and citrus trees. Some terpenes are identified explicitly in research (myrcene, pinene, limonene). The "skunk" odor attributable to cannabis is primarily volatile thiols. Commercial cannabis cultivation, processing, and distribution have the potential to generate nuisance odors.

The furthest distance cannabis odors may be recognizable or detectable is approximately two miles, depending on topography and meteorology (Kern County 2017). However, recognition of an odor does not imply that the odor is a nuisance, only that it can be identified or detected as cannabis. Typically, the odor is detectable much closer to the source, such as adjacent to or on a commercial cannabis cultivation site. The distance for odor detection is very site-specific and can be affected by many variables including meteorology, topography, and how ready plants are for harvesting. In addition, human perception of cannabis plant odors may be influenced by personal views regarding cannabis. Whether the odor is acceptable and the level at which it should be defined as objectionable at various strengths and distances as perceived by individual sensitive receptors varies.

The MCCR includes the following standards that address odor:

#### Section 10A.17.040: General Limitations on Cultivation of Cannabis

(C) The outdoor, indoor or mixed light cultivation of cannabis shall not propagate objectionable odors which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any of those persons or the public.

#### Section 10A.17.070: Requirements for all Cannabis Cultivation Business Licenses (CCBLs)

(P) All buildings, including greenhouses, used for the cultivation of cannabis pursuant to an "artificial light" permit (generally Type C-A, Type 1-A, Type 2-A and Nursery as applicable), shall be equipped with filtered ventilation systems, permitted by the Mendocino County Air Quality Management District (MCAQMD) which rely on Activated Carbon Filtration, Negative Ion Generation, Ozone Generation or other odor control mechanism demonstrated to be effective in reducing cannabis odors.

### Section 20.242.070: Planning Approval Required to Cultivate Cannabis

(C) Administrative Permit. In accordance with the Administrative Permit review procedure listed in Chapter 20.192, the Zoning Administrator shall approve, conditionally approve or deny an Administrative Permit for cannabis cultivation sites based on the following special findings.

(3) The cannabis cultivation will avoid or minimize odor and light impact on residential uses.

(D) Minor Use Permit. In accordance with the Use Permit review procedure listed in Chapter 20.196, the Zoning Administrator or the Planning Commission shall approve, conditionally approve, or deny a Minor Use Permit for a cannabis cultivation site based on findings in section 20.196.020 and the following special findings:

(3) The proposed cannabis cultivation site will avoid or minimize odor and light impact on residential uses.

As noted above, Mendocino County has not had odor issues with licensed commercial cannabis cultivation sites that have triggered notices of violation. However, Mendocino County Code Enforcement has received odor complaints during the cannabis harvest season, more specifically during the months of September and October.

### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual licensure are part of the existing ambient air quality and odor conditions and are not anticipated to be altered through the annual licensing process. Additionally, existing provisionally licensed sites would continue to be required to meet the odor control standards established in sections 10A.17.040(C) and 10A.17.070(P) of the MCCR, which requires maintenance of permits required by MCAQMD associated with stationary sources (e.g., generator use). Therefore, this impact would be less than significant for existing provisionally licensed sites.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. Expansion of cannabis cultivation areas and associated processing activities could increase the potential for the generation nuisance odors beyond existing conditions for the licensed commercial cannabis cultivation sites. The extent of odor impacts would depend on the type of commercial cannabis cultivation activity. Odor control can be accomplished for nurseries, mixed-light and indoor commercial cannabis cultivation operations that use buildings and greenhouses through the use of equipment such as active carbon filters, biofilters, plasma ion technology, air filters, and other manufactured odor control/masking substances (e.g., gels and sprays designed to mask odors), and other air filter technology consistent with MCCR section 10A.17.0070(P). Odor control for outdoor and mixed-light commercial cannabis cultivation operations not involving the use of buildings or greenhouses is primarily limited to buffers from sensitive land uses in order to comply with the requirements of MCCR section 10A.17.040(C) to not propagate objectionable odors which cause injury, detriment, nuisance, or annoyance. Section 10A.17.040 of the MCCR establishes a range of buffers (100 feet to 1,000 feet) between commercial cannabis cultivation and residential and other sensitive land uses.

As noted above, whether the odor is acceptable or at a level which it may be defined as objectionable at various strengths and distances as perceived by individual sensitive receptors

varies. Emission modeling conducted has identified that cannabis odors may be detected as far as two miles away. While odor control equipment for outdoor and mixed-light commercial cannabis cultivation operations contained within buildings or greenhouses would mitigate odor impacts, detectable cannabis odors from outdoor and mixed-light commercial cannabis cultivation operations not contained within buildings cannot be completely eliminated in all circumstances. Thus, this impact would be significant and unavoidable for expansion of existing provisionally licensed outdoor and mixed-light commercial cannabis cultivation sites not contained within buildings or greenhouses.

### Future Licensed Sites

Development of future licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would involve the growing and handling of cannabis. As identified above, cannabis plants are known to emit odors, especially during the final stages of the growing cycle (i.e., typically beginning in August and continuing through the harvest season, in September and October), which may be detectable at a distance of 2 miles or more depending on weather. The potential for detected odors to be considered objectionable and an adverse effect would depend on the size of the cannabis-related operation, the receptor, the presence of nearby vegetation, and topographic and atmospheric conditions. Because site-specific conditions can determine the effectiveness of buffers, identifying a standard buffer distance at which odors could not be perceived for outdoor and mixed-light commercial cannabis cultivation operations not contained within buildings or greenhouses is not considered feasible. Generally, the larger the size of the canopy area, the greater the potential for odor to be evident to off-site receptors.

MCCR section 10A.17.070(P) requires that all buildings, including greenhouses, used for the cultivation of commercial cannabis pursuant to an "artificial light" license type (generally Type C-A, Type 1-A, Type 2-A and Nursery (Mendocino County commercial cannabis cultivation license types)) must be equipped with filtered ventilation systems. Odors from these facilities can be controlled through the use of active carbon filters, biofilters, plasma ion technology, air filters, and other manufactured odor control/masking substances (e.g., gels and sprays designed to mask odors) consistent with the odor control performance standards of MCCR section 10A.17.040(C).

Odor impact associated with commercial cannabis cultivation operations not associated with the use of buildings and greenhouses (outdoor and mixed-light) are typically addressed through the establishment of setbacks and/or buffers. Section 10A.17.040 of the MCCR establishes a range of buffers (100 feet to 1,000 feet) between commercial cannabis cultivation and residential and other sensitive land uses.

Whether the odor is acceptable or at a level which it may be defined as objectionable at various strengths and distances as perceived by individual sensitive receptors varies. Emission modeling conducted has identified that cannabis odors may be detected as far as two miles away. While odor control equipment for outdoor and mixed-light commercial cannabis cultivation operations contained within buildings or greenhouses would mitigate odor impacts, detectable cannabis odors from outdoor and mixed-light commercial cannabis cultivation operations not contained within buildings cannot be completely eliminated in all circumstances. Thus, this impact would be significant and unavoidable for new licensed outdoor and mixed-light commercial cannabis cultivation sites not contained within buildings or greenhouses.

All licensed commercial cannabis cultivation uses are subject to compliance with the odor control performance standards of MCCR section 10A.17.040(C). MCCR section 10A.17.160



provides for enforcement of licensed commercial cannabis cultivation premises that fail to comply with the odor control performance standards that could include administrative process to achieve code compliance or available civil remedies, such as injunctive relief.

### Summary

Given that detection of cannabis odors cannot be completely eliminated for expansion of existing provisionally licensed and new licensed outdoor and mixed-light commercial cannabis cultivation sites not contained within buildings or greenhouses, this impact is **significant and unavoidable**.

### Mitigation Measures

Compliance with MCCR sections 10A.17.040(C), 10A.17.070(P), 10A.17.160, 20.240.070(C), and 20.240.070 (D) would provide all feasible measures to address and minimize odor impacts as well as corrective actions for licensed commercial cannabis cultivation sites that routinely generate nuisance odor impacts off-site. However, it is possible that nuisance odor impacts would occur occasionally before abatement for expansion of existing provisionally licensed and new licensed outdoor and mixed-light commercial cannabis cultivation sites not contained within buildings or greenhouses. There are no feasible mitigation measures for completely avoiding the potential for occasional odor nuisance impacts because there is no reliable method to contain odors on-site under all atmospheric conditions during harvest season. There are no effective mitigation measures to ensure elimination of cannabis odors. This impact would be **significant and unavoidable**.

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### 3.4 ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

This section analyzes and evaluates the potential impacts of the project on known and unknown cultural resources. Cultural resources include districts, sites, buildings, structures, or objects generally older than 50 years and considered to be important to a culture, subculture, or community for scientific, traditional, religious, or other reasons. They include prehistoric resources, historic-period resources, and “tribal cultural resources” (the latter as defined by Assembly Bill (AB) 52, Statutes of 2014, in CEQA at PRC section 21074).

Archaeological resources are locations where human activity has measurably altered the earth or left deposits of prehistoric (e.g., precontact) or historic-period (e.g., historic era) physical remains (e.g., stone tools, bottles, former roads, house foundations). Historical (or built-environment) resources include standing buildings (e.g., houses, barns, outbuildings, cabins), intact structures (e.g., dams, bridges, roads, districts), and landscapes. A cultural landscape is defined as a geographic area (including both cultural and natural resources and the wildlife therein) associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values. Tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe.

One comment letter regarding cultural resources was received in response to the notice of preparation (NOP). The Native American Heritage Commission (NAHC) requested AB 52 and Senate Bill (SB) 18 compliance information. SB 18 does not apply to the project, because a general plan amendment (the trigger for SB 18 compliance) is not associated with the project. In addition, SB 18 compliance is not a CEQA requirement; therefore, it is not discussed in this section. AB 52 compliance is described below. All comments received in response to the NOP are presented in Appendix A of this EIR.

Two comments relating to cultural resources were received during the scoping meeting. The first comment expressed concern about cultural and tribal resources and requested that these issues be addressed in the EIR. This section addresses both environmental topics. The second comment stated that the tribe did not receive a letter (assuming AB 52 consultation letter) related to the EIR. Tribal affiliation was not provided by this individual. AB 52 letters were mailed to all tribes indicated by the NAHC on August 24, 2023. The results are discussed below.

#### 3.4.1 Regulatory Setting

##### FEDERAL

###### National Register of Historic Places

The National Register of Historic Places (NRHP) is the nation’s master inventory of known historic properties. It is administered by the National Park Service and includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level.

The formal criteria (36 C.F.R. 60.4) for determining NRHP eligibility are as follows:

1. The property is at least 50 years old (however, properties under 50 years of age that are of exceptional importance or are contributors to a district can also be included in the NRHP).
2. It retains integrity of location, design, setting, materials, workmanship, feeling, and association.
3. It possesses at least one of the following characteristics:
  - Criterion A Is associated with events that have made a significant contribution to the broad patterns of history (events).
  - Criterion B Is associated with the lives of persons significant in the past (persons).
  - Criterion C Embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant, distinguishable entity whose components may lack individual distinction (architecture).
  - Criterion D Has yielded, or may be likely to yield, information important in prehistory or history (information potential).

For a property to retain and convey historic integrity, it must possess most of the seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association. Location is the place where the historic property was constructed or the place where a historic event occurred. Integrity of location refers to whether the property has been moved since its construction. Design is the combination of elements that create the form, plan, space, structure, and style of a property. Setting is the physical environment of a historic property that illustrates the character of the place. Materials are the physical elements that were combined or deposited during a particular period and in a particular pattern or configuration to form a historic property. Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory. Feeling is a property's expression of the aesthetic or historic sense of a particular period. This intangible quality is evoked by physical features that reflect a sense of a past time and place. Association is the direct link between the important historic event or person and a historic property. Continuation of historic use and occupation help maintain integrity of association.

Listing in the NRHP does not entail specific protection or assistance for a property, but it does guarantee consideration in planning for federal or federally assisted projects, eligibility for federal tax benefits, and qualification for federal historic preservation assistance. In addition, project effects on properties listed in the NRHP must be evaluated under CEQA.

The National Register Bulletin series was developed to assist evaluators in the application of NRHP criteria (NPS 2000). For example, National Register Bulletin #36 provides guidance on the evaluation of archaeological site significance. If a property cannot be placed within a particular theme or period, and thereby lacks "focus," it will be unlikely to possess characteristics that would make it eligible for listing in the NRHP.

### Cultural and Historic Landscapes

Under the NRHP, historic properties may be defined as sites, buildings, structures (such as bridges or dams), objects (such as sculptures or monuments), or districts, including cultural or historic landscapes. A cultural landscape differs from a historic building or district in that it is understood through the spatial organization of the property, which is created by the landscape's cultural and natural features. Some features may create viewsheds or barriers

(such as a fence), and others may create spaces or “rooms” (such as an arrangement of buildings and structures around a lawn area). Some features, such as grading and topography, underscore the site’s development in relationship to the natural setting. To be listed in the NRHP, a cultural landscape must meet one of the four evaluation criteria and must retain its integrity.

A cultural landscape is defined as “a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values” (NPS 2023). There are four general types of cultural landscapes—historic sites, historic designed landscapes, historic vernacular landscapes, and ethnographic landscapes—and they are not mutually exclusive:

- ▶ A historic site is a landscape significant for its association with a historic event, activity, or person. Examples include battlefields and a president’s house properties.
- ▶ A historic designed landscape is a landscape that was consciously designed or laid out by a landscape architect, master gardener, architect, or horticulturist according to design principles or by an amateur gardener working in a recognized style or tradition. The landscape may be associated with a significant person, trend, or event in landscape architecture, or it may illustrate an important development in the theory and practice of landscape architecture. Aesthetic values play a significant role in designed landscapes. Examples include parks, campuses, and estates.
- ▶ A historic vernacular landscape is a landscape that evolved through use by the people whose activities or occupancy shaped that landscape. Such a landscape reflects the social and cultural attitudes of an individual, a family, or a community, as well as the physical, biological, and cultural character of everyday lives. Function plays a significant role in vernacular landscapes. They can be a single property, such as a farm, or a collection of properties, such as a district of historic farms along a river valley. Examples include rural villages, industrial complexes, and agricultural landscapes.
- ▶ An ethnographic landscape is a landscape containing a variety of natural and cultural resources that associated people define as heritage resources. Examples are contemporary settlements, religious sacred sites, and massive geological structures. Small plant communities, animals, subsistence, and ceremonial grounds are often components.

Historic landscapes include residential gardens and community parks, scenic highways, rural communities, institutional grounds, cemeteries, battlefields, and zoological gardens. They are composed of character-defining features that individually or collectively contribute to the landscape’s physical appearance as they have evolved over time. In addition to vegetation and topography, cultural landscapes may include water features, such as ponds, streams, and fountains; circulation features, such as roads, paths, steps, and walls; buildings; and furnishings, including fences, benches, lights, and sculptural objects.

### Secretary of the Interior’s Standards

The Secretary of the Interior’s Standards for the Treatment of Historic Properties (Secretary’s Standards) provide guidance for working with historic properties. The Secretary’s Standards are used by lead agencies to evaluate proposed rehabilitative work on historic properties. They are useful for understanding and describing the potential impacts of proposed changes to historic resources. Projects that comply with the Secretary’s Standards benefit from a regulatory presumption that they would not result in a significant impact on a historic resource.

In 1992, the Secretary's Standards were revised so they could be applied to all types of historic resources, including landscapes. They were reduced to four sets of treatments to guide work on historic properties: Preservation, Rehabilitation, Restoration, and Reconstruction. The four distinct treatments are defined as follows:

- ▶ **Preservation** focuses on the maintenance and repair of historic materials and retention of a property's form as it has evolved over time.
- ▶ **Rehabilitation** acknowledges the need to alter or add to a historic property to meet continuing or changing uses while retaining the property's historic character.
- ▶ **Restoration** depicts a property at a particular period in its history while removing evidence of other periods.
- ▶ **Reconstruction** recreates vanished or nonsurviving portions of a property for interpretive purposes.

Because rehabilitation incorporates continuing changing uses of a property it would be the most likely treatment used for projects. Therefore, specific guidance has been developed for this treatment. The Secretary of the Interior's Standards for Rehabilitation are as follows:

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.
2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.
4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.
6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

## STATE

### California Register of Historical Resources

All properties in California that are listed in or formally determined eligible for listing in the NRHP are also listed in the California Register of Historical Resources (CRHR). The CRHR is a listing of State of California resources that are significant in the context of California's history. It is a statewide program with a scope and with criteria for inclusion similar to those used for the NRHP. In addition, properties designated under municipal or county ordinances are also eligible for listing in the CRHR.

California Historical Landmarks—buildings, structures, sites, or places that have been determined to have statewide historical significance—are also automatically listed in the CRHR. California Points of Historical Interest are sites, buildings, features, or events that are of local (city or county) significance. Points of Historical Interest designated after December 1997 and recommended by the State Historical Resources Commission are also listed in the CRHR.

A historical resource must be significant at the local, state, or national level under one or more of the criteria defined in CCR, title 15, section 4850 to be included in the CRHR. The CRHR criteria are tied to CEQA because any resource that meets the criteria listed below is considered a significant historical resource under CEQA. As noted above, all resources listed in or formally determined eligible for listing in the NRHP are automatically listed in the CRHR.

The CRHR uses four evaluation criteria:

- Criterion 1. Is associated with events that have made a significant contribution to the broad patterns of local or regional history, or to the cultural heritage of California or the United States.
- Criterion 2. Is associated with the lives of persons important to local, California, or national history.
- Criterion 3. Embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of a master; or possesses high artistic values.
- Criterion 4. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

Similar to the NRHP, a historical resource must meet one of the criteria identified above and retain integrity to be listed in the CRHR. The CRHR uses the same seven aspects of integrity used by the NRHP.

### California Environmental Quality Act

CEQA requires public agencies to consider the effects of their actions on "historical resources," "unique archaeological resources," and "tribal cultural resources." Pursuant to CEQA at PRC section 21084.1, a "project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." Section 21083.2 of the PRC requires agencies to determine whether projects would have effects on unique archaeological resources. PRC section 21084.2 establishes that "[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment."

### Historical Resources

“Historical resource” is a term with a defined statutory meaning (PRC section 21084.1; State CEQA Guidelines, sections 15064.5(a), (b)). Under State CEQA Guidelines, section 15064.5(a), historical resources include the following:

- 1) A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the CRHR is considered a historical resource (PRC section 5024.1).
- 2) A resource included in a local register of historical resources, as defined in PRC section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC section 5024.1(g), will be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- 3) Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource will be considered by the lead agency to be historically significant if the resource meets the criteria for listing in the CRHR (PRC section 5024.1).
- 4) The fact that a resource is not listed in or determined to be eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to PRC section 5020.1(k)), or not identified in a historical resources survey (meeting the criteria in PRC section 5024.1(g)) does not preclude a lead agency from determining that the resource may be a historical resource as defined in PRC sections 5020.1(j) or 5024.1.

### Unique Archaeological Resources

CEQA requires lead agencies to consider whether projects would affect unique archaeological resources. CEQA at PRC section 21083.2(g) states that “unique archaeological resource” means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets one or more of the following criteria:

1. Contains information needed to answer important scientific research questions, and there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

### Tribal Cultural Resources

CEQA requires lead agencies to consider whether projects would affect tribal cultural resources. CEQA at PRC section 21074 states:

a) “Tribal cultural resources” are either of the following:

- 1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:



- A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.
  - B) Included in a local register of historical resources as defined in subdivision (k) of section 5020.1 of the PRC.
- 2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of section 5024.1 of the PRC. In applying the criteria set forth in section 5024.1(c) of the PRC for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.
- b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.
  - c) A historical resource described in section 21084.1 of the PRC, a unique archaeological resource as defined in section 21083.2(g) of the PRC, or a “nonunique archaeological resource” as defined in section 21083.2(h) of the PRC may also be a tribal cultural resource if it conforms with the criteria of section 21083.2(a) of the PRC.

### CEQA Section 21080.3

AB 52, signed by the California governor in September 2014, established a new class of resources under CEQA: “tribal cultural resources,” defined in CEQA at PRC section 21074. Pursuant to PRC sections 21080.3.1, 21080.3.2, and 21082.3, lead agencies undertaking CEQA review must, upon written request of a California Native American tribe, begin consultation before the release of an EIR, negative declaration, or mitigated negative declaration. PRC sections 21080.3.1 and 21080.3.2 state that within 14 days of determining that a project application is complete, or to undertake a project, the lead agency must provide formal notification, in writing, to the tribes that have requested notification of proposed projects in the lead agency’s jurisdiction. If it wishes to engage in consultation on the project, the tribe must respond to the lead agency within 30 days of receipt of the formal notification. The lead agency must begin the consultation process with the tribes that have requested consultation within 30 days of receiving the request for consultation. Consultation concludes when either (1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource, or (2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.

If the lead agency determines that a project may cause a substantial adverse change to a tribal cultural resource, and measures are not otherwise identified in the consultation process, provisions under PRC section 21084.3(b) describe mitigation measures that may avoid or minimize the significant adverse impacts. Examples include:

- (1) Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
- (2) Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
  - (A) Protecting the cultural character and integrity of the resource
  - (B) Protecting the traditional use of the resource

(C) Protecting the confidentiality of the resource.

(3) Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

(4) Protecting the resource.

### PRC Section 21083.2

Treatment options under CEQA at PRC section 21083.2(b) to mitigate impacts on archaeological resources include activities that preserve such resources in place in an undisturbed state. PRC section 21083.2 states:

- (a) As part of the determination made pursuant to section 21080.1 of the PRC, the lead agency shall determine whether the project may have a significant effect on archaeological resources. If the lead agency determines that the project may have a significant effect on unique archaeological resources, the environmental impact report shall address the issue of those resources. An environmental impact report, if otherwise necessary, shall not address the issue of nonunique archaeological resources. A negative declaration shall be issued with respect to a project if, but for the issue of nonunique archaeological resources, the negative declaration would be otherwise issued.
- (b) If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. Examples of that treatment, in no order of preference, may include, but are not limited to, any of the following:
- (1) Planning construction to avoid archaeological sites.
  - (2) Deeding archaeological sites into permanent conservation easements.
  - (3) Capping or covering archaeological sites with a layer of soil before building on the sites.
  - (4) Planning parks, greenspace, or other open space to incorporate archaeological sites.
- (c) To the extent that unique archaeological resources are not preserved in place or not left in an undisturbed state, mitigation measures shall be required as provided in this subdivision.
- (d) Excavation as mitigation shall be restricted to those parts of the unique archaeological resource that would be damaged or destroyed by the project.
- (e) In no event shall the amount paid by a project applicant for mitigation measures required pursuant to subdivision (c) exceed the following amounts:
- (1) An amount equal to one-half of 1 percent of the projected cost of the project for mitigation measures undertaken within the site boundaries of a commercial or industrial project.
  - (2) An amount equal to three-fourths of 1 percent of the projected cost of the project for mitigation measures undertaken within the site boundaries of a housing project consisting of a single unit.
  - (3) If a housing project consists of more than a single unit, an amount equal to three-fourths of 1 percent of the projected cost of the project for mitigation measures undertaken within the site boundaries of the project for the first unit plus the sum of the following:

- (A) Two hundred dollars (\$200) per unit for any of the next 99 units.
  - (B) One hundred fifty dollars (\$150) per unit for any of the next 400 units.
  - (C) One hundred dollars (\$100) per unit in excess of 500 units.
- (f) Unless special or unusual circumstances warrant an exception, the field excavation phase of an approved mitigation plan shall be completed within 90 days after final approval necessary to implement the physical development of the project or, if a phased project, in connection with the phased portion to which the specific mitigation measures are applicable. However, the project applicant may extend that period if he or she so elects. Nothing in this section shall nullify protections for Indian cemeteries under any other provision of law.

#### California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural, and Sacred Sites Act (PRC section 5097.9) applies to both state and private lands. The act requires, upon discovery of human remains, that construction or excavation activity cease and that the County coroner be notified. If the remains are those of a Native American, the coroner must notify the Native American Heritage Commission (NAHC), which notifies and has the authority to designate the most likely descendant of the deceased. The act stipulates the procedures the descendants may follow for treating or disposing of the remains and associated grave goods.

#### Health and Safety Code Section 7050.5

Section 7050.5 of the Health and Safety Code requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If they are determined to be those of a Native American, the coroner must contact NAHC.

#### Public Resources Code Section 5097

PRC section 5097 specifies the procedures to be followed if human remains are unexpectedly discovered on nonfederal land. The disposition of Native American burials falls within the jurisdiction of NAHC. Section 5097.5 of the PRC states:

No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

#### California Code of Regulations

California Code of Regulations, title 4, section 16304(a)(3) provides that commercial cannabis cultivation activities should be immediately halted and the requirements of section 7050.5(b) of the Health and Safety Code should be implemented if human remains are discovered.

#### State Water Resources Control Board Order WQ 2023-0102-DWQ

Attachment A (Section 1, General Requirements and Prohibitions) of the State Water Resources Control Board (SWRCB) Order WQ 2023-0102-DWQ, General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities, includes the following requirements (terms) for state-licensed cultivation sites:

18. Cannabis cultivators shall not commit trespass. Nothing in this Policy or any program implementing this Policy shall be construed to authorize cannabis cultivation: (a) on land not owned by the cannabis cultivator without the express written permission of the landowner; or (b) inconsistent with a conservation easement, open space easement, or greenway easement. This includes, but is not limited to, land owned by the United States or any department thereof, the State of California or any department thereof, any local agency, or any other person who is not the cannabis cultivator. This includes, but is not limited to, any land owned by a California Native American tribe, as defined in section 21073 of the Public Resources Code, whether or not the land meets the definition of tribal lands and includes lands owned for the purposes of preserving or protecting Native American cultural resources of the kinds listed in Public Resources Code section 5097.9 and 5097.993. This includes, but is not limited to, conservation easements held by a qualifying California Native American tribe pursuant to Civil Code section 815.3 and greenway easements held by a qualifying California Native American tribe pursuant to Civil Code section 816.56.
19. Prior to acting on a cannabis cultivator's request to cultivate cannabis on tribal lands<sup>1</sup> or within 600 feet of tribal lands, the Water Boards will notify the governing body of any affected California Native American tribe or the governing body's authorized representative, as applicable. A 45-day review period will commence upon receipt of the notice by the affected tribe.

During the 45-day review period, the affected tribe may, at its discretion, accept, reject, or not act regarding the cannabis cultivation proposal. If the tribe rejects the proposed cultivation, the cannabis cultivator is prohibited from cultivating cannabis on or within 600 feet of the affected tribe's tribal lands. If the affected tribe accepts the cannabis cultivation proposal or does not act during the 45-day review period, the Water Boards may proceed with a decision on the cannabis cultivation request as though the affected tribe accepted the cannabis cultivation proposal. The Water Boards will consider requests to extend the 45-day review period on a case-by-case basis.

The governing bodies of California Native American tribes may, at their discretion, notify the State Water Board's Executive Director in writing that they: a) reject all proposed cannabis cultivation; or b) waive the 45-day review period for all current and future proposed cannabis cultivation on their tribal lands, on portions of their tribal lands, or within 600 feet of their tribal lands. Upon the Executive Director's receipt of written notice, the Water Boards will, based on the nature of the request, either:

- a. Not approve cannabis cultivation proposals on or within 600 feet of the affected tribe's tribal lands, as applicable; or
- b. Abide by the waiver and, at the Water Boards discretion, act on cannabis cultivation requests on or within 600 feet of tribal lands, as applicable, as though the affected tribe accepted the proposal.

The governing bodies of California Native American tribes may, at their discretion, withdraw a previously issued decision regarding cannabis cultivation on or within 600 feet of their tribal lands. In such instances, the governing body of the affected tribe

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<sup>1</sup> "Tribal lands" means lands recognized as "Indian country" within the meaning of title 18, United States Code, section 1151.

should notify the State Water Board's Executive Director in writing. The Water Boards will abide by the withdrawal of the affected tribe's decision for any new cannabis cultivation proposals received after the date the State Water Board Executive Director has notified the governing body of the affected tribe that its decision was received. The Water Boards will coordinate with the affected tribe to address existing permitted cannabis cultivation sites on the affected tribe's lands, as necessary. Nothing in this provision shall be construed to modify or interpret tribal law or tribal jurisdiction in any way.

20. No cannabis cultivation activities shall occur within 600 feet of an identified tribal cultural resource site. The State Water Board may modify this requirement for specific identified tribal cultural resource sites at the request of an affected California Native American tribe(s) after consultation with the affected tribe(s). The cannabis cultivator is solely responsible for identifying any tribal cultural resource sites<sup>2</sup> within the cannabis cultivation area.
21. Prior to land disturbance activities for new or expanded cannabis cultivation activities, the cannabis cultivator shall perform a records search of potential Native American archeological or cultural resources at a California Historical Resources Information System (CHRIS) information center. Any person who meets qualification requirements for access to the CHRIS may perform the initial CHRIS records search and document the results. The requirement to perform a CHRIS records search may be satisfied by using the results of a previous CHRIS records search completed within the previous 10 years for the specific parcel or parcels where new or expanded cannabis cultivation activities are proposed to occur.

Prior to land disturbance activities for new or expanded cannabis cultivation activities, the cannabis cultivator shall also request a search of the Sacred Lands Inventory that is maintained by the Native American Heritage Commission pursuant to Public Resources Code sections 5097.94, subdivision (a), and 5097.96 (Sacred Lands Inventory). If the Sacred Lands Inventory search reveals the presence or potential presence of Native American places of special or social significance to Native Americans, Native American known graves or cemeteries, or Native American sacred places, the cannabis cultivator shall consult with the tribe or tribes that are culturally affiliated with the area in which these Native American cultural resources exist or potentially exist prior to conducting any land disturbance activities. The information provided by tribes through consultation with the cannabis cultivator shall be maintained as confidential by the cannabis cultivator and its agents. A new Sacred Lands Inventory search is always required prior to ground disturbing activities for new or expanded cannabis cultivation.

The cannabis cultivator shall notify the Appropriate Person within seven days of receiving a CHRIS positive result or Sacred Lands Inventory positive result. The Appropriate Person is the Deputy Director for Water Rights (Deputy Director) if the cannabis cultivator is operating under the Cannabis Small Irrigation Use Registration (SIUR), the Executive Officer of the applicable Regional Water Board (Executive Officer) if the cannabis cultivator is operating under the Cannabis Cultivation General Order or Cannabis General Water Quality Certification, or both if the cannabis cultivator is operating under both programs.

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<sup>2</sup> "Identified tribal cultural resource site" means a tribal cultural resource that meets the requirements of section 21074, subdivision (a)(1) of the Public Resource Code.

In the event that prehistoric archeological materials or indicators are identified in a CHRIS positive result, the cannabis cultivator shall also notify the Native American Heritage Commission within seven days of receiving the CHRIS positive result and request a list of any California Native American tribes that are potentially culturally affiliated with the positive result. The cannabis cultivator shall notify any potentially culturally affiliated California Native American tribes of the CHRIS positive result within 48 hours of receiving a list from the Native American Heritage Commission.

The cannabis cultivator shall promptly retain a Professional Archeologist<sup>3</sup> to evaluate the CHRIS positive result and recommend appropriate conservation measures. In the event of a Sacred Lands Inventory positive result, the cannabis cultivator shall develop appropriate mitigation and conservation measures in consultation with the affected California Native American tribe, and shall promptly retain a Professional Archeologist to assist in this task in the event of a Sacred Lands Inventory positive result related to human remains or archeological resources. The cannabis cultivator shall submit proposed mitigation and conservation measures to the Appropriate Person(s) (Deputy Director for the Cannabis SIUR and Executive Officer for the Cannabis Cultivation General Order or Cannabis General Water Quality Certification) for written approval. The Appropriate Person may require all appropriate measures necessary to conserve archeological resources and tribal cultural resources, including but not limited to Native American monitoring, preservation in place, and archeological data recovery.

In the event that prehistoric archeological materials or indicators are identified in a CHRIS positive result, or in the event of a Sacred Lands Inventory positive result, the cannabis cultivator shall also provide a copy of the final proposed mitigation and conservation measures to any culturally affiliated California Native American tribes identified by the Native American Heritage Commission. The Appropriate Person will carefully consider any comments or mitigation measure recommendations submitted by culturally affiliated California Native American tribes with the goal of conserving tribal cultural resources and prehistoric archeological resources with appropriate dignity.

Ground-disturbing activities shall not commence until all approved measures have been completed to the satisfaction of the Deputy Director and/or Executive Officer, as applicable.

22. If any buried archeological materials or indicators<sup>4</sup> are uncovered or discovered during any cannabis cultivation activities, all ground-disturbing activities shall immediately cease within 100 feet of the find.

The cannabis cultivator shall notify the Appropriate Person within 48 hours of any discovery. The Appropriate Person is the Deputy Director if the cannabis cultivator is operating under the Cannabis SIUR, the Regional Water Board Executive Officer if the cannabis cultivator is operating under the Cannabis General Order or Cannabis General Water Quality Certification, or both if the cannabis cultivator is operating under both programs.

In the event that prehistoric archeological materials or indicators are discovered, the cannabis cultivator shall also notify the Native American Heritage Commission within 48

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<sup>3</sup> A professional archaeologist is one that is qualified by the Secretary of Interior, Register of Professional Archaeologists, or Society for California Archaeology.

<sup>4</sup> Prehistoric archaeological indicators include, but are not limited to: obsidian and chert flakes and chipped stone tools; bedrock outcrops and boulders with mortar cups; ground stone implements (grinding slabs, mortars, and pestles) and locally darkened midden soils containing some of the previously listed items plus fragments of bone, fire affected stones, shellfish, or other dietary refuse.

hours of any discovery and request a list of any California Native American tribes that are potentially culturally affiliated with the discovery. The cannabis cultivator shall notify any potentially culturally affiliated California Native American tribes of the discovery within 48 hours of receiving a list from the Native American Heritage Commission.

The cannabis cultivator shall promptly retain a professional archeologist<sup>5</sup> to evaluate the discovery. The cannabis cultivator shall submit proposed mitigation and conservation measures to the appropriate person(s) (Deputy Director for the Cannabis SIUR and Regional Water Board Executive Officer for the Cannabis General Order or Cannabis General Water Quality Certification) for written approval. The appropriate person may require all appropriate measures necessary to conserve archeological resources and tribal cultural resources, including but not limited to Native American monitoring, preservation in place, and archeological data recovery.

In the event of a discovery of prehistoric archeological materials or indicators are discovered, the cannabis cultivator shall also provide a copy of the final proposed mitigation and conservation measures to any culturally affiliated California Native American tribes identified by the Native American Heritage Commission. The appropriate person will carefully consider any comments or mitigation measure recommendations submitted by culturally affiliated California Native American tribes with the goal of conserving prehistoric archeological resources and tribal cultural resources with appropriate dignity.

Ground-disturbing activities shall not resume within 100 feet of the discovery until all approved measures have been completed to the satisfaction of the Deputy Director and/or Executive Officer, as applicable.

23. Upon discovery of any human remains, cannabis cultivators shall immediately comply with Health and Safety Code section 7050.5 and, if applicable, Public Resources Code section 5097.98. The following actions shall be taken immediately upon the discovery of human remains:

All ground-disturbing activities in the vicinity of the discovery shall stop immediately. The cannabis cultivator shall immediately notify the County coroner. Ground disturbing activities shall not resume until the requirements of Health and Safety Code section 7050.5 and, if applicable, Public Resources Code section 5097.98 have been met. The cannabis cultivator shall ensure that the human remains are treated with appropriate dignity.

Per Health and Safety Code section 7050.5, the coroner has two working days to examine human remains after being notified by the person responsible for the excavation, or by their authorized representative. If the remains are Native American, the coroner has 24 hours to notify the Native American Heritage Commission.

Per Public Resources Code section 5097.98, the Native American Heritage Commission will immediately notify the persons it believes to be the most likely descended from the deceased Native American. The most likely descendent has 48 hours to make recommendations to the landowner or representative for the treatment or disposition, with proper appropriate dignity, of the human remains and any associated grave goods. If the Native American Heritage Commission is unable to identify a descendant; the mediation provided for pursuant to subdivision (k) of Public Resources

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<sup>5</sup> A professional archaeologist is one that is qualified by the Secretary of Interior, Register of Professional Archaeologists, or Society for California Archaeology.

Code section 5097.94, if invoked, fails to provide measures acceptable to the landowner; or the most likely descendent does not make recommendations within 48 hours; and the most likely descendants and the landowner have not mutually agreed to extend discussions regarding treatment and disposition pursuant to subdivision (b)(2) of Public Resources Code section 5097.98, the landowner or their authorized representative shall reinter the human remains and items associated with the Native American human remains with appropriate dignity on the property in a location not subject to further and future disturbance consistent with subdivision (e) of Public Resources Code section 5097.98. If the landowner does not accept the descendant's recommendations, the landowner or the descendants may request mediation by the Native American Heritage Commission pursuant to Public Resources Code section 5097.94, subdivision (k).

## LOCAL

### Mendocino County General Plan

The Mendocino County General Plan Development Element provides the following policies related to cultural resources (Mendocino County 2021):

- ▶ **Policy DE-111:** Encourage collaboration among the Archaeological Commission, County Museum, historical societies, Native American peoples, and others in inventorying and protecting Mendocino County's significant cultural resources.
- ▶ **Policy DE-112:** The Department of Planning and Building Services shall be the County's 'lead agency' for technical advice and work coordination on historical sites and issue.
- ▶ **Policy DE-113:** The County and other public agencies are encouraged to protect, maintain, and restore historical, archaeological, and cultural resources under their ownership or management.
- ▶ **Policy DE-114:** Fully evaluate and protect historical, archaeological, and cultural resources through the development process, including resources of national, state, or local significance.
  - **Action Item DE-114.1:** Evaluate development proposals for potential impact on historical and cultural resources that contribute to the character of the various community areas.
  - **Action Item DE-114.2:** Increase historical preservation through expanded review or adoption of a historical review code.
  - **Action Item DE-114.3:** Adopt a cultural resources section in the Zoning Ordinance to address effective inventory, preservation, protection, and management of prehistoric and historic resources and establish cultural and historic review procedures.
  - **Action Item DE-114.4:** Preserve Mendocino County's architectural heritage by adopting the State Historic Building Code and adhering to the Marks Historical Rehabilitation Act of 1976 (Health and Safety Code).
- ▶ **Policy DE-115:** Cultural resources evaluations (i.e., archaeological and historical investigations) shall be conducted at the County's determination for project applications, where it is determined that cultural resources may occur. The evaluations should identify cultural resources (i.e., prehistoric sites and isolated artifacts and features) in a project area, determine their eligibility for inclusion in the California Register of Historical



Resources, and provide mitigation measures for any resources in a project area that cannot be avoided. Cultural resources evaluations shall be completed by a professional archaeologist that meets the Secretary of the Interior's Standards and Guidelines for Professional Qualifications in archaeology and/or.

- If, during the course of implementing County-approved projects, cultural resources (i.e., prehistoric sites, historic sites, and isolated artifacts and features) are discovered, all work shall be halted immediately within 50 feet of the discovery, the County Planning and Building Services Department shall be notified, and a professional archaeologist that meets the Secretary of the Interior's Standards and Guidelines for Professional Qualifications in archaeology shall be retained to determine the significance of the discovery.
- The County and project applicant shall consider mitigation recommendations presented by a professional archaeologist that meets the Secretary of the Interior's Standards and Guidelines for Professional Qualifications in archaeology for any unanticipated discoveries. The County and project applicant shall consult and agree upon the implementation of a measure or measures that they deem feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. The project applicant will implement the agreed-upon mitigation measures necessary for the protection of cultural resources.

#### Mendocino County Archaeological Ordinance

The Mendocino County Archaeological Ordinance, which was adopted in 1976 (Mendocino County Code Chapter 22.12), was created to protect cultural resources for the economic and cultural life of the County. The County Archaeological Commission was established under section 22.12.040 as part of this ordinance. The commission conducts CEQA review and recommends mitigation regarding archaeological resources.

### 3.4.2 Environmental Setting

#### REGIONAL PRECONTACT HISTORY

Mendocino County has a long history of occupation and use by Native American groups. Human occupation in northwest California is generally subdivided into distinct time periods, each of which is marked by various adaptive patterns and geographical distributions. Moratto (1984) divided the regional northwest California archaeology into three patterns: Borax Lake Pattern (10,000–4500 calibrated years before present (cal BP)), Mendocino Pattern (2500–1500 cal BP), and Gunther Pattern (post 1500 cal BP) (Moratto 1984).

##### Borax Lake Pattern (10,000-4500 cal BP)

The Borax Lake Pattern of the Early Holocene is characterized by Borax Lake wide-stemmed projectile points, milling slabs, handstones, large serrated bifaces, and cobble tools. The pattern was first documented in Lake County and is found throughout the Lower Archaic Period in the North Coast Ranges. People inhabiting the North Coast Ranges during this period were residentially mobile, occupying a series of temporary camps, and practiced a generalized hunting-collecting economy. Some items were obtained by trade, although trade does not appear to be well developed (Moratto 1984).

### Mendocino Pattern (2500-1500 cal BP)

The Mendocino Pattern, which is sometimes referred to regionally as the Willits Pattern, is characterized by a variety of side-notched, corner-notched, and concave-base projectile points; bifaces; handstones and milling slabs; flaked stone tools; cobble tools; and, in some cases, mortars and pestles. Most of the sites are temporary camps or short-term forager residential bases that show a focus on terrestrial resources, although some sites suggest an adaptive shift in the Middle Holocene toward the establishment of semisedentary villages near productive natural resources, such as acorns (Moratto 1984).

### Gunther Pattern (post 1500 cal BP)

A greater focus on the coast is a characteristic of the Gunther Pattern, along with a high degree of sedentism during the Late Holocene. Archaeological evidence in the form of fishhooks, spears, and composite harpoon tips, which are especially abundant at coastal sites, indicates there was an intensified use of lowland subsistence resources, including exploitation of marine mammals and fish.

Population density was greater during this period, with indications of social stratification. Steatite pipes and bowls, large obsidian ceremonial blades, and bone and shell ornaments are artifacts typical of this period. Sites also tend to have well-defined houses, some made of redwood planks; cemeteries; artifact caches; and midden/refuse areas. Extensive trade networks between permanent villages during this period have been documented archaeologically and ethnographically by the use of dentalium shell, shell beads, obsidian, and historic era, Euro-American manufactured materials, such as glass beads and metal (Moratto 1984).

## ETHNOHISTORY

At the time of European contact, around 1769, the north and central Pomo, Yuki, Cahto, Wailaki, Huchnom, and Sinkyone occupied portions of the County. The north and central Pomo occupied most of the County, and the other ethnographic groups occupied areas at the northern boundary of the County. The material culture of these tribes was similar, with an emphasis on the use and production of baskets for many of the day-to-day tasks of living. However, each had its own territories, cultural traditions and forms (PMC 2008).

### Pomo

The southern third of Mendocino County is the home of Native Americans speaking the Central Pomo languages. North of this area was traditionally the territory of people speaking the Northern Pomo language, who controlled a strip of land extending from the Pacific Coast to Clear Lake in Lake County. The northern groups also controlled the coast from the Navarro River north to Cleone and from just north of Anderson Valley to Sherwood Valley. Coyote, Yokayo, Redwood, and Potter Valley tribes were also within this territory. Northern Pomo were the most populous native linguistic group in Mendocino County. The Pomo are members of the Hokan language family, which appears to be one of the oldest linguistic families in California.

Pomo social and political organization is quite variable, but Pomo were typically organized into tribelets that were composed of bilaterally related kin groups that ranged in size from 100 to 2,000 persons. Tribelets generally occupied individual villages and had a chief or headman, but multiple chiefs for a single tribelet were also common (PMC 2008).

### Coast Yuki, Yuki, and Huchnom

Coast Yuki occupied an area along the coast extending from Fort Bragg north to an area just north of Rockport. Coast Yuki are one of the few groups in California with a true coastal adaptation because they had little access to interior resources. Yuki and Huchnom occupied an area east of the Coast Yuki that included most of the drainage of the upper Eel River in the Coast Ranges, extending north just beyond Round Valley and south to just beyond Willits.

There is scant ethnographic information regarding these groups, and the population of each group appears to have been relatively small compared to that of other California Native American groups, such as the Pomo. The history of these three groups becomes merged in the 1860s, when they joined other groups at the Round Valley Indian Reservation, which was established in 1858. The reservation, located at the northern end of Round Valley, is the largest contiguous enclave of Indian land in Mendocino County and one of the largest in California (PMC 2008).

### Cahto

Cahto territory is bounded by Branscomb, Laytonville, and Cummings and includes Cahto and Long Valleys and the upper drainage of the South Fork Eel River at the north end of Mendocino County. Cahto are the southernmost Athapaskan-speaking group on the Pacific Coast. There is scant ethnographic information regarding Cahto, and the population of the group appears to have been relatively small compared to that of other California Native American groups, such as the Pomo. Regardless, Cahto had permanent villages at the current sites of Branscomb, Laytonville, and Cummings. Salmon and acorns, the primary food sources, were supplemented by the hunting of deer and other animals. Cahto had friendly contact with Northern Pomo and Yuki. By the 1920s, the remaining population of Cahto resided at the Round Valley Indian Reservation or their tribal rancheria near Laytonville (PMC 2008).

### Sinkyone and Wailaki

Sinkyone occupied the area around Shelter Cove and along Eel River and South Fork Eel River. Wailaki occupied most of the Eel River and North Fork Eel River drainage. Sinkyone and Wailaki are Athapaskan speakers and are related to groups further to the north. There is scant ethnographic information regarding Sinkyone and Wailaki, but they were organized into tribelets that were controlled by a chief. Salmon and other fish and acorns were primary food sources that were supplemented by the hunting of deer and other animals. Sinkyone and Wailaki were relatively isolated from other groups at the north end of Mendocino County because of local geography, and they interacted primarily with each other and three other Athapaskan-speaking groups (Mattole, Nongatl, and Lassik) in the area (PMC 2008).

## EURO-AMERICAN CONTACT SETTING

### Mendocino County History

Initial settlement and development of Mendocino County primarily occurred along the coast. In the 1850s, fishing and lumber enterprises were established in the County, and harbors were built at the mouths of the Noyo, Navarro, and Albion Rivers. The ports on the Navarro and Albion Rivers were developed to serve the rapidly expanding lumber industry in the County. Other coastal areas were also developed to address the needs of the lumber industry, including towns such as Point Arena, which was reputedly the busiest town between San Francisco and Eureka (PMC 2008).

The US Army established a military base on the Mendocino Indian Reservation in 1857. The base was named Fort Bragg after the famous general of the Mexican War, Braxton Bragg. Subsequently, the town of Fort Bragg was established and encompassed the military base. The base and town attracted lumber mills, and the lumber industry expanded in the area. The Union Lumber Company established the first private nursery in California, near Fort Bragg in 1922. Fort Bragg was linked with Willits and other towns in the 1860s by construction of the California Western Railroad. Today, the railroad line between Fort Bragg and Willits is popularly known as the “Skunk Train” because of its strong gasoline odor (PMC 2008).

The major industry of Mendocino County away from the coast was logging. The development of the timber industry led to the establishment of towns such as Ukiah, Hopland, Willits, Boonville, Comptche, Branscomb, Philo, and Yorkville during the 1860s. The rugged interior of the County is relatively isolated, and many areas are sparsely occupied to this day. In addition to logging, hot springs resorts attracted settlement of interior towns, such as Ukiah, which is located near Vichy Springs. Vichy Springs, originally named Doolan Ukiah Vichy, began operation in the late 1880s and is one of the oldest continuously operated hot springs resorts in the country. Other mineral spring resorts in the County are Orr’s Springs, located west of Ukiah, and Duncan Springs, located south of Hopland (PMC 2008).

Agriculture was developed in Mendocino County during the 1850s in valleys such as Anderson, Potter, and Redwood. One of the first crops planted in the County was hops, which were planted in 1858 by Stephen Warren Knowles near Hopland. By the early 1900s, however, hops were replaced by fruit crops, such as pears, and then by vineyards. The planting of vineyards in the County has continued, and today vineyards are an important part of the agriculture of the County (PMC 2008).

### Cannabis History

Commercial cannabis production is rapidly increasing in Mendocino County. Between 2012 and 2016, the total area in the County used for commercial cannabis cultivation increased by 112 percent (from approximately 0.8 square miles to 1.5 square miles), and the number of cannabis plants increased by 230 percent (from 217,270 plants to 718,842 plants). These estimates have primarily been calculated with geospatial software because the crop’s status as a federally illegal substance makes it difficult for researchers to safely and legally obtain direct field measurements. Federal regulatory agencies that are generally involved in regulating agriculture, such as the US Department of Agriculture and the US Environmental Protection Agency, cannot legally be involved with the regulation of commercial cannabis infrastructure. The legal status of cannabis has prevented federal regulation and pushed growers to operate in rural areas, particularly in small, upper watersheds (Clements 2020).

## RECORDS SEARCHES, SURVEYS, AND CONSULTATION

Information contained in the CHRIS is derived from the accumulated observations and assessments reported by individuals and organizations. The resources reported include both eligible and ineligible resources for the CRHR and NRHP. The purpose of conducting a records search is to obtain that information and proceed based on the needs of the project.

On October 30, 2023, a records search was performed at the Northwest Information Center (NWIC), at California State University, Sonoma (File no. 23-0265). According to the results of the records search, 6,487 cultural sites and features have been recorded in Mendocino County. The 6,487 cultural sites and features consisted of 683 records that include “building,” 499 records that include “structure,” 4,795 records that include “site,” 111 records that include

“object,” 19 records that include “district,” 333 records that include “element of district,” and 372 records that include “other” (Table 3.4-1). These terms are defined as follows:

- ▶ **Building:** A building, such as a house, barn, church, hotel, or similar construction, is created principally to shelter any form of human activity. "Building" may also be used to refer to a historically and functionally related unit, such as a courthouse and jail or a house and barn.
- ▶ **Structure:** The term "structure" is used to distinguish from buildings those functional constructions made usually for purposes other than creating human shelter.
- ▶ **Object:** The term "object" is used to distinguish from buildings and structures those constructions that are primarily artistic in nature or are relatively small in scale and simply constructed. Although it may be, by nature or design, movable, an object is associated with a specific setting or environment.
- ▶ **Site:** A site is the location of a significant event, a precontact or historic era occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value regardless of the value of any existing structure.
- ▶ **District:** A district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development (OHP 1995).
- ▶ **Element of a District:** This could be a site, building, structure, or object that is a contributing element of a district.
- ▶ **Other:** This category is used for resources that cannot be readily classified as one of the above categories.

**Table 3.4-1 Resources Previously Recorded in Mendocino County**

	<b>Building</b>	<b>Structure</b>	<b>Site</b>	<b>Object</b>	<b>District</b>	<b>Element of District</b>	<b>Other</b>
<b>Precontact</b>	0	0	3,716	30	2	14	273
<b>Protohistoric era</b>	0	0	88	1	1	3	2
<b>Historic era</b>	683	498	1,471	82	19	324	108
<b>Unknown</b>	1	0	6	2	0	0	2

Source: NWIC 2023.

### Known Archaeological Resources

The records search results revealed a total of 3,952 precontact archaeological resources, such as lithic scatters, bedrock milling features, habitation debris, burial sites, and petroglyphs, have previously been recorded in Mendocino County. A total of 1,486 historic era archaeological resources, such as mines and quarry tailings, dams, railroad grades, cemeteries, and building foundations, have been previously recorded in Mendocino County. It is unknown how many of these resources have been listed, evaluated, or determined eligible for listing in the CRHR and NRHP.

### Known Built-Environment Resources

The NWIC search revealed that a total of 1,181 built-environment resources, including walls, bridges, single-family properties, and government buildings, have been recorded in Mendocino County. In addition, the Built Environment Resources Directory (BERD), which includes listings of the CRHR, California State Historical Landmarks, California State Points of Historical Interest, and NRHP, includes 1,138 built-environment resources for Mendocino County (OHP

2023). According to the BERD, 760 built-environment resources have been listed, have been determined to be eligible for listing, or appear to be eligible for listing in the NRHP. Under CEQA, these 760 built-environment resources have the same status in the CRHR. Therefore, these 760 built-environment resources are historical resources under CEQA. In addition, California State Historical Landmarks #770 and above and California State Points of Historical Interests designated after December 1997 are automatically eligible for listing in the CRHR. Note that not all 1,138 built-environment resources have been submitted to and processed by the NWIC, which is why not all are included in the 1,181 total.

## Tribal Cultural Resources

### Native American Consultation

On July 28, 2023, the NAHC provided a list of 22 tribal representatives for Mendocino County. Pursuant to AB 52, DCC mailed notification letters to the following tribal representatives on August 24, 2023:

- ▶ Bear River Band of Rohnerville Rancheria; Josefina Frank, Chairwoman
- ▶ Bear River Band of the Rohnerville Rancheria; Edward “Gusto” Bowie, Cultural Liaison
- ▶ Cahto Tribe; Kendra Campbell, Secretary-Treasurer
- ▶ Cahto Tribe; Mary Norris, Chairperson
- ▶ Cahto Tribe; Tasheena Sloan, Vice Chairperson
- ▶ Coyote Valley Band of Pomo Indians; Richard Campbell, Acting Chairperson
- ▶ Guidiville Rancheria of California; Michael Derry, Historian
- ▶ Guidiville Rancheria of California; Bunny Tarin, Tribal Administrator
- ▶ Habematolel Pomo of Upper Lake; Robert Geary, Cultural Resources Administrator/Tribal Historic Preservation Officer
- ▶ Hopland Band of Pomo Indians; Sonny Elliott, Chairperson
- ▶ Kashia Band of Pomo Indians of the Stewarts Point Rancheria; Dino Franklin, Chairperson
- ▶ Kashia Band of Pomo Indians of the Stewarts Point Rancheria; Loren Smith, Tribal Historic Preservation Officer
- ▶ Manchester Band of Pomo Indians of the Manchester Rancheria; Jaime Cobarrubia, Chairperson
- ▶ Noyo River Indian Community; no representative identified
- ▶ Pinoleville Pomo Nation; Leona Williams, Chairperson
- ▶ Potter Valley Tribe; Salvador Rosales, Chairperson
- ▶ Redwood Valley or Little River Band of Pomo Indians; Debra Ramirez, Chairperson
- ▶ Robinson Rancheria of Pomo Indians; Beniakem Cromwell, Chairperson
- ▶ Round Valley Reservation/Covelo Indian Community; James Russ, President
- ▶ Sherwood Valley Rancheria of Pomo; Melanie Rafanan, Chairperson
- ▶ Sherwood Valley Rancheria of Pomo; Valerie Stanley, Tribal Historic Preservation Officer
- ▶ Yokayo Tribe; Yokayo Tribe, Chairperson

No responses to these notifications were received within the 30-day window identified in CEQA at section 21080.3 of the PRC. Therefore, no consultation under AB 52 occurred.

### 3.4.3 Environmental Impacts and Mitigation Measures

#### METHODOLOGY

The impact analysis for archaeological, historical, and tribal cultural resources is informed by the provisions and requirements of federal, state, and local laws and regulations that apply to cultural resources.

CEQA at PRC section 21083.2(g) defines a “unique archaeological resource” as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets one or more of the following CRHR-related criteria: (1) that it contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information; (2) that it has a special and particular quality, such as being the oldest of its type or the best available example of its type; or (3) that it is directly associated with a scientifically recognized important prehistoric or historic event or person. An impact on a resource that is not unique is not a significant environmental impact under CEQA (State CEQA Guidelines, section 15064.5(c)(4)). If an archaeological resource qualifies as a resource under CRHR criteria, then the resource is treated as a unique archaeological resource for the purposes of CEQA.

CEQA at PRC section 21074 defines “tribal cultural resources” as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” that are listed or determined eligible for listing in the CRHR, listed in a local register of historical resources, or otherwise determined by the lead agency to be a tribal cultural resource.

In addition, according to State CEQA Guidelines, section 15126.4(b)(1), if a project adheres to the Secretary of the Interior’s Standards for the Treatment of Historic Properties, the project’s impact “will generally be considered mitigated below the level of a significance and thus is not significant.”

For the purposes of the impact discussion, “historical resource” is used to describe built-environment historic-period resources. Archaeological resources (both prehistoric and historic period), which may qualify as “historical resources” pursuant to CEQA, are analyzed separately from built-environment historical resources.

#### THRESHOLDS OF SIGNIFICANCE

An impact on cultural resources would be significant if implementation of the project would:

- ▶ Cause a substantial adverse change in the significance of a historical resource pursuant to section 15064.5 of the State CEQA Guidelines;
- ▶ Cause a substantial adverse change in the significance of an archaeological resource pursuant to section 15064.5 of the State CEQA Guidelines;
- ▶ Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC section 21074 as either a site, feature, place, or cultural landscape that is

geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe; or

- ▶ Disturb any human remains, including those interred outside of formal cemeteries.

## ISSUES NOT DISCUSSED FURTHER

All the issues identified in the thresholds of significance are addressed in the following analysis.

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Impact 3.4-1: Cause a Substantial Adverse Change in the Significance of a Historical Resource

Implementation of the project could result in existing and new licensed commercial cannabis cultivation sites obtaining annual licensure on lands that contain or are near historic resources. This could result in damage to or destruction of a historic building or structure, thereby resulting in a substantial adverse change in the significance of a historical resource as defined in State CEQA Guidelines, section 15064.5. This would be a **potentially significant** impact.

Historical (or architectural) resources include standing buildings (e.g., houses, barns, cabins) and intact structures (e.g., dams, bridges). Mendocino County contains several known historic resources, including federally recognized and state-recognized resources. Known historic era resources within the County generally include civic and commercial or industrial buildings, bridges, barns, homes, and historic districts.

As described in Section 3.4.2, “Environmental Setting,” and Table 3.4-1, the records search results identified 1,181 built-environment resources in Mendocino County. The BERD identified 1,138 built-environment resources for Mendocino County, some of which may not be included in the NWIC results. According to the BERD total of 760 resources have been listed, determined eligible, or appear to be eligible for the NRHP; these 760 resources are also eligible for listing in the CRHR, and therefore are resources under CEQA. Additionally, California State Historical Landmarks #770 and above and California State Points of Historical Interests designated after December 1997 are automatically eligible for the CRHR.

#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual licensure would not result in new impacts to potentially significant historic resources because operations are not anticipated to be altered through the annual licensing process. In addition, existing provisionally licensed sites would retain the extent of their existing licensed commercial cannabis cultivation activities.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. The expansion of cultivation activities are required to comply with the SWRCB General Order Attachment A (Section 1, General Requirements and Prohibitions) (SWRCB Order WQ 2023-0102-DWQ) Term 21. In addition, the expansion of cultivation activities would not have impacted historic resources because the cultivation area expansion would not result in the alteration of buildings that could potentially be a historical resource. Therefore, there



would have been no impact to historical resources from existing provisionally licensed commercial cannabis cultivation sites.

### Future Licensed Sites

New licensed commercial cannabis cultivation sites in Mendocino County would be required to obtain and annually renew commercial cannabis cultivation licenses through DCC as well as obtain local license approvals from Mendocino County. New licensed commercial cannabis cultivation operations and processing and/or distribution transport-only operations associated with future new licenses could result in the reuse of existing buildings or construction of new buildings and the use of smaller sheds for storage of materials. These activities could occur in areas with known historical sites or in areas where structures have not yet been evaluated for historical significance. Damage to or destruction of a building or structure that is a designated historic resource, that is eligible for listing as a historic resource, or that has not yet been evaluated could result in a change in its historical significance.

New licensed commercial cannabis cultivation operations within the County would be required to obtain an annual cultivation license under DCC and comply with the SWRCB General Order Attachment A (Section 1, General Requirements and Prohibitions) (SWRCB Order WQ 2023-0102-DWQ) for new licensed commercial cannabis cultivation operations. Term 21 of Section 1 (General Requirements and Prohibitions) requires that records searches be performed through the applicable CHRIS information center before land-disturbing activities. Any positive results identified in the records search would need to be further evaluated. Compliance with Term 21 of the SWRCB's General Requirements and Prohibitions would reduce impacts to known historical resources through identification of potential historical features and further evaluation.

New licensed commercial cannabis cultivation operations resulting from implementation of the project that could result in damage, modification, or destruction of known or yet to be evaluated historical resources would be a potentially significant impact.

### Summary

As noted above, the BERD total of 760 resources have been listed, determined eligible, or appear to be eligible for the NRHP; these 760 resources are also eligible for listing in the CRHR and therefore are resources under CEQA. In addition, future commercial cannabis cultivation sites could result in the reuse of existing buildings or construction of new buildings or structures. Because the construction and operation of new licensed commercial cannabis cultivation sites within the County could result in damage, modification, or destruction of known or yet to be evaluated historical resources, this impact would be **potentially significant**.

### Mitigation Measures

#### Mitigation Measure 3.4-1: Implement Additional Measures to Protect Historic Resources

As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1 - Term 21), the DCC shall require new licensed commercial cannabis cultivation sites in Mendocino County to identify and evaluate all historic-age (over 45 years in age) buildings and structures that are proposed to be removed or modified as part of new licensed commercial cannabis cultivation site operations. This shall include preparation of a historic structure report and evaluation of resources to determine their eligibility for recognition under federal, state, or county local official register of historic resources criteria. The evaluation shall be prepared by an architectural historian or historical architect meeting the Secretary of the Interior's

Standards and Guidelines for Archeology and Historic Preservation, Professional Qualification Standards. The evaluation shall comply with State CEQA Guidelines, section 15064.5(b).

If resources eligible for inclusion in the NRHP, CRHR, or local official register of historic resources are identified, an assessment of impacts on these resources shall be included in the report, as well as detailed measures to avoid impacts. If avoidance of a significant architectural/built-environment resource is not feasible, additional mitigation options include, but are not limited to, specific design plans for historic districts or plans for alteration or adaptive reuse of a historical resource that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitation, Restoring, and Reconstructing Historic Buildings.

#### Significance after Mitigation

Implementation of Mitigation Measure 3.4-1 would reduce potentially significant impacts by requiring protection of historic resources within the County's historic districts. Further, this mitigation ensures that actions will be taken to record, evaluate, avoid, or otherwise treat the resource appropriately, in accordance with pertinent laws and regulations. However, State CEQA Guidelines, section 15126.4(b)(2) notes that in some circumstances, documentation of a historical resource shall not mitigate the effects of demolition of that resource to a less-than-significant level because the historic resources would no longer exist. Therefore, because the potential for permanent loss of a historic resource or its integrity cannot be precluded, impacts on historic resources would be **significant and unavoidable**.

#### Impact 3.4-2: Cause a Substantial Adverse Change in the Significance of Unique Archaeological Resources

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New and existing licensed commercial cannabis cultivation sites associated with implementation of the project could be located on properties that contain known or unknown archaeological resources. Ground-disturbing activities associated with new or expanded licensed commercial cannabis cultivation site operations could result in discovery or damage of yet undiscovered archaeological resources as defined in State CEQA Guidelines, section 15064.5. However, licensed cannabis cultivation sites would be required to comply with Attachment A (Section 1, General Requirements and Prohibitions) of the SWRCB Order WQ 2023-0102-DWQ, which includes protection measures to archaeological resources which would reduce impacts **less than significant**.

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The following archaeological site types may be encountered throughout unsurveyed portions of the County: bedrock milling features, habitation debris, burial sites, petroglyphs, mines and quarry tailings, dams, and railroad grades. As described in Section 3.4.2, "Environmental Setting," 5,438 sites that include precontact and historic era archaeological resources have been identified in Mendocino County. It is unknown how many of these resources have been listed, evaluated, or determined eligible for the CRHR/NRHP.

#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual licensure would not result in impacts to archaeological resources as operations are not anticipated to be altered through the annual licensing process. In addition, existing provisionally licensed sites would retain the extent of their existing licensed commercial cannabis cultivation activities.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their commercial cannabis cultivation site activities as they transition to annual licensure. The expansion of commercial cannabis cultivation activities is required to comply with the SWRCB General Order Attachment A (Section 1, General Requirements and Prohibitions) (SWRCB Order WQ 2023-0102-DWQ) Terms 21 and 22. Therefore, there would be no impact to archaeological resources from existing provisionally licensed sites.

### Future Licensed Sites

As part of licensing requirements, new licensed commercial cannabis cultivation operations and associated processing and/or distribution transport-only operations would be required to comply with the SWRCB's cannabis cultivation policies for cultivation activities. Attachment A (Section 1, General Requirements and Prohibitions) of the SWRCB General Order (Order WQ 2023-0102-DWQ) includes Terms 21 and 22 which require CHRIS records searches, NAHC record searches, and archaeological surveys or evaluations (if necessary). Compliance with Terms 21 and 22 would reduce impacts to known archaeological resources through requiring standard record searches, requiring archaeological evaluations of identified features, and implementing necessary measures to ensure the conservation of archaeological resources. Therefore, impacts to archaeological resources would be less than significant.

### Summary

5,438 sites that include precontact and historic era archaeological resources have been identified in Mendocino County. It is unknown how many of these resources have been listed, evaluated, or determined eligible for the CRHR/NRHP. However, as described above, new licensed commercial cannabis cultivation sites would comply with Attachment A (Section 1, General Requirements and Prohibitions) of the SWRCB Order WQ 2023-0102-DWQ which includes terms 21 and 22 that require CHRIS records searches, NAHC record searches, archaeological evaluations (if necessary), and protection of discovered resources. Complying with these terms would ensure impacts to unique archaeological resources to be **less than significant**.

### Mitigation Measures

No mitigation is required for this impact.

### Impact 3.4-3: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource

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Pursuant to AB 52, the DCC sent letters inviting tribal consultation to the 22 tribal contacts identified by the NAHC. No responses were received as a result of AB 52 notification. Although no tribal cultural resources, defined by CEQA section 21074, were identified, it is possible that tribal cultural resources could be identified through the development of new or expanded licensed commercial cannabis cultivation sites. Compliance with CEQA section 21080.3.2 and section 21084.3(a) would render this impact **less than significant**.

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No tribal cultural resources were identified because no responses were received from the AB 52 notifications. As described in Section 3.4.2, "Environmental Setting," 3,952 cultural sites that include precontact archaeological resources have been identified in Mendocino County. It is unknown how many of these resources have been listed, evaluated, or determined eligible

for the CRHR/NRHP. Some of these precontact archaeological resources may also be a tribal cultural resource.

#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual licensure would not result in impacts to tribal cultural resources as operations are not anticipated to be altered through the annual licensing process. In addition, existing provisionally licensed sites would retain the extent of their existing licensed commercial cannabis cultivation activities.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. The expansion of cultivation activities are required to comply with the SWRCB General Order Attachment A (Section 1, General Requirements and Prohibitions) (SWRCB Order WQ 2023-0102-DWQ) Terms 19 through 22. Therefore, there would be no impact to tribal cultural resources from existing provisionally licensed sites.

#### Future Licensed Sites

As part of licensing requirements, new licensed commercial cannabis cultivation operations and associated processing and/or distribution transport-only operations would be required to comply with the SWRCB's licensing commercial cannabis cultivation policies. Attachment A (Section 1, General Requirements and Prohibitions) of the SWRCB General Order (Order WQ 2023-0102-DWQ) includes Terms 19 and 20, which require notification to tribes of any new licensed commercial cannabis cultivation and operation activities on tribal lands or tribal cultural resources, or within 600 feet of these lands. In addition, compliance with Terms 21 and 22 would reduce impacts to known tribal cultural resources through requiring a sacred lands inventory search through the NAHC and to consult with the tribe(s) affiliated with the area and implementing necessary measures to ensure the conservation of tribal cultural resources. Therefore, impacts to tribal cultural resources would be less than significant.

#### Summary

No tribal cultural resources were identified because no responses were received from the AB 52 notifications. However, new licensed commercial cannabis cultivation sites would comply with Attachment A (Section 1, General Requirements and Prohibitions) of the SWRCB Order WQ 2023-0102-DWQ terms 19 and 20, which require notification to tribes of any new licensed commercial cannabis cultivation and operation activities on tribal lands or tribal cultural resources, or within 600 feet of these lands. In addition, compliance with Terms 21 and 22 would reduce impacts to known tribal cultural resources through requiring a sacred lands inventory search through the NAHC and to consult with the tribe(s) affiliated with the area and implementing necessary measures to ensure the conservation of tribal cultural resources. Complying with these terms would ensure impacts to tribal cultural resources to be **less than significant**.

#### Mitigation Measures

No mitigation is required for this impact.

### Impact 3.4-4: Disturb Human Remains

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Previously undiscovered human remains could be discovered when soils are disturbed during construction of licensed commercial cannabis cultivation sites under the project. Compliance with Health and Safety Code section 7050.5 and California Public Resources Code section 5097 would make this impact **less than significant**.

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As described in Section 3.4.2, “Environmental Setting,” approximately 5,438 sites that include precontact and historic era archaeological resources have been identified in Mendocino County. This evidence indicates that burial sites are likely to be encountered in the County.

#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual licensure would not result in impacts to human remains because operations are not anticipated to be altered through the annual licensing process. In addition, existing provisionally licensed sites would retain the extent of their existing licensed commercial cannabis cultivation activities.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. The expansion of cultivation activities are required to comply Attachment A (Section 1, General Requirements and Prohibitions) of the SWRCB Order WQ 2023-0102-DWQ terms that require compliance with the Health and Safety Code section 7050.5 and, if applicable, PRC section 5097.98. Therefore, there would be no impact to human remains from existing provisionally licensed sites.

#### Future Licensed Sites

Ground-disturbing construction activities associated with new licensed commercial cannabis cultivation site operations and associated processing or distribution transport-only uses could uncover previously unknown human remains, which could be archaeologically or culturally significant. Structures could also be constructed for processing and/or distribution transport-only operations, and smaller sheds could be constructed to store materials. These activities would result in limited, shallow levels of soil disturbance; it is unlikely that unknown human remains would be unearthed by earth-disturbing activities associated with the proposed program because of the shallow soil disturbance required. Nevertheless, the potential exists for previously undiscovered human remains to be discovered when soils are disturbed.

California law recognizes the need to protect Native American human burials, skeletal remains, and items associated with Native American burials from vandalism and inadvertent destruction. The procedures for the treatment of Native American human remains are described in California Health and Safety Code section 7050.5 and PRC section 5097.

These statutes require that if human remains are discovered during any construction activities, potentially damaging ground-disturbing activities in the area of the remains shall be halted immediately, and the Mendocino County coroner and NAHC shall be notified immediately, in accordance with PRC section 5097.98 and section 7050.5 of California’s Health and Safety Code. If the remains are determined by NAHC to be Native American, the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. Following the coroner’s findings, the archaeologist, and the NAHC-designated Most Likely Descendant shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting upon

notification of a discovery of Native American human remains are identified in PRC section 5097.94.

Compliance with Health and Safety Code section 7050.5 and PRC section 5097 would provide an opportunity to avoid or minimize the disturbance of human remains, and to appropriately treat any remains that are discovered. Therefore, this impact would be less than significant.

### Summary

As described above, new licensed commercial cannabis cultivation sites would be required to comply with Attachment A (Section 1, General Requirements and Prohibitions) of the SWRCB Order WQ 2023-0102-DWQ terms that require compliance with the Health and Safety Code section 7050.5 and, if applicable, PRC section 5097.98. Therefore, this impact would be **less than significant**.

### Mitigation Measures

No mitigation is required for this impact.

## 3.5 BIOLOGICAL RESOURCES

This section evaluates the potential impacts that may occur with project implementation to biological resources known from or with potential to occur in Mendocino County. It summarizes relevant federal, state, and local regulations that pertain to biological resources and describes the existing environmental conditions. The analysis includes a description of the methods used for assessment, the potential direct and indirect impacts of project implementation, and mitigation measures recommended to address impacts determined to be significant or potentially significant. The information presented in this section is based on a review of existing and available information and is regional in scope. Data, analysis, and findings provided in this section are programmatic for broad application under the project rather than site-specific.

Comments regarding biological resources submitted in response to the notice of preparation (NOP) were received from the California Department of Fish and Wildlife (CDFW), the California Department of Conservation, and several individuals. Comments pertained to impacts on sensitive habitats (e.g., watersheds, rivers, streams, wetlands, riparian habitat, forest habitat) and plant and wildlife species (e.g., anadromous fish, listed wildlife species, wildlife entanglement, introduction of nonnative species, light pollution, noise). These issues are addressed in the impact analysis below. All comments received in response to the NOP are presented in Appendix A of this EIR.

### 3.5.1 Regulatory Setting

#### FEDERAL

##### Federal Endangered Species Act

Pursuant to the federal Endangered Species Act (ESA) (16 US Code section 1531 et seq.), the US Fish and Wildlife Service (USFWS) regulates the taking of species listed in the ESA as threatened or endangered. In general, persons subject to ESA (including private parties) are prohibited from “taking” endangered or threatened fish and wildlife species on private property and from “taking” endangered or threatened plants in areas under federal jurisdiction or in violation of state law. Under section 9 of the ESA, the definition of “take” is to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” USFWS has also interpreted the definition of “harm” to include significant habitat modification that could result in take.

Section 10 of the ESA applies if a nonfederal agency is the lead agency for an action that results in take and no other federal agencies are involved in permitting the action. Section 7 of the ESA applies if a federal discretionary action is required (e.g., a federal agency must issue a permit), in which case the involved federal agency consults with USFWS.

##### Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA), first enacted in 1918, provides for protection of international migratory birds and authorizes the Secretary of the Interior to regulate the taking of migratory birds. The MBTA provides that it will be unlawful, except as permitted by regulations, to pursue, take, or kill any migratory bird, or any part, nest, or egg of any such bird. Under the MBTA, “take” is defined as “pursue, hunt, shoot, wound, kill, trap, capture, or collect, or any attempt to carry out these activities.” A take does not include habitat destruction

or alteration, as long as there is not a direct taking of birds, nests, eggs, or parts thereof. The current list of species protected by the MBTA can be found in Title 50 of the Code of Federal Regulations (CFR), section 10.13 . The list includes nearly all birds native to the United States.

#### Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act, enacted in 1940 and amended multiple times since, prohibits the taking of bald and golden eagles without a permit from the Secretary of the Interior. Similar to the ESA, the Bald and Golden Eagle Protection Act defines “take” as “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb” (16 U.S. Code 668–668c). For the purpose of the act, disturbance that would injure an eagle, decrease productivity, or cause nest abandonment, including habitat alterations that could have these results, are considered take and can result in civil or criminal penalties.

#### Section 404 of the Clean Water Act

Section 404 of the federal Clean Water Act (CWA) (33 U.S.C. section 1344) requires a project applicant to obtain a permit before engaging in any activity that involves any discharge of dredged or fill material into waters of the United States, including wetlands. Fill material is material placed in waters of the United States where the material has the effect of replacing any portion of a water of the United States with dry land or changing the bottom elevation of any portion of a water of the United States. Waters of the United States include navigable waters of the United States; interstate waters; all other waters where the use, degradation, or destruction of the waters could affect interstate or foreign commerce; tributaries to any of these waters that are relatively permanent standing or continuously flowing bodies of water; and wetlands adjacent to and with a continuous surface connection to these waters. Wetlands are defined as those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Potentially jurisdictional wetlands must meet three wetland delineation criteria: hydrophytic vegetation, hydric soil types, and wetland hydrology. Wetlands that meet the delineation criteria may be jurisdictional under section 404 of the CWA pending US Army Corps of Engineers (USACE) verification.

#### Section 401 Water Quality Certification

Under section 401 of the CWA (33 U.S.C. section 1341), an applicant for a section 404 permit must obtain a certificate from the appropriate state agency stating that the intended dredging or filling activity is consistent with the state’s water quality standards and criteria. In California, the authority to grant water quality certification is delegated by the State Water Resources Control Board (SWRCB) to the regional water quality control boards (RWQCBs).

## STATE

#### Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act (Porter-Cologne Act, Chapter 368, Statutes of 1943), waters of the state fall under the jurisdiction of the appropriate RWQCB. RWQCBs must prepare and periodically update water quality control plans (basin plans). Each basin plan sets forth water quality standards for surface water and groundwater, as well as actions to control point and nonpoint sources of pollution to achieve and maintain these standards. The RWQCB’s jurisdiction includes federally protected waters, as well as areas that meet the definition of “waters of the state.” “Waters of the state” is defined as any surface water or groundwater, including saline waters, within the boundaries of the state. The RWQCB



has the discretion to take jurisdiction over areas not federally protected under section 401 of the CWA provided they meet the definition of waters of the state. Actions that affect waters of the state, including wetlands, must meet the RWQCB's waste discharge requirements.

#### State Water Resources Control Board Order WQ 20230102-DWQ

Attachment A (General Requirements and Prohibitions and Requirements Related to Water Diversions and Waste Discharge for Cannabis) of State Water Resources Control Board (SWRCB) Order WQ 2023-0102-DWQ, General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Wastes Associated with Cannabis Cultivation Activities, includes the following requirements (terms) for state-licensed cultivation sites that are associated with biological resources. The reader is referred to Section 3.10, "Hydrology and Water Quality," for requirements associated with protection of water quality and surface water flows.

#### General Requirements and Prohibitions:

1. Prior to commencing any cannabis cultivation activities, including cannabis cultivation land development or alteration, the cannabis cultivator shall comply with all applicable federal, state, and local laws, regulations, and permitting requirements, as applicable, including but not limited to the following:
  - The Clean Water Act (CWA) as implemented through permits, enforcement orders, and self-implementing requirements. When needed per the requirements of the CWA, the cannabis cultivator shall obtain a CWA section 404 (33 U.S.C. § 1344) permit from the United States Army Corps of Engineers (Army Corps) and a CWA section 401 (33 U.S.C. § 1341) water quality certification from the State Water Board or the Regional Water Board with jurisdiction. If the CWA permit cannot be obtained, the cannabis cultivator shall contact the appropriate Regional Water Board or State Water Board prior to commencing any cultivation activities. The Regional Water Board or State Water Board will determine if the cannabis cultivation activity and discharge is covered by the Requirements in the Policy and Cannabis General Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities (Cannabis General Order).
  - The California Water Code as implemented through applicable water quality control plans (often referred to as Basin Plans), waste discharge requirements (WDRs) or waivers of WDRs, enforcement orders, and self-implementing requirements issued by the State Water Resources Control Board (State Water Board) or Regional Water Quality Control Boards (Regional Water Boards).
  - All applicable state, city, county, or local regulations, ordinances, or license requirements including, but not limited to those for cannabis cultivation, grading, construction, and building.
  - All applicable requirements of the California Department of Fish and Wildlife (CDFW).
  - All applicable requirements of the California Department of Forestry and Fire Protection (CAL FIRE), including the Board of Forestry.
  - California Environmental Quality Act and the National Environmental Policy Act.

3. The cannabis cultivator shall apply for a Lake and Streambed Alteration Agreement (LSA Agreement) or consult with CDFW to determine if an LSA Agreement is needed prior to commencing any activity that may substantially:
  - divert or obstruct the natural flow of any river, stream, or lake;
  - change or use any material from the bed, channel, or bank of any river, stream, or lake; or
  - deposit debris, waste, or other materials that could pass into any river stream or lake.

“Any river, stream or lake,” as defined by CDFW, includes those that are episodic (they are dry for periods of time) as well as those that are perennial (they flow year round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water.
4. Cannabis cultivators shall not take any action which results in the taking of Special-Status Plants (state listed and California Native Plant Society 1B.1 and 1B.2), Fully Protected species (Fish and Game Code sections 3511, 4700, 5050, and 5515), or a threatened, endangered, or candidate species under either the California Endangered Species Act (ESA) (Fish & Game Code §§ 2050 et seq.) or the federal ESA (16 U.S.C. § 1531 et seq.). If a “take,” as defined by the California ESA (Fish and Game Code section 86) or the federal ESA (16 U.S.C. § 1532(21)), may result from any act authorized under this Policy, the cannabis cultivator must obtain authorization from CDFW, National Marine Fisheries Service, and United States Fish and Wildlife Service, as applicable, to incidentally take such species prior to land disturbance or operation associated with the cannabis cultivation activities. The cannabis cultivator is responsible for meeting all requirements under the California ESA and the federal ESA.
7. A California Licensed Timber Operator (LTO) shall be used if any commercial tree species are to be removed from the cannabis cultivation site. All timberland conversions shall be permitted and compliant with the Forest Practice Rules and CAL FIRE permitting requirements.
10. Prior to commencing any cannabis land development or site expansion activities the cannabis cultivator shall retain a qualified biologist to identify sensitive plant, wildlife species, or communities at the proposed development site. If sensitive plant, wildlife species, or communities are identified, the cannabis cultivator and Qualified Biologist shall consult with CDFW and CAL FIRE to designate a no-disturbance buffer to protect identified sensitive plant, wildlife species, and communities. A copy of the report shall be submitted to the appropriate Regional Water Board.
11. To prevent transfer of invasive species, all equipment used at the cannabis cultivation site, including excavators, graders, etc., shall be cleaned before arriving and before leaving the site.
30. In timberland areas, cannabis cultivators shall not remove commercial tree species or other vegetation within 150 feet of fish bearing water bodies or 100 feet of aquatic habitat for nonfish aquatic species (e.g., aquatic insects) prior to obtaining all applicable permits required from CAL FIRE, CDFW (i.e., LSA Agreement), and/or the Regional Water Board Executive Officer.

37. Cannabis cultivators shall comply with the minimum riparian setbacks described below n (EIR Table 3.5-1) for all land disturbance, cannabis cultivation activities, and facilities (e.g., material or vehicle storage, petroleum powered pump locations, water storage areas, and chemical toilet placement). The riparian setbacks shall be measured from the waterbody's bankfull stage (high flow water levels that occur every 1.5 to 2 years) or from the top edge of the waterbody bank in incised channels, whichever is more conservative. Riparian setbacks for springheads shall be measured from the springhead in all directions (circular buffer). Riparian setbacks for wetlands shall be measured from the edge of wetland as delineated by a qualified professional with experience implementing the Corps of Engineers Wetlands Delineation Manual (with regional supplements). The Regional Water Board Executive Officer may require additional riparian setbacks or additional requirements, as needed, to meet the performance requirement of protecting surface water from discharges that threaten water quality. If the cannabis cultivation site cannot be managed to protect water quality, the Executive Officer of the applicable Regional Water Board may revoke authorization for cannabis cultivation activities at the cannabis cultivation site:

**Table 3.5-1 Minimum Riparian Setbacks<sup>1,2</sup>**

Common Name	Watercourse Class <sup>3</sup>	Distance
Perennial watercourses, waterbodies (e.g., lakes, ponds), or springs <sup>4</sup>	I	150 ft.
Intermittent watercourses or wetlands	II	100 ft.
Ephemeral watercourses	III	50 ft.
Man-made irrigation canals, water supply reservoirs, or hydroelectric canals that support native aquatic species	IV	Established Riparian Vegetation Zone
All other man-made irrigation canals, water supply reservoirs, or hydroelectric canals	IV	N/A

<sup>1</sup>. A Regional Water Board may adopt site-specific WDRs or an enforcement order for a commercial cannabis cultivator with requirements that are inconsistent with the setbacks in this table if the Executive Officer determines that the site-specific WDRs or enforcement order contains sufficient requirements to be protective of water quality.

<sup>2</sup>. Commercial cannabis cultivators enrolled in a Regional Water Board order adopting WDRs or a waiver of WDRs for commercial cannabis cultivation activities prior to October 17, 2017, may retain reduced setbacks applicable under that Regional Water Board order unless the Regional Water Board's Executive Officer determines that the reduced setbacks applicable under that order are not protective of water quality.

<sup>3</sup>. Except where more restrictive, the stream class designations are equivalent to the Forest Practice Rules Water Course and Lake Protection Zone definitions (California Code of Regulations, title 14, Chapter 4. Forest Practice Rules, Subchapters 4, 5, and 6 Forest District Rules, Article 6 Water Course and Lake Protection).

<sup>4</sup>. Spring riparian setbacks default to the applicable watercourse riparian setback 150 feet downstream and/or upstream of the spring's confluence with the watercourse or 150 feet downstream of the point where the spring forms a watercourse with defined bed and banks.

### Requirements Related to Water Diversions and Waste Discharge for Cannabis:

63. Cannabis cultivators shall not disturb aquatic or riparian habitat, such as pools, spawning sites, large wood, or shading vegetation unless authorized under a CWA section 404 permit, CWA section 401 certification, Regional Water Board WDRs (when applicable), or a CDFW LSA Agreement.

64. Cannabis cultivators shall maintain existing, naturally occurring, riparian vegetative cover (e.g., trees, shrubs, and grasses) in aquatic habitat areas to the maximum extent possible to maintain riparian areas for streambank stabilization, erosion control, stream shading and

temperature control, sediment and chemical filtration, aquatic life support, wildlife support, and to minimize waste discharge.

### California Endangered Species Act

Pursuant to the California Endangered Species Act (CESA, Fish and Game Code section 2050 et seq.), a permit from CDFW is required for projects that could result in the “take” of a plant or animal species that is listed by the state as threatened or endangered. Under CESA, “take” is defined as an activity that would directly or indirectly kill an individual of a species but, unlike the federal definition, does not include “harm” or “harass.” As a result, the threshold for take is higher under CESA than under the federal ESA. Authorization for take of state-listed species can be obtained through a Fish and Game Code section 2081 Incidental Take Permit.

### Fish and Game Code Sections 3503 and 3503.5—Protection of Bird Nests and Raptors

Section 3503 of the Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 of the Fish and Game Code states that it is unlawful to take, possess, or destroy any raptors (i.e., species in the orders Falconiformes and Strigiformes), including their nests or eggs. Typical violations include destruction of active nests as a result of tree removal or disturbance caused by project construction or other activities that cause the adults to abandon the nest, resulting in loss of eggs and/or young.

### Fully Protected Species under the Fish and Game Code

Protection of fully protected species is described in sections 3511, 4700, 5050, and 5515 of the Fish and Game Code. These statutes prohibit take or possession of fully protected species and do not provide for authorization of incidental take, except under specific conditions. The Fish and Game Code allows CDFW to authorize incidental take of fully protected species for State Water Project projects, regional or local water agency infrastructure (other than the Delta conveyance project and desalination project), certain transportation-related projects, such as wildlife crossings, and wind and solar photovoltaic projects, provided that the project avoids, minimizes, or mitigates impacts on these species.

### Fish and Game Code Section 1602—Streambed Alteration

All diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California that supports wildlife resources are subject to regulation by CDFW under section 1602 of the Fish and Game Code. Under section 1602 of the Fish and Game Code, it is unlawful for any person, governmental agency, or public utility to do the following without first notifying CDFW:

- ▶ substantially divert or obstruct the natural flow of, or substantially change or use any material from, the bed, channel, or bank of any river, stream, or lake, or
- ▶ deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

The regulatory definition of a stream is a body of water that flows at least periodically or intermittently through a bed or channel that has banks and supports fish or other aquatic life. This definition includes watercourses with a surface or subsurface flow that supports or has supported riparian vegetation. CDFW’s jurisdiction within altered or artificial waterways is based on the value of those waterways to fish and wildlife. A CDFW streambed alteration agreement must be obtained for any action that would result in an impact on a river, stream, or lake.

### Native Plant Protection Act

The Native Plant Protection Act (NPPA) (Fish and Game Code section 1900 et seq.) allows the California Fish and Game Commission to designate plants as rare or endangered. The act prohibits take of endangered or rare native plants but includes exceptions for agricultural and nursery operations; for emergencies; and, after proper notification of California Department of Fish and Wildlife (CDFW), for vegetation removal from canals, roads, and other building sites, changes in land use, and other situations. CDFW and California Native Plant Society (CNPS) jointly manage the Rare Plant Status Review groups, which consist of over 300 botanical experts from government agencies, academia, nonprofit organizations, and the private sector. The Rare Plant Status Review groups evaluate plant taxa rarity using NatureServe's element ranking methodology, which uses standardized ranking criteria and definitions, making ranks comparable across organisms and political boundaries. The methodology uses a rank calculator to increase repeatability and transparency of the process. Detailed information on the current element ranking methodology can be found at <https://www.natureserve.org/conservation-status-assessment>. Designating plants with a California Rare Plant Ranks (CRPRs) is part of this process and are defined as follows:

- ▶ **CRPR 1A:** Presumed Extirpated or Extinct – plants presumed extirpated in California and either rare or extinct elsewhere.
- ▶ **CRPR 1B:** Rare or Endangered – plants rare, threatened, or endangered in California and elsewhere. **CRPR 2A:** Extirpated in California – plants presumed extirpated in California but common elsewhere.
- ▶ **CRPR 2B:** Rare or Endangered in California – plants rare, threatened, or endangered in California but common elsewhere.

### CRPR threat ranks:

- ▶ **0.1:** Seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat).
- ▶ **0.2:** Moderately threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat).
- ▶ **0.3:** Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known).

### Oak Woodlands Conservation Act

The Oak Woodlands Conservation Act (Senate Bill 1334, Chapter 732, Statutes of 2004) requires counties to determine whether implementation of a project within their jurisdiction may result in a conversion of oak woodlands that would have a significant adverse effect on the environment (Public Resources Code (PRC) section 21083.4). If the County determines that implementing a project would result in a significant adverse effect on oak woodlands, mitigation measures to reduce the significant adverse effect of converting oak woodlands to other land uses are required.

## LOCAL

### Mendocino County General Plan

The Resource Management Element of the Mendocino County General Plan contains the following policies related to biological resources that are relevant to the project (Mendocino County 2021):

- ▶ **Policy RM-24:** Protect the County's natural landscapes by restricting conversion and fragmentation of timberlands, oak woodlands, stream corridors, farmlands, and other natural environments.
- ▶ **Policy RM-25:** Prevent fragmentation and loss of our oak woodlands, forests, and wildlands and preserve the economic and ecological values and benefits.
- ▶ **Policy RM-26:** Protect, use, and manage the County's farmlands, forests, water, air, soils, energy, and other natural resources in an environmentally sound and sustainable manner.
- ▶ **Policy RM-27:** Conserve, restore and enhance natural resources, sensitive environments, and ecological integrity.
- ▶ **Policy RM-28:** All discretionary public and private projects that identify special-status species in a biological resources evaluation (where natural conditions of the site suggest the potential presence of special-status species) shall avoid impacts to special-status species and their habitat, to the maximum extent feasible. Where impacts cannot be avoided, projects shall include the implementation of site-specific or project-specific effective mitigation strategies developed by a qualified professional in consultation with state or federal resource agencies with jurisdiction (if applicable) including, but not limited to, the following strategies:
  - Preservation of habitat and connectivity of adequate size, quality, and configuration to support the special-status species. Connectivity shall be determined based on the specifics of the species' needs.
  - Provision of supplemental planting and maintenance of grasses, shrubs, and trees of similar quality and quantity to provide adequate vegetation cover to enhance water quality, minimize sedimentation and soil transport, and provide adequate shelter and food for wildlife.
  - Provide protection for habitat and the known locations of special-status species through adequate buffering or other means.
  - Provide replacement habitat of like quantity and quality on- or off-site for special-status species.
  - Enhance existing special-status species habitat values through restoration and replanting of native plant species.
  - Provision of temporary or permanent buffers of adequate size (based on the specifics of the special-status species) to avoid nest abandonment by nesting migratory birds and raptors associated with construction and site development activities.
  - Incorporation of the provisions or demonstration of compliance with applicable recovery plans for federally listed species.
- ▶ **Policy RM-29:** All public and private discretionary projects shall avoid impacts to wetlands if feasible. If avoidance is not feasible, projects shall achieve no net loss of wetlands, consistent with state and federal regulations.
- ▶ **Policy RM-30:** Individual development projects and conversions from rangeland to intensive agriculture should retain movement corridor(s) adequate (both in size and in habitat quality) to allow for continued wildlife use based on the species anticipated to use the corridor and maintain compatibility with adjacent uses.

- ▶ **Policy RM-31:** For the purposes of implementing this General Plan, the County defines “special status species” and “sensitive biotic communities” to include all species and habitat identified as such by the California Department of Fish and Game, U.S. Fish and Wildlife Service, or NOAA Fisheries.
- ▶ **Policy RM-32:** Use conservation and open space easements, growth boundaries, tax incentives, and other tools to:
  - Protect, restore, and enhance significant resource values.
  - Reduce premature conversion of resource lands in and around community areas.
  - Provide linkages between natural resource areas.
- ▶ **Policy RM-34:** Protect and enhance watershed ecosystems by supporting and integrating local, state, and federal requirements avoiding regulatory duplication.
- ▶ **Policy RM-74:** Promote land uses and management practices that protect biological diversity and productivity.
- ▶ **Policy RM-75:** New development shall protect sensitive environments and resource corridors while maintaining compatibility with adjacent uses.
- ▶ **Policy RM-76:** The design of new development should emphasize avoiding sensitive resources and environments rather than their removal and replacement.
- ▶ **Policy RM-77:** Discretionary development shall be designed or conditioned to achieve no net loss of sensitive resources.
- ▶ **Policy RM-78:** Protection of existing sensitive resources is the highest priority. Onsite replacement or offsite replacement, protection, or enhancement is less desirable.
- ▶ **Policy RM-79:** Limit land use density and intensity within and adjacent to critical wildlife habitats, such as wetlands, deer wintering range, old-growth forests, and riparian corridors.
- ▶ **Policy RM-80:** Maintain resource diversity and integrity by protecting and enhancing continuous resource corridors compatible with adjacent uses through project design.
- ▶ **Policy RM-81:** Conserve native vegetation, critical habitats, and soil resources through education, technical and financial assistance, cooperative endeavors, best management practices, and soils and vegetation management plans for development and resource uses.
- ▶ **Policy RM-82:** Encourage farmers, landowners, and property managers to protect sensitive environments, and minimize the effects of recreation, tourism, agriculture, and development on these resources. Promote techniques and features such as:
  - Habitat contiguity,
  - Wildlife corridors,
  - Maintaining compatibility with adjacent uses,
  - Maintaining habitat for sensitive plant and animal species.
- ▶ **Policy RM-84:** Vegetation management and landscaping for public and private development should emphasize the protection and continuity of natural habitats and hydrology.
- ▶ **Policy RM-85:** Promote the conservation and use of native species or drought-tolerant, fire-resistive, and noninvasive vegetation.

- ▶ **Policy RM-86:** In rural areas, promote vegetation and landscape management programs that protect wildlife and livestock habitat, discourage pest species and non-native species, reduce wildfire risk, and conserve water resources.
- ▶ **Policy RM-87:** Protect “pygmy” ecosystems (“pygmy” and “transitional pygmy” vegetation and soils) through the use of measures that include minimizing:
  - Vegetation removal,
  - Disruption of vegetation continuity, and
  - The introduction of water and nutrients due to human activity, sewage disposal systems, animals or agricultural uses.
  - Also: Limit subdivision of land on agricultural lands adjacent to “pygmy” ecosystems, and
  - Promote best management practices to minimize impacts.
- ▶ **Policy RM-88:** Conserve and replant oak woodlands and stands of native oaks in community areas and developments. Protect oak woodlands in other areas through limitations on density and clustering.
- ▶ **Policy RM-89:** Maintain and enhance the urban tree canopy, which creates a sense of open space.
- ▶ **Policy RM-90:** Conserve the County’s hillside vegetation (consistent with fire safety standards) by incorporating density transfers, clustering, small building sites, shared improvements, and other measures that:
  - Are compatible with the natural terrain and hydrology.
  - Conserve continuous critical habitats, oak woodlands, and natural vegetation.
  - Minimize visual impacts.
- ▶ **Policy RM-92:** Conserve and enhance watercourses to protect habitat, fisheries, soils, and water quality.
- ▶ **Policy RM-93:** Conserve and enhance streamside (riparian) vegetation through development design and standards.
- ▶ **Policy RM-94:** Stream restoration and maintenance programs shall conserve riparian vegetation and the floodwater carrying capacity of river and stream channels.
- ▶ **Policy RM-95:** Whenever possible, use riparian vegetation in conjunction with natural or appropriate structural materials to achieve a natural appearance.
- ▶ **Policy RM-96:** Encourage public agencies and private property owners to protect fishery habitat and participate in fishery enhancement projects (including removal of barriers to fish passage) for coastal and inland waterways of Mendocino County.
- ▶ **Policy RM-97:** Support instream flows adequate to maintain and protect fisheries and beneficial uses.
- ▶ **Policy RM-99:** Support the restoration of spawning and nursery habitat in all salmonid-bearing streams and rivers.



### Ukiah Valley Area Plan

The Open Space and Conservation Element of the Ukiah Valley Area Plan contains the following policies related to biological resources that are relevant to the project (Mendocino County 2011):

- ▶ **Policy OC 1.1:** Protect the river corridor and riparian habitat while accommodating responsible development.
- ▶ **Policy OC1.2:** Protect and maintain the Russian River Corridor channel elevation and banks.
- ▶ **Policy OC1.3:** Enhance the fisheries in the Russian River and its tributaries within the Ukiah Valley.
- ▶ **Policy OC1.4:** Managing and maintaining gravel levels in the Russian River is essential to prevent bed down cutting and lowering of the water table.
- ▶ **Policy OC2.1:** Prioritize open space resources with targeted conservation and restoration efforts.
- ▶ **Policy OC2.2:** Protect natural resources while providing opportunities for compatible development.
- ▶ **Policy OC2.3:** Preserve and restore native oak woodland and hillside habitats.

### Brooktrails Township Specific Plan

The Environmental Resources Element of the Brooktrails Township Specific Plan contains the following policies related to biological resources that are relevant to the project (Mendocino County 2002):

- ▶ **Vegetation and Wildlife Policy ER-6.3-1A:** Protect and enhance botanical resources including native plants, trees, and wildflowers.
- ▶ **Vegetation and Wildlife Policy ER-6.3-1B:** Promote the protection of rare and unique vegetation through appropriate management prescriptions.
- ▶ **Vegetation and Wildlife Policy ER-6.3-1C:** Establish a Brooktrails subdivision-wide tree cutting policy. Trees shall not be harvested for the primary purpose of obtaining revenue.
- ▶ **Vegetation and Wildlife Policy ER-6.3-1D:** Encourage native landscaping within the Township and the use of flowering native plants and wild flowers in landscaping. Discourage the introduction of non-native plant species.
- ▶ **Vegetation and Wildlife Policy ER-6.3-1F:** Protect and enhance parklands and their biological diversity.
- ▶ **Vegetation and Wildlife Policy ER-6.3-2A:** Manage the deer population to be in balance with the ecosystem. Discourage feeding of all wild animals by residents and visitors by education.
- ▶ **Vegetation and Wildlife Policy ER-6.3-2B:** Provide protection for any animal species officially listed on the State and Federal Rare and Endangered Species Lists.
- ▶ **Vegetation and Wildlife Policy ER-6.3-2C:** Minimize the impact of domestic animals on native wildlife.

- ▶ **Vegetation and Wildlife Policy ER-6.3-2D:** Encourage the re-establishment and maintenance of a healthy salmon and steelhead population and spawning environment within the Township waterways. Improve the bass population in Township lakes.
- ▶ **Vegetation and Wildlife Policy ER-6.3-2E:** Encourage the preservation and enhancement of Beeler Pond as a neighborhood ecological park, and ensure the maintenance of small pond biological life.

### Mendocino County Cannabis Regulation

The Mendocino County Cannabis Regulation (MCCR) contains the following requirements related to biological resources:

#### Section 10A.17.040

The following limitations shall apply to all cultivation of cannabis in Mendocino County, including but not limited to cultivation pursuant to a Permit issued under this Chapter or an exemption provided for Section 10A.17.030. Cultivation of cannabis shall also be subject to all applicable restrictions of Mendocino County Code Chapter 20.242.

- (G) All cultivation of cannabis shall not utilize water that has been or is illegally diverted from any spring, wetland, stream, creek, or river. The activities associated with the cultivation of cannabis shall not create erosion or result in contaminated runoff into any stream, creek, river or body of water.
- (K) Prohibition of Tree Removal. Removal of any commercial tree species as defined by Title 14 California Code of Regulations section 895.1, Commercial Species for the Coast Forest District and Northern Forest District, and the removal of any true oak species (*Quercus* sp.) or Tan Oak (*Notholithocarpus* sp.) for the purpose of developing a cannabis cultivation site is prohibited. This prohibition shall not include the pruning of any such trees for maintenance, or the removal of such trees if necessary to address safety or disease concerns. For purposes of this section 10A.17.040(K), “for the purpose of developing a cultivation site” shall mean the alteration, grading, removal, or other development of land to create, or expand, a cultivation site, as that term is defined in Section 10A.17.020.

#### Section 10A.17.070

Unless specifically exempted, in addition to compliance with all other requirements of this Chapter, all CCBL Holder’s shall comply with the requirements of this section.

- (F) Generators. The indoor or mixed-light cultivation of cannabis shall not rely on a generator as a primary source of power.
  - (1) If no grid power source is available and there is not an alternative power source supporting both any required legal dwelling unit and the indoor or mixed-light CCBL operations, a generator may be used only under the following conditions: (1) the CCBL Holder shall install an alternative power source that will meet at least one-half (½) of the combined power requirements by the expiration of four (4) years from the date of initial application for a CCBL pursuant to this Chapter and (2) it will be a condition of the renewal of a CCBL at the end of such four (4) year period that the commercial cannabis cultivator commit, in writing, to expand their alternative power source to fully meet the combined needs of the commercial cannabis cultivation operations and any required legal dwelling unit within two years. If a generator is being used pursuant to the conditions set forth in this paragraph, CCBL Holder shall have conducted an analysis of the noise levels produced by the generator at full operational speed, showing

compliance with Mendocino County General Plan Policies DE100, 101 and 103. This analysis shall be performed by an accredited acoustical engineer or using some other mechanism or device as provided for on a list to be prepared and published by the Department. All generators shall be, at a minimum, equipped with the manufacturer's specified muffler; if compliance with Policies DE100, 101 and 103 requires additional measures, the generator shall be equipped with such measures, which may include a hospital grade muffler and/or a structure to enclose the generator designed for sound suppression.

- (2) If a generator is used to support any aspect of a commercial cannabis cultivation operation with a CCBL, (excluding the conditions set forth in paragraph (1) above), it shall be as a secondary or back-up power source. The use of the generator shall only be allowed when the primary alternative power source is unable to provide its normal output and generate sufficient power to meet the needs of the commercial cannabis cultivation operation and the legal dwelling unit. The Owner's Manual and/or Operation Manual (or operational fact sheet) providing the operational characteristics and maintenance schedule for the generator shall be on-site and available for review.
  - (3) Any electrical wiring associated with the generator shall be of sufficient capacity and installed in such a way as to provide for the minimum installation and safety standards for the electrical service provided by that generator.
  - (4) See also section 10A.17.090 regarding application requirements related to generators.
- (I) North Coast Regional Water Quality Control Board (NCRWQCB).
- (1) CCBL Holders shall establish and maintain enrollment in Tier 1, 2 or 3 with NCRWQCB Order No. 2015-0023, if applicable, or any superseding or substantially equivalent rule that may be subsequently adopted by the NCRWQCB, the County of Mendocino or other responsible agency, or shall obtain proof of exemption from said Order.
  - (2) For cultivation areas for which no enrollment pursuant to NCRWQCB Order No. 2015-0023 is required, the site shall comply with the standard conditions set forth in that Order, as well as the applicable "Best Management Practices for Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effects" as presented in Appendix B of the Order, or any superseding or substantially equivalent rule that may be subsequently adopted by the NCRWQCB, the County of Mendocino or other responsible agency
- (J) If any on-site or off-site component of the cultivation facility, including access roads, water supply, grading or terracing, impacts the bed or bank of any stream or other watercourse, the CCBL Holder shall have notified the CDFW pursuant to section 1602 of the Fish and Game Code and shall obtain all relevant approvals or authorizations as may be required by CDFW prior to commencing commercial cannabis cultivation.
- (K) For cannabis cultivation sites that involve construction or other work in waters of the United States that are not otherwise exempt or excluded, including streams and wetlands, CCBL Holders shall obtain a Clean Water Act (CWA) section 404 permit from the Army Corps of Engineers and a CWA section 401 water quality certification from the NCRWQCB prior to commencing such construction, unless otherwise allowed by the relevant agencies.
- (L) For projects that disturb one (1) or more acres of soil or projects that disturb less than one (1) acre but that are part of a larger common plan of development that in total disturbs one or more acres, CCBL Holders shall obtain coverage as may be required under the State

Water Resources Control Board (SWRCB) General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009-0009-DWQ, or any superseding, substantially equivalent or additional rule applicable to such activities that may be subsequently adopted by the SWRCB or other responsible agency.

Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility.

- (Q) Any use of pesticide products shall be consistent with State law and regulations enforced by the California Department of Pesticide Regulation and the Agricultural Commissioner's Office. All agricultural use pesticides and concentrated fertilizers, amendments, and similar materials shall be stored in a locked, hard-faced enclosure to prevent unauthorized entry by humans, to exclude large animals that may be attracted by odors, and to ensure that they will not enter or be released into surface or ground waters.

#### Section 10A.17.080

Unless specifically exempted, in addition to compliance with all other requirements of this Chapter, all CCBL's shall comply with the following requirements:

#### (B) Requirements specific to Phase One CCBL's.

- (3) Relocation. Persons able to show proof of prior cultivation pursuant to paragraph (B)(1) above may apply for a CCBL not on the site previously cultivated (the "origin site") but on a different legal parcel (the "destination site"), subject to the following requirements:
- (c) The origin site shall be restored. The application for a CCBL on a destination site shall be accompanied by a restoration plan that is consistent with the standard conditions and best management practices listed in the North Coast Regional Water Quality Control Board Order No. 2015-0023, and which shall include the following:
- (i) Remove or repurpose buildings, greenhouses, fences, irrigation equipment, water intakes, pumps, storage tanks and other materials brought to the origin site for the purpose of cannabis cultivation;
  - (ii) Remove illegal dams, ponds or other in-stream water storage to restore natural stream flows, unless such features will continue in use;
  - (iii) Remove or compost agricultural wastes;
  - (iv) Remove trash and other debris; and
  - (v) Revegetate cleared areas with native plants typical of nearby natural areas, including groundcover, shrubs and trees.

#### (C) Requirements specific to Phase One CCBL's.

- (1) Watershed Assessment. All CCBL applications, except for legal parcels located in the Agricultural (A-G) zoning district, shall demonstrate there is adequate water to serve the cultivation site.
- (a) If surface water (or groundwater influenced by surface water) will be used, applicants may demonstrate that there is adequate water by providing
- (i) a watershed assessment that establishes there is sufficient watershed supply to serve the proposed cultivation site and existing uses within the watershed, and
  - (ii) a water right exists to serve the cultivation site. A watershed assessment shall consist of an established "In Stream Flow Policy" as prepared by the State Water

Resources Control Board Division of Water Rights or an equivalent document approved by that agency.

#### Section 10A.17.090

Any person or entity that wishes to engage in the cultivation of cannabis shall submit an application for a CCBL to the Department. Applications for CCBL's shall be made upon such forms and accompanied by such plans and documents as may be prescribed by the Department. The application shall be reviewed by the Department and other agencies as described herein and renewed annually. Any referral to or consultation with an agency other than the County of Mendocino shall state that a response must be returned within thirty (30) days of the date of the referral.

Following the submission of an application for a Phase One CCBL, an applicant may file with the Department, on a form prescribed by the Department, a Notice of Application Stay for the purpose of preventing the denial of an application for a Phase One CCBL based on inactivity by the applicant for up to a one (1) year period. An applicant may only file a Notice of Application Stay one (1) time. Nothing in this paragraph is intended to prevent the County or the applicant the ability to continue processing or perfecting the application. During the time period of this Application Stay, the applicant shall be prohibited from cultivating cannabis in excess of the limitations of paragraph (B) or (C) of section 10A.17.030 and shall allow the County to make and shall pay the reasonable costs for an inspection of the applicant's commercial cannabis cultivation site (and origin site if the application involves a relocation) to confirm compliance with this paragraph; violation of this prohibition shall be a violation of County Code, subject to administrative penalties, and shall be cause for immediate denial of the permit application. Any denial of an application may be followed by nuisance abatement procedures. During the time period of the Application Stay, the applicant shall remain subject to all code enforcement provisions as identified in section 10A.17.100.

The Department shall refer each application to the Department of Planning and Building Services for a determination pursuant to Chapter 20.242 as to what type of clearance or permit is required. No application for a CCBL shall be approved without clearance or final permit approval as required by Chapter 20.242.

Applicants for a CCBL shall provide the following information on, or as an attachment to, the application:

- (E) A cannabis cultivation and operations plan which includes elements that meet or exceed the minimum legal standards for the following: water storage, conservation and use; drainage, runoff and erosion control; watershed and habitat protection; and proper storage of fertilizers, pesticides and other regulated products to be used on the legal parcel. The plan will also provide a description of commercial cannabis cultivation activities including, but not limited to, permit type, commercial cannabis cultivation area, soil/media importation and management, the approximate date(s) of all commercial cannabis cultivation activities that have been conducted on the legal parcel prior to the effective date of this ordinance, and schedule of activities during each month of the growing and harvesting season. The commercial cannabis cultivation and operations plan shall also include the following:
  - (2) If a generator is proposed to support any aspect of the commercial cannabis cultivation site or related operations, the commercial cannabis cultivation and operations plan shall identify any containment structure and dimensions necessary to contain any leak or spill that may develop or occur as a result of relying on any generator for backup power generation. The plan shall also include a maintenance plan for the generator, detailing

how spent oil, used oil filters, expired batteries and other hazardous wastes generated from the operation of the generator will be handled, including fuel storage and delivery systems.

- (3) Any fuel, fertilizer, pesticides, or other substance toxic to wildlife, children, or pets, must be stored in a secured and locked structure or device.

#### Section 10A.17.100

Unless specifically exempted, in addition to compliance with all other requirements of this Chapter, all CCBL's shall comply with the following requirements:

(A) The Department shall issue a CCBL pursuant to this Chapter only:

- (2) Following review by qualified County staff to review proposed permit locations and identify where habitat suitable for sensitive species may exist. The County shall consult with the California Department of Fish and Wildlife ("CDFW") to evaluate if there is a possibility for presence or habitat suitable for sensitive species on the parcel with a proposed CCBL location. Upon consultation, CDFW may recommend approval of the proposed development, ask to conduct a site inspection or request additional studies in order to make the determination that no impacts to sensitive species will occur. A cultivator that cannot demonstrate that there will be a less than significant impact to sensitive species will not be issued a CCBL. The County shall develop a policy in consultation with CDFW to define an objective set of criteria that applications can be checked against and when during Phases 1 and 2 a formal referral to CDFW is required to avoid impacts to sensitive species and natural communities. Following the development of the policy referred to in the previous sentence, consultation with CDFW shall not be required but be performed pursuant to the policy. During Phase 3 all applications will be referred to CDFW.

### 3.5.2 Environmental Setting

This environmental setting section contains information of the following existing biological resources:

- ▶ land cover types and associated biological habitat uses,
- ▶ special-status species,
- ▶ critical habitat,
- ▶ sensitive natural communities,
- ▶ invasive plant species and noxious weeds,
- ▶ aquatic habitats,
- ▶ cannabis priority watersheds,
- ▶ wildlife movement corridors,
- ▶ native wildlife nursery sites,
- ▶ habitat conservation plans,
- ▶ existing stressors on biological resources in Mendocino County, and
- ▶ projected alteration of habitat conditions attributable to climate change.

## LAND COVER TYPES

Land cover types in Mendocino County are summarized in Table 3.5-2 and Figures 3.5-1 through 3.5-5 (Aerial Information Systems 2007; Keeler-Wolf et al. 2019; Buck-Diaz et al. 2020; US Forest Service 2023; USFWS 2023). Approximately 27 percent (599,508 acres) of the County contains montane hardwood habitat, approximately 18 percent (409,759 acres) contains redwood (*Sequoia sempervirens*) habitat, 17 percent (379,130 acres) contains montane hardwood-conifer habitat, and more than 10 percent (235,594 acres) contains annual grasslands habitat. The County contains a significant amount of late-successional (i.e., forest with multilayered tree canopy, large-diameter trees, complex understory, and coarse woody debris) and old-growth forest (i.e., forest usually 180–220 years old with large trees, large snags, and complex structure that has not undergone significant disturbance; Figure 3.5-6). Total acreages of each habitat type are presented in Table 3.5-2, and land cover types are described below in order of abundance (CDFW 2023; USFWS 2023).

### Montane Hardwood

Montane hardwood habitats in Mendocino County are dominated by broad-leaved hardwood tree species, primarily canyon live oak (*Quercus chrysolepis*) on canyon slopes and huckleberry oak (*Quercus vacciniifolia*) at higher elevations. Other species associated with montane hardwood habitat include white fir (*Abies concolor*), Jeffrey pine (*Pinus jeffreyi*), Douglas fir (*Pseudotsuga menziesii*), tanoak (*Notholithocarpus densiflorus*), Pacific madrone (*Arbutus menziesii*), California bay (*Umbellularia californica*), black oak (*Quercus kelloggii*), knobcone pine (*Pinus attenuata*), foothill pine (*Pinus sabiniana*), and Oregon white oak (*Quercus garryana*). Montane hardwood habitat in Mendocino County is widespread and intergrades with habitats including redwood, montane hardwood-conifer, and Douglas fir in the County (Figure 3.5-2). Wildlife species that use acorns as a primary food source include Steller's jay (*Cyanocitta stelleri*), acorn woodpecker (*Melanerpes formicivorus*), California quail (*Callipepla californica*), western gray squirrel (*Sciurus griseus*), black bear (*Ursus americanus*), and mule deer (*Odocoileus hemionus*).

### Redwood

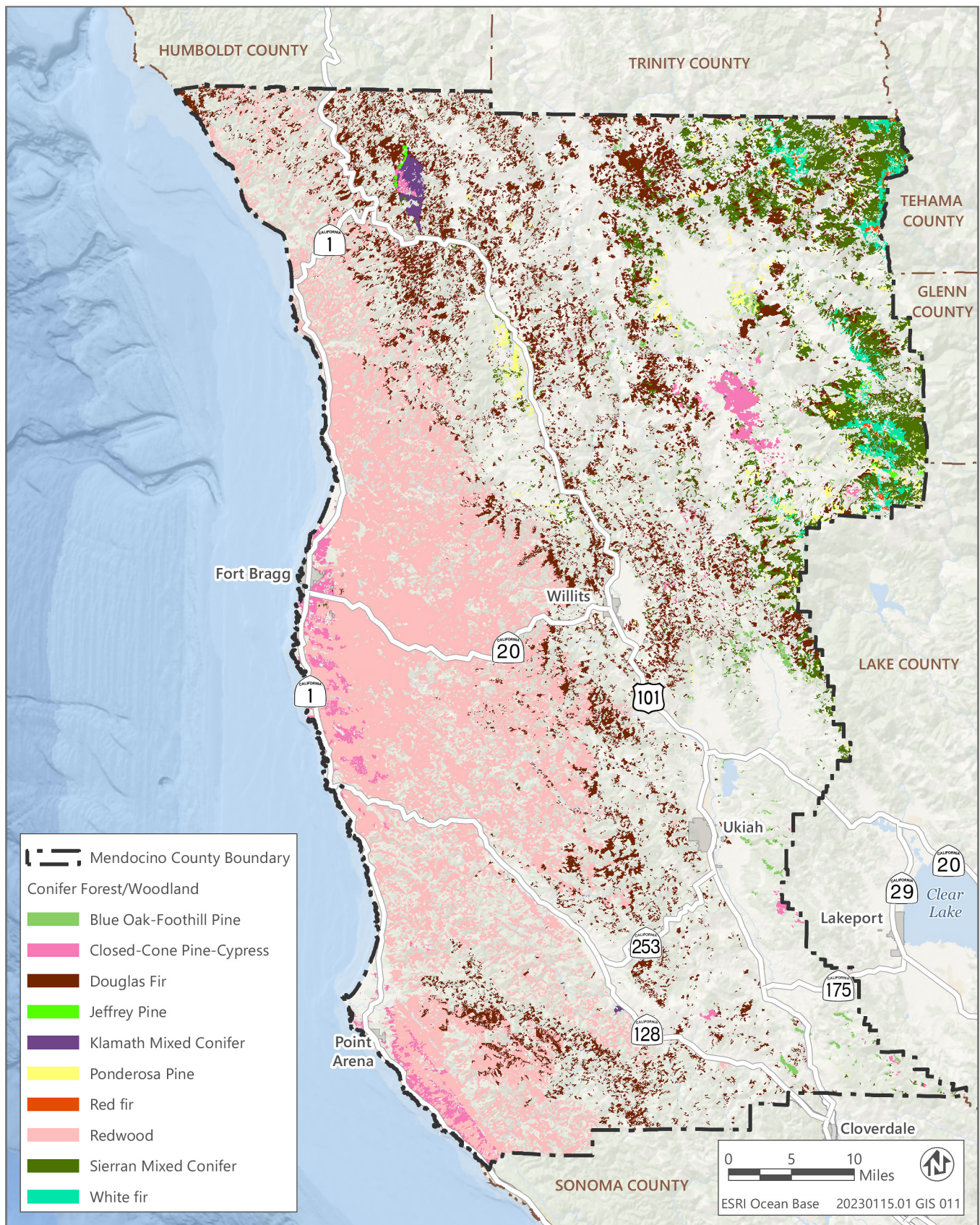
Redwood habitat is typically associated with coastal environments and usually occurs within approximately 30 miles of the coast (Figure 3.5-1). In addition to redwood, species in this habitat include Sitka spruce (*Picea sitchensis*), grand fir (*Abies grandis*), red alder (*Alnus rubra*), and Douglas fir. In more interior areas, redwood is also associated with tanoak and Pacific madrone. Understory species in redwood forests often include sword fern (*Polystichum californicum*), deer fern (*Blechnum spicant*), chainfern (*Woodwardia fimbriata*), coast rhododendron (*Rhododendron macrophyllum*), huckleberry (*Vaccinium* spp.), oceanspray (*Holodiscus discolor*), salmonberry (*Rubus spectabilis*), poison oak (*Toxicodendron diversilobum*), and western thimbleberry (*Rubus parviflorus*). Old-growth redwood forests are one of the signature features of Mendocino County. Figure 3.5-6 illustrates old-growth and late-successional habitat (including old-growth redwood) in Mendocino County. Old-growth redwood habitat in Mendocino County is partly on publicly owned land, including US Forest Service land in northeast Mendocino County and land owned by nonprofit conservancies and trusts, including land east of Fort Bragg and east of Point Arena. Although there are concentrated pockets of old-growth habitat, this habitat type occurs throughout the County (Figure 3.5-6). Many wildlife species can be found in redwood forest habitat, and several species, such as marbled murrelet (*Brachyramphus marmoratus*), northern red-legged frog (*Rana aurora*), and Ensatina salamanders (*Ensatina eschscholtzii*), prefer or depend almost entirely on redwood forests.

**Table 3.5-2 Land Cover Types in Mendocino County**

<b>Habitat Type</b>	<b>Size (acres)</b>
Montane Hardwood	599,508
Redwood	409,759
Montane Hardwood-Conifer	379,130
Annual Grassland	235,594
Douglas Fir	206,845
Sierran Mixed Conifer	87,487
Mixed Chaparral	76,392
Closed-Cone Pine-Cypress	33,348
Chamise-Redshank Chaparral	32,764
Cropland	30,727
Pasture	24,816
Riverine	24,442
Barren	16,604
White Fir	13,173
Ponderosa Pine	12,509
Coastal Scrub	11,753
Fresh Emergent Wetland (Including Freshwater Forested/Shrub Wetland and Freshwater Pond)	11,367
Montane Chaparral	10,558
Blue Oak Woodland	9,762
Blue Oak-Foothill Pine	7,829
Perennial Grassland	6,270
Coastal Oak Woodland	6,042
Urban	5,913
Montane Riparian	5,269
Klamath Mixed Conifer	4,174
Valley Oak Woodland	3,744
Lacustrine	2,742
Jeffrey Pine	1,490
Red Fir	1,303
Saline Emergent Wetland (Estuarine and Marine Wetland)	1,250
Vineyard	568
Wet Meadow	398
Valley Foothill Riparian	375
Marine (Estuarine and Marine Deepwater)	331
Alpine Dwarf-Shrub	186
Eucalyptus	60
Deciduous Orchard	13

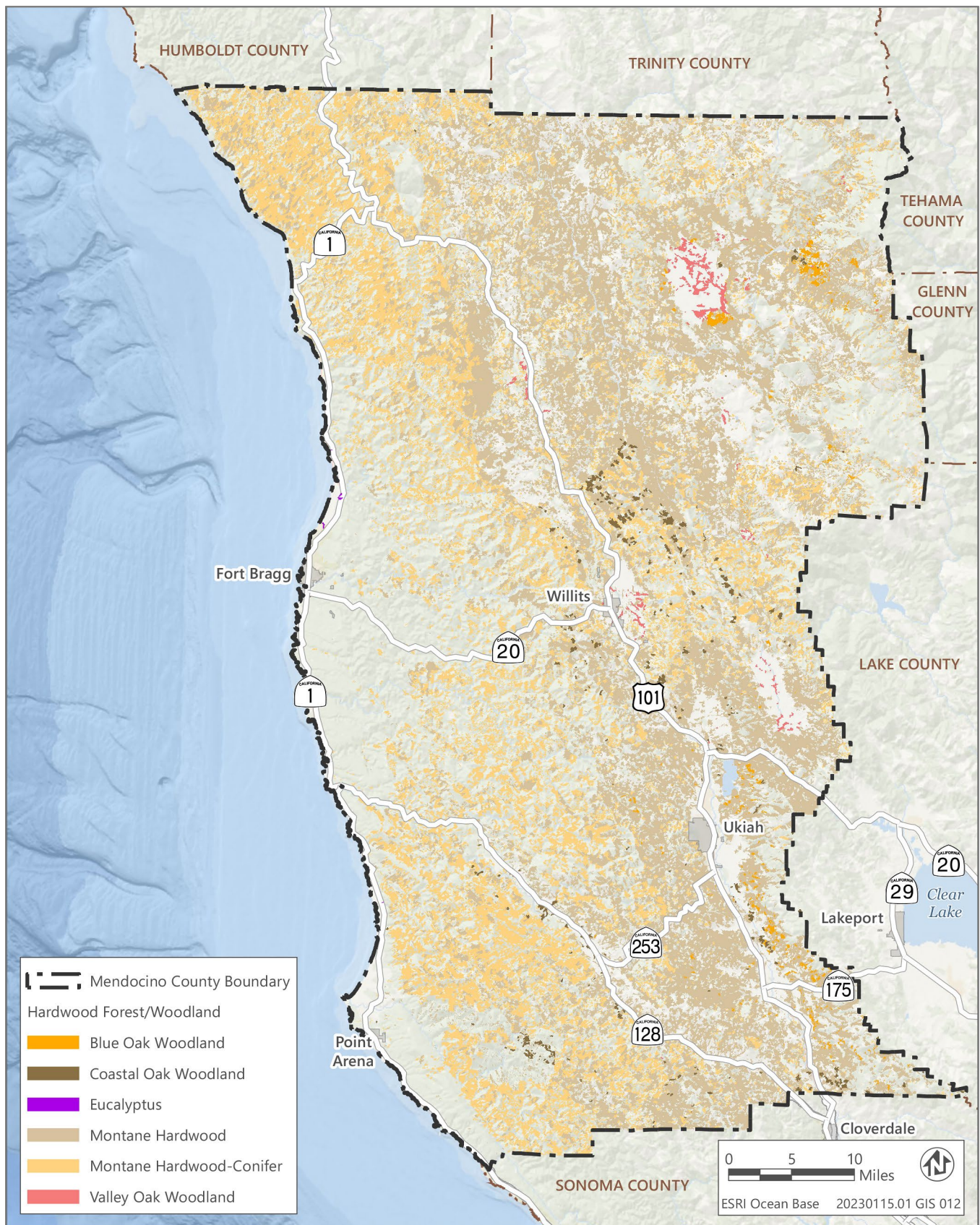
Source: Data compiled by Ascent in 2023.





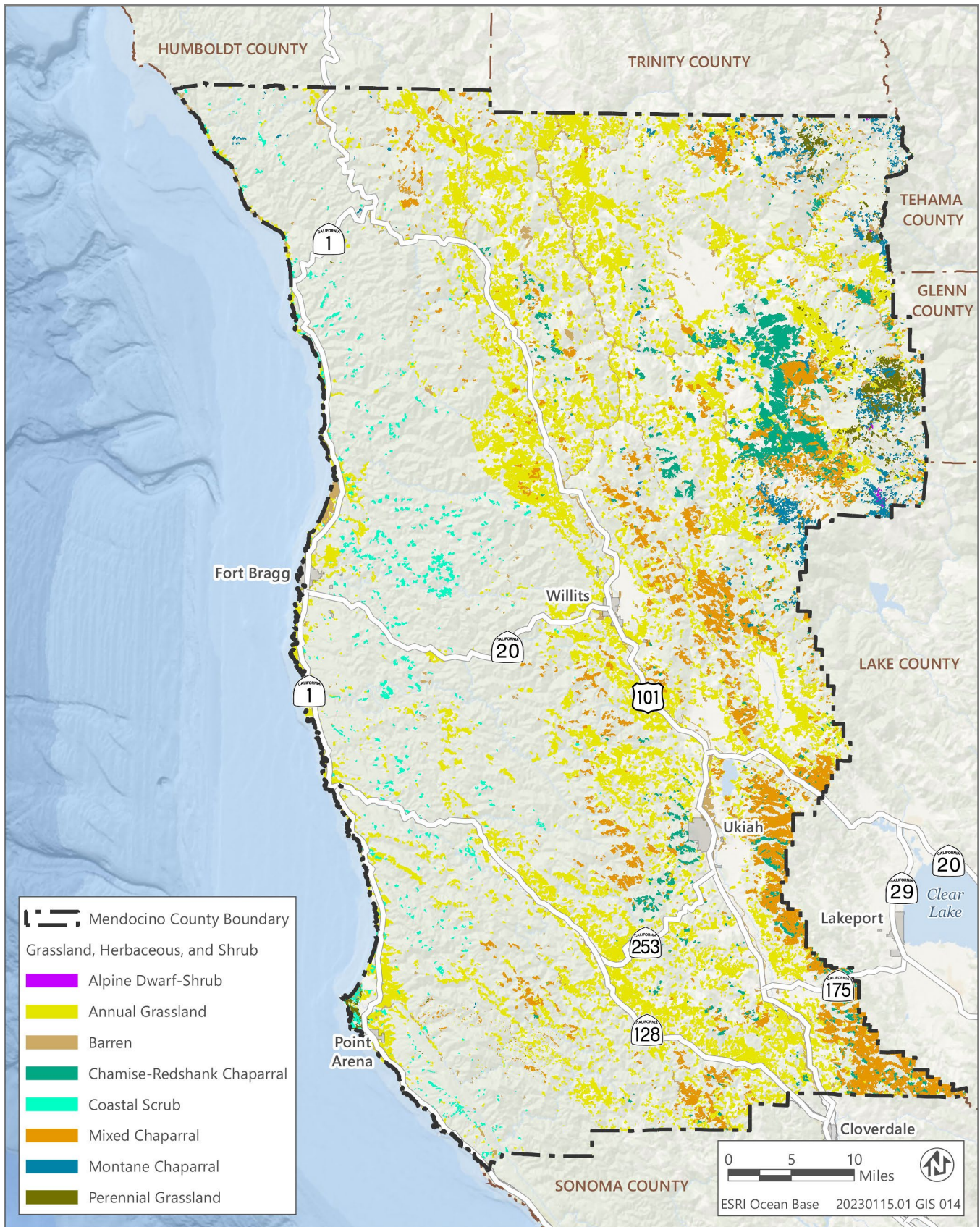
Source: Data downloaded from USFS in 2018 and CDFW in 2023; adapted by Ascent in 2023

**Figure 3.5-1 Conifer Forest/Woodland**



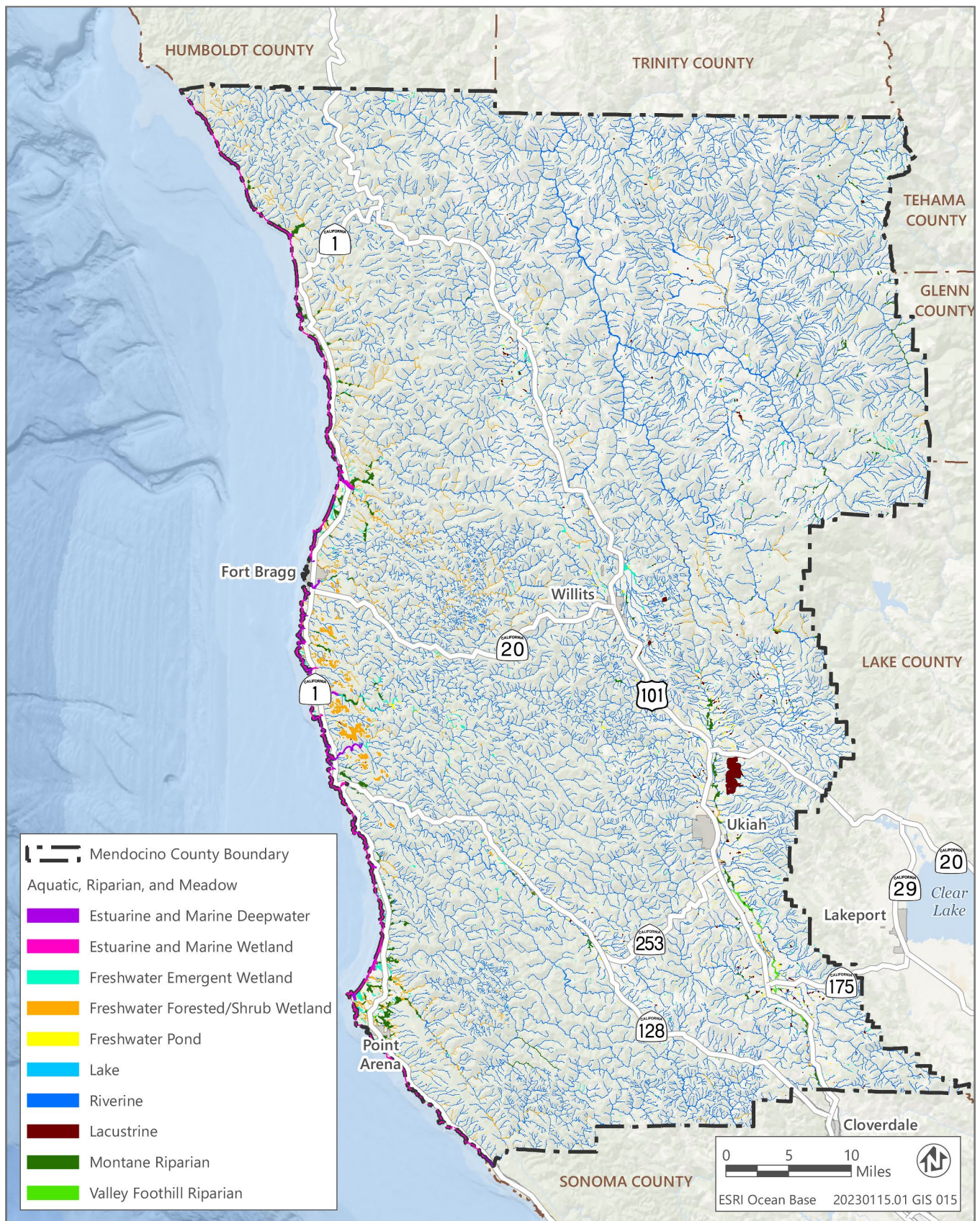
Source: Data downloaded from USFS in 2018 and CDFW in 2023; adapted by Ascent in 2023

**Figure 3.5-2 Hardwood Forest/Woodland**



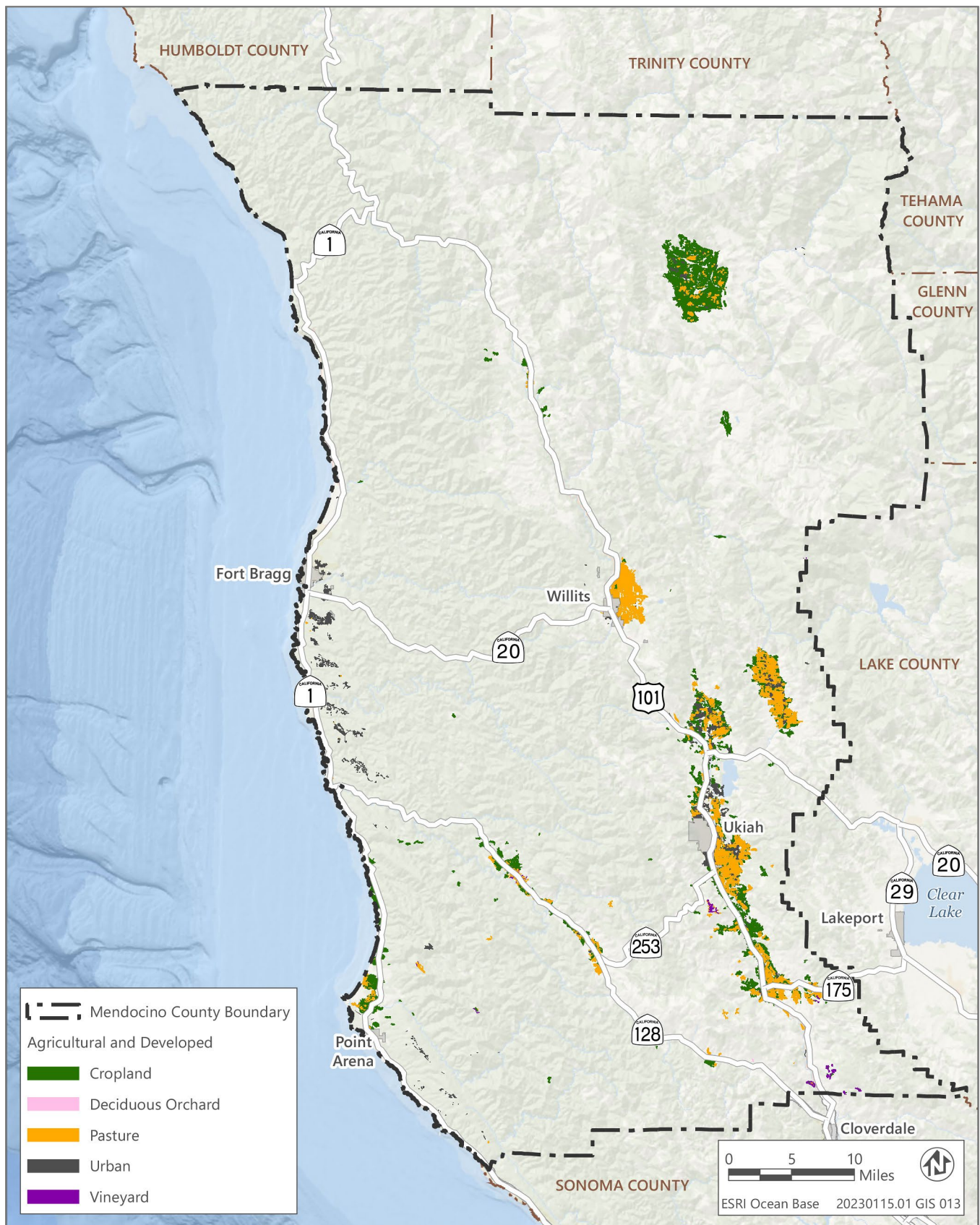
Source: Data downloaded from USFS in 2018 and CDFW in 2023; adapted by Ascent in 2023

**Figure 3.5-3 Grassland, Herbaceous, and Shrub**



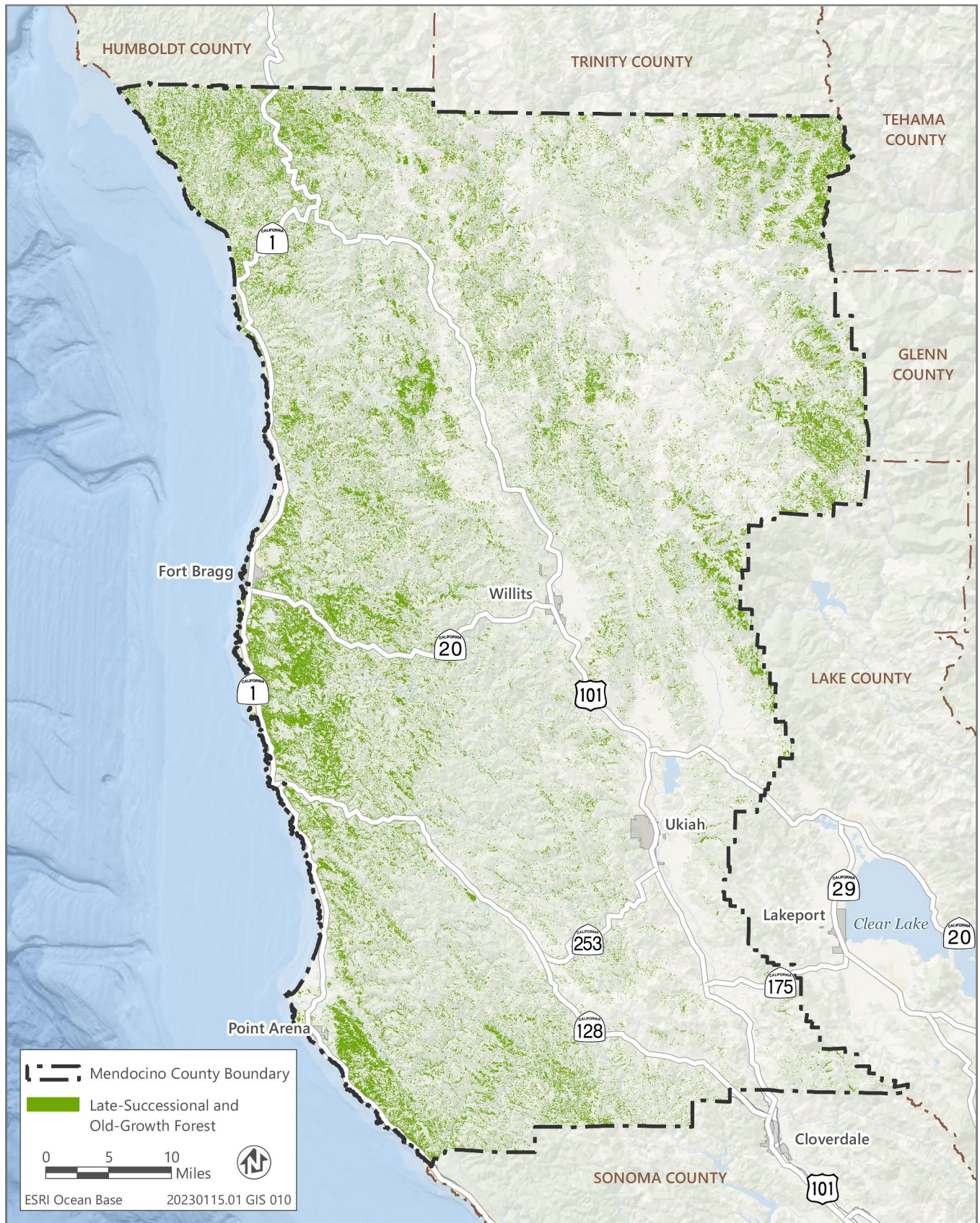
Source: Data downloaded from USFS in 2018, CDFW in 2023, and USFWS in 2023; adapted by Ascent in 2023

**Figure 3.5-4 Aquatic, Riparian, and Meadow**



Source: Data downloaded from USFS in 2018 and CDFW in 2023; adapted by Ascent in 2023

**Figure 3.5-5 Agricultural and Developed**



Source: Data downloaded from USFS in 2018; adapted by Ascent in 2023

**Figure 3.5-6 Late-Successional and Old-Growth Forest**

### Montane Hardwood-Conifer

Montane hardwood-conifer habitats contain at least one-third conifer and one-third broad-leaved hardwood trees. Species assemblages often include ponderosa pine (*Pinus ponderosa*), Douglas fir, incense cedar (*Calocedrus decurrens*), black oak, tan oak (*Notholithocarpus densiflorus*), Pacific madrone, and Oregon white oak. Other potential species in this habitat type that are more specific to California North Coast regions include golden chinquapin (*Chrysolepis chrysophylla*), canyon live oak, white fir, red alder, and knobcone pine. Montane hardwood-conifer habitat is widespread throughout the County but is concentrated in some areas in the eastern portion of the County (Figure 3.5-2). Species assemblages likely vary widely depending on location in Mendocino County. Special-status species, such as Sonoma tree vole (*Arborimus pomo*) and southern torrent salamander (*Rhyacotriton variegatus*) can be found in montane hardwood-conifer habitat.

### Grassland

Grassland habitat in Mendocino County includes both annual and perennial grassland types and occurs mainly in the center and eastern portions of the County, although some annual grassland habitat patches occur throughout the County (Figure 3.5-3). Annual grasses include wild oats (*Avena* spp.), soft chess (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), Chinook brome (*Bromus laevipes*), and wild barley (*Hordeum* spp.). Perennial grasses include species such as California oatgrass (*Danthonia californica*), and Kentucky bluegrass (*Poa pratensis*). Although dominated by grasses, grassland habitats are often interspersed with forb species. Grasslands provide habitat for many wildlife species, including garter snakes (*Thamnophis* spp.), western fence lizard (*Sceloporus occidentalis*), western harvest mouse (*Reithrodontomys megalotis*), deer mice (*Peromyscus* spp.), and various bird species.

### Douglas Fir

Douglas fir forest composition varies depending on soil, moisture, topography, and disturbance of the habitat (e.g., history of logging). Douglas fir forests in dry habitats often contain canyon live oak, tan oak, Pacific madrone, sugar pine (*Pinus lambertiana*), ponderosa pine, and black oak. In wetter habitats, Douglas fir can be associated with species like white fir, incense cedar, and Pacific yew (*Taxus brevifolia*). Douglas fir habitat is widespread throughout Mendocino County (Figure 3.5-1). Many wildlife species can be found within Douglas fir forests in Mendocino County, including bird species (e.g., northern spotted owl (*Strix occidentalis caurina*), varied thrush (*Ixoreus naevius*), chestnut-backed chickadee (*Poecile rufescens*)), amphibians (e.g., coast giant salamander (*Dicamptodon tenebrosus*), Ensatina salamanders), and various mammal species (e.g., dusky-footed woodrat (*Neotoma fuscipes*), Douglas squirrel (*Tamiasciurus douglasii*)).

### Sierran Mixed Conifer

Sierran mixed conifer habitat is concentrated mainly in the northeastern and eastern portions of Mendocino County, especially in Mendocino National Forest (Figure 3.5-1). This habitat type intergrades with Douglas fir, red fir (*Abies magnifica*), and white fir habitat, as well as montane hardwood-conifer and montane hardwood habitat. Sierran mixed conifer habitat largely consists of white fir, Douglas fir, ponderosa pine, sugar pine, incense cedar, and black oak. Understory species include deerbrush (*Ceanothus integerrimus*), whitethorn (*Ceanothus cordulatus*), manzanita (*Arctostaphylos* spp.), chinquapin (*Chrysolepis chrysophylla*), tan oak, and gooseberry (*Ribes* spp.). Sierran mixed conifer forests support many wildlife species, including northern spotted owl, bald eagle (*Haliaeetus leucocephalus*), and fisher (*Pekania pennanti*).

## Chaparral

Chaparral habitat (119,714 acres) within Mendocino County includes mostly mixed chaparral (76,392 acres), approximately 32,764 acres of chamise-redshank chaparral, and approximately 10,558 acres of montane chaparral. Chaparral habitat is mainly concentrated in the central and eastern portions of Mendocino County (Figure 3.5-3). Plant assemblages for this habitat type vary based on elevation and geographic area; however, chaparral habitat generally includes various manzanita species, various ceanothus species (*Ceanothus* spp.), huckleberry oak, chinquapin, and birch leaf mountain mahogany (*Cercocarpus betuloides*). Chamise-redshank chaparral can contain these species but generally contain mostly chamise (*Adenostoma fasciculatum*). Chaparral provides important foraging habitat for mammals (e.g., deer and rabbits), as well as for many bird species. The physical structure of chaparral habitat also provides protection, cover, and nesting habitat for many wildlife species.

## Closed-Cone Pine-Cypress

Closed-cone pine-cypress habitat occurs mainly in the coastal mountains directly adjacent to the Pacific Ocean in the southern and central portions of Mendocino County, although there are patches located throughout the County (Figure 3.5-1). These habitats include inland stands of Sargent cypress (*Hesperocyparis sargentii*) and coastal stands of pygmy cypress (*Hesperocyparis pigmaea*). Policy RM-87 in the Mendocino County General Plan requires protection of pygmy forests (See Section 3.5.1, “Regulatory Setting”). Various wildlife species use this habitat for foraging and cover, and great horned owl (*Bubo virginianus*) and red-tailed hawk (*Buteo jamaicensis*) have been known to nest within closed-cone pine habitats.

## Agricultural

Agricultural land types in Mendocino County include croplands, pasture, vineyards, and deciduous orchards. Agricultural land in Mendocino County is largely concentrated along US Highway (US) 101 and State Route (SR) 1 and SR 128, including large areas of cropland and pastureland near Ukiah (Figure 3.5-5). Migrating waterfowl and shorebirds forage in pastureland in the County, including Aleutian cackling goose (*Branta hutchinsii*), greater white-fronted goose (*Anser albifrons*), tundra swan (*Cygnus columbianus*), marbled godwit (*Limosa fedoa*), long-billed curlew (*Numenius americanus*), sandpipers (*Calidris* spp.), and willet (*Tringa semipalmata*).

## Riverine

The preeminent riverine feature in Mendocino County is the Eel River, which flows through 166 miles of the eastern portion of the County. The Eel River watershed is the third largest in California and drains 3,684 square miles in five counties, including Mendocino County. Other riverine features present in the County include Mill Creek, Russian River, Big River, Garcia River, Navarro River, and Rancheria Creek (Figure 3.5-4). Special-status species, such as California red-legged frog (*Rana draytonii*) and foothill yellow-legged frog (*Rana boylei*), can be found in riverine habitat.

## Barren

Barren habitat is devoid of vegetation and can include rocky outcroppings, riverbanks, canyon walks, or areas associated with urbanization. Barren habitats are present in patches throughout the County, and a large concentration of these habitats is located near Ukiah (Figure 3.5-3). Barren habitats vary widely in their composition, and wildlife associations are also variable.



### White Fir and Red Fir

White fir and red fir forest habitats are predominately monotypic (contain only one species), and intergrade into each other on an elevational gradient. These habitats occur largely in areas of higher elevation in Mendocino County in the Mendocino National Forest (Figure 3.5-1). Red fir habitat is used by northern goshawk (*Accipiter gentilis*), and both red and white fir habitats provide large snags, which are used by many wildlife species.

### Yellow Pine

Yellow pine habitat in Mendocino County, which includes both Jeffrey pine and ponderosa pine, is located in small patches, mainly concentrated in the northern portion of the County (Figure 3.5-1). These habitat types are commonly pure stands of either species but are often associated with each other and with other conifer species, such as sugar pine, white fir, red fir, incense cedar, and black cottonwood (*Populus trichocarpa*). Common understory species include huckleberry, scrub oak, manzanita, ceanothus, Fremont's silk tassel (*Garrya fremontii*), Pacific dogwood (*Cornus nuttallii*), and coffeeberry (*Frangula californica*). Wildlife species, such as squirrels and mule deer, depend on pine nuts as a major food source. Species that use yellow pine habitats include nuthatches (*Sitta* spp.), brown creeper (*Certhia americana*), and woodpeckers.

### Coastal Scrub

Coastal scrub habitat is located in patches throughout the western portion of Mendocino County (Figure 3.5-3). Plant species associated with coastal scrub include lupine (*Lupinus* spp.), coyote brush (*Baccharis pilularis*), California coffeeberry, blackberry (*Rubus* spp.), and poison oak. Special-status species, such as burrowing owl (*Athene cunicularia*), Crotch bumble bee (*Bombus crotchii*), and western bumble bee (*Bombus occidentalis*), can be found in coastal scrub habitat.

### Fresh Emergent Wetland (Including Freshwater Forested/Shrub Wetland and Freshwater Pond)

Fresh emergent wetland habitat (2,665 acres), freshwater forested/shrub wetland habitat (6,753 acres), and freshwater pond habitat (1,950 acres) occur throughout Mendocino County (Figure 3.5-4). Fresh emergent wetlands, freshwater forested/shrub wetland habitat, and natural freshwater ponds are associated with aquatic features, such as rivers and creeks. Many different plant species can be associated with these habitats, including sedges (*Carex* spp.), rushes (*Juncus* spp.), willow (*Salix* spp.), and various grasses. California red-legged frogs can be found in wetland and pond habitat. Additionally, bald eagle and peregrine falcon (*Falco peregrinus anatum*) use wetlands as feeding areas and roost sites.

### Blue Oak Woodland

Blue oak (*Quercus douglasii*) woodland habitat is mainly in the eastern portion of Mendocino County with large patches located in the northeastern corner of the County (Figure 3.5-2). Blue oak is the dominant species, making up 85–100 percent of the trees present. Common associates in the canopy are interior live oak (*Quercus wislizeni*). Wildlife species, such as California scrub-jay (*Aphelocoma californica*), western gray squirrel, and California ground squirrel (*Otospermophilus beecheyi*), use blue oak woodland.

### Blue Oak-Foothill Pine

Blue oak and foothill pine dominate the overstory of this habitat; other species in blue oak-foothill pine habitat can include interior live oak, California buckeye (*Aesculus californica*), ceanothus, and manzanita. Blue oak-foothill pine habitat in Mendocino County intergrades with

montane hardwood, montane hardwood-conifer, and Douglas fir habitats (Figure 3.5-1). Wildlife associations for blue oak-foothill pine habitat are similar to those for montane hardwood habitat in the County (see above).

#### Coastal Oak Woodland

Coastal oak woodland habitat occurs in a mosaic with montane hardwood and montane hardwood-conifer habitats, depending on dominant species. In Mendocino County, coastal oak woodland habitat includes Oregon white oak, black oak, canyon live oak, Pacific madrone, and interior live oak. Wildlife associations for coastal oak woodland habitat are similar to those for montane hardwood habitats (see above).

#### Urban

In Mendocino County, urban habitat occurs mainly along SR 1 and US 101, with other patches sporadically located in unincorporated communities throughout the County (Figure 3.5-5). Urban habitat includes urban landscaping, lawns, parks, and green zones. Common urban wildlife species include rock pigeon (*Columba livia*), house sparrow (*Passer domesticus*), European starling (*Sturnus vulgaris*), and racoon (*Procyon lotor*). Because much of the urban area in Mendocino County is located adjacent to more natural habitats, species such as gray fox (*Urocyon cinereoargenteus*), mule deer, striped skunk (*Mephitis mephitis*), and a variety of resident and migratory songbirds are also common in suburban areas.

#### Riparian

Riparian habitat in Mendocino County is mostly montane riparian habitat. Riparian habitat occurs throughout the County adjacent to aquatic habitat (Figure 3.5-4). Montane riparian habitat contains black cottonwood, bigleaf maple (*Acer macrophyllum*), Pacific dogwood, and boxelder (*Acer negundo*). Valley foothill riparian habitat contains species such as white alder (*Alnus rhombifolia*) and Oregon ash (*Fraxinus latifolia*). Riparian habitat provides important habitat for wildlife species and often supports a great diversity of species. Sensitive species that use riparian habitat include foothill yellow-legged frog, northern red-legged frog, little willow flycatcher (*Empidonax traillii brewsteri*), and white-tailed kite (*Elanus leucurus*).

#### Klamath Mixed Conifer

Klamath mixed conifer habitat is restricted to northern California and southern Oregon. The habitat is found exclusively in the northern portion of Mendocino County, with a large patch located in the northwestern corner of the County, north of SR 1 (Figure 3.5-1). Klamath mixed conifer habitat is like Sierran mixed conifer habitat in that dominant conifers include white fir, Douglas fir, ponderosa pine, incense cedar, and sugar pine. Wildlife associations for Klamath mixed conifer habitat are similar to those for Sierran mixed conifer habitat (see above).

#### Valley Oak Woodland

Valley oak (*Quercus lobata*) woodland is located in the eastern portion of Mendocino County in large patches starting southeast of Willits and continuing northward along US 101 and east (Figure 3.5-2). Canopies of this community are almost exclusively dominated by valley oak. The shrub layer consists of species including poison oak and California wild grape (*Vitis californica*), and various grasses dominate the herbaceous understory. Wildlife species associated with this habitat include European starling, California quail, California scrub jay, and acorn woodpecker.

### Lacustrine

Lacustrine habitat in Mendocino County includes Lake Mendocino, Van Arsdale Reservoir, Walker Lake, Leonard Lake, and Howard Lake (Figure 3.5-4). Lake Mendocino, Van Arsdale Reservoir, and Walker Lake are reservoirs associated with dams, whereas Leonard Lake and Howard Lake are natural. This habitat supports various special-status species, including bald eagle which can be found nesting near lake margins and California giant salamander (*Dicamptodon ensatus*) which can occasionally be found in lakes.

### Saline Emergent Wetland (Estuarine and Marine Wetland)

Saline emergent wetlands (also known as estuarine and marine wetlands) in Mendocino County are mapped along the coastline (Figure 3.5-4). Saline emergent wetland habitat contains plant species, including California cord grass (*Spartina foliosa*), invasive dense flowered cord grass (*Spartina densiflora*), pickleweed (*Salicornia pacifica*), common cattail (*Typha latifolia*), and various other grasses and forbs. A wide variety of wildlife species occur in saline emergent wetland habitats, including Virginia rail (*Rallus limicola*), sora (*Porzana carolina*), common yellowthroat (*Geothlypis trichas*), various shorebird species, western harvest mouse, raccoon, and American mink (*Neogale vison*).

### Wet Meadow

Wet meadow habitat is present throughout Mendocino County in small patches and is associated with aquatic features, such as rivers and creeks (Figure 3.5-4). Many different plant species can be associated with wet meadow habitats, including sedges, rushes, willows, and various grasses. Mule deer often feed in wet meadows, and waterfowl and other bird species also use the habitat. Special-status amphibian species, such as foothill yellow-legged frog and northern red-legged frog, can also be found in wet meadow habitat.

### Marine (Estuarine and Marine Deepwater)

Marine habitats (also known as estuarine and marine deepwater habitats) extend from the upper limit of the unvegetated shore to the ocean. In Mendocino County, marine habitat is mapped on the western border along the coastline (Figure 3.5-4). Special-status marine species, such as green turtle (*Chelonia mydas*) and Pacific leatherback sea turtle (*Dermochelys coriacea*), can be found in marine habitat.

### Alpine Dwarf-Shrub

Alpine dwarf-shrub habitat is present in the northeastern portion of the County in large patches (Figure 3.5-3). One of the most common shrubs occurring in this habitat type is oceanspray. Common wildlife species in this habitat include sooty grouse (*Dendragapus fuliginosus*), rufous hummingbird (*Selasphorus rufus*), and mountain bluebird (*Sialia currucoides*).

### Eucalyptus

Eucalyptus-dominated habitats in Mendocino County most commonly contain blue gum (*Eucalyptus globulus*). Blue gum is an invasive species from Australia that has become widespread in California. There are only a few patches of eucalyptus stands in Mendocino County, along SR 1 directly north of Fort Bragg (Figure 3.5-2). Eucalyptus stands are typically associated with urban development or disturbed areas. Although blue gum is not a California native species, several bird species, including American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), barn owl (*Tyto alba*), red-tailed hawk, and red-shouldered hawk, use the trees to nest.

## SENSITIVE BIOLOGICAL RESOURCES

### Special-Status Species

Special-status species are plants and animals that are legally protected under CESA (Fish and Game Code section 2050 et seq.), the federal ESA, or other regulations, as well as species considered sufficiently rare by the scientific community to qualify for such listing. For this program EIR, special-status species are defined as:

- ▶ Species listed or proposed for listing as threatened or endangered under the ESA (50 CFR 17.12 for listed plants and 50 CFR 17.11 for listed animals) and in various notices in the Federal Register;
- ▶ Species that are candidates for possible future listing as threatened or endangered under the ESA (75 CFR 69222);
- ▶ Species that are listed or proposed for listing by the State of California as threatened or endangered under CESA (CCR, title 14, section 670.5);
- ▶ Plants considered by CDFW to be “rare, threatened, or endangered in California” and assigned a California Rare Plant Ranks (CRPR) 1A, 1B, 2A, 2B;
- ▶ Species that meet the definition of rare or endangered under State CEQA Guidelines section 15380;
- ▶ Animals fully protected in California (Fish and Game Code section 3511 for birds, section 4700 for mammals, and section 5050 for reptiles and amphibians); or
- ▶ Animals identified by CDFW as species of special concern.

### Special-Status Plants

A total of 171 special-status plant species occur in Mendocino County (see Table 3.5-3).

**Table 3.5-3 Special-Status Plant Species Known to Occur in Mendocino County**

Species	Federal Listing Status <sup>1</sup>	State Listing Status <sup>1</sup>	CRPR Listing Status <sup>1</sup>	Habitat
Pink sand-verbena <i>Abronia umbellata</i> var. <i>breviflora</i>	–	–	1B.1	Coastal dunes and coastal strand. Foredunes and interdunes with sparse cover. <i>Abronia umbellata</i> var. <i>breviflora</i> is usually the plant closest to the ocean. 0–40 feet in elevation. Blooms June–October. Perennial.
Blasdale’s bent grass <i>Agrostis blasdalei</i>	–	–	1B.2	Coastal dunes, coastal bluff scrub, coastal prairie. Sandy or gravelly soil close to rocks; often in nutrient-poor soil with sparse vegetation. 10–1,200 feet in elevation. Blooms May–July. Geophyte.
Grass alisma <i>Alisma gramineum</i>	–	–	2B.2	Freshwater marsh. 410–5,690 feet in elevation. Blooms June–August. Geophyte.
Franciscan onion <i>Allium peninsulare</i> var. <i>franciscanum</i>	–	–	1B.2	Cismontane woodland, valley and foothill grassland. Clay soils; often on serpentine; sometimes on volcanics. Dry hillsides. 10–1,150 feet in elevation. Blooms May–June. Geophyte.
Bent-flowered fiddleneck <i>Amsinckia lunaris</i>	–	–	1B.2	Cismontane woodland, valley and foothill grassland, coastal bluff scrub. 10–2,610 feet in elevation. Blooms March–June. Annual.
Scabrid alpine tarplant <i>Anisocarpus scabridus</i>	–	–	1B.3	Open stony ridges, metamorphic scree slopes of mountain peaks, and cliffs in or near red fir forest. 5,410–7,550 feet in elevation. Blooms July–August. Perennial.
McDonald’s rockcress <i>Arabis mcdonaldiana</i>	FE	SE	1B.1	Rocky outcrops, ridges, slopes, and flats on serpentine. 440–5,910 feet in elevation. Blooms May–July. Perennial.

Species	Federal Listing Status <sup>1</sup>	State Listing Status <sup>1</sup>	CRPR Listing Status <sup>1</sup>	Habitat
Mt. Diablo manzanita <i>Arctostaphylos auriculata</i>	–	–	1B.3	Chaparral, cismontane woodland. In canyons and on slopes. On sandstone. 590–1,860 feet in elevation. Blooms January–March. Perennial.
The Cedars manzanita <i>Arctostaphylos bakeri</i> ssp. <i>sublaevis</i>	–	SR	1B.2	In serpentine chaparral and Sargent cypress woodland; typically in canyons and on slopes. 600–2,500 feet in elevation. Blooms February–May. Perennial.
Vine Hill manzanita <i>Arctostaphylos densiflora</i>	–	SE	1B.1	Chaparral. Acid marine sand. 160–400 feet in elevation. Blooms February–April. Perennial.
Konocti manzanita <i>Arctostaphylos manzanita</i> ssp. <i>elegans</i>	–	–	1B.3	Chaparral, cismontane woodland, lower montane coniferous forest. Volcanic soils. 740–6,010 feet in elevation. Blooms January–May. Perennial.
Pygmy manzanita <i>Arctostaphylos nummularia</i> ssp. <i>mendocinoensis</i>	–	–	1B.2	Closed-cone coniferous forest. Acidic, sandy-clay soils in dwarf coniferous forest. 290–610 feet in elevation. Blooms January. Perennial.
Raiche's manzanita <i>Arctostaphylos stanfordiana</i> ssp. <i>raichei</i>	–	–	1B.1	Chaparral, lower montane coniferous forest. Rocky, serpentine sites. Slopes and ridges. 1,590–3,510 feet in elevation. Blooms February–April. Perennial.
Humboldt milk-vetch <i>Astragalus agnicidus</i>	–	SE	1B.1	Disturbed openings in partially timbered forest lands; also along ridgelines; south aspects. 520–2,200 feet in elevation. Blooms April–September. Perennial.
Jepson's milk-vetch <i>Astragalus rattanii</i> var. <i>jepsonianus</i>	–	–	1B.2	Commonly on serpentine in grassland or openings in chaparral. 570–3,300 feet in elevation. Blooms March–June. Annual.
Sonoma sunshine <i>Blennosperma bakeri</i>	FE	SE	1B.1	Vernal pools and swales. 30–360 feet in elevation. Blooms March–May. Annual.
Point Reyes blennosperma <i>Blennosperma nanum</i> var. <i>robustum</i>	–	SR	1B.2	Coastal prairie, coastal scrub. On open coastal hills in sandy soil. 10–410 feet in elevation. Blooms February–April. Annual.
Snow Mountain rockcress <i>Boechea ultraalsa</i>	–	–	1B.1	Upper montane coniferous forest. Rocky sites. 5,900 feet in elevation. Blooms June–July. Perennial.
Rattlesnake fern <i>Botrypus virginianus</i>	–	–	2B.2	Wetland. Bogs and fens, lower montane coniferous forest, meadows and seeps, riparian forest. 2,350–4,450 feet in elevation. Blooms June–September. Perennial.
Watershield <i>Brasenia schreberi</i>	–	–	2B.3	Freshwater marshes and swamps. Aquatic from water bodies both natural and artificial in California. 100–7,220 feet in elevation. Blooms June–September. Geophyte.
Narrow-anthered brodiaea <i>Brodiaea leptandra</i>	–	–	1B.2	Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland. Volcanic substrates. 100–1,940 feet in elevation. Blooms May–July. Geophyte.
Buxbaumia moss <i>Buxbaumia viridis</i>	–	–	2B.2	Lower montane coniferous forest, upper montane coniferous forest, subalpine coniferous forest. Well-rotted logs and in peaty soil and humus. 3,200–7,220 feet in elevation. Perennial.
Thurber's reed grass <i>Calamagrostis crassiglumis</i>	–	–	2B.1	Usually in marshy swales surrounded by grassland or coastal scrub. 10–170 feet in elevation. Blooms May–August. Geophyte.
Leafy reed grass <i>Calamagrostis foliosa</i>	–	SR	4.2	Rocky cliffs and ocean-facing bluffs. 0–4,010 feet in elevation. Blooms May–September. Perennial.
The Cedars fairy-lantern <i>Calochortus raichei</i>	–	–	1B.2	Closed-cone coniferous forest, chaparral. On serpentine. Usually on shaded slopes, but also on barrens and talus. 830–1,410 feet in elevation. Blooms May–August. Geophyte.

Species	Federal Listing Status <sup>1</sup>	State Listing Status <sup>1</sup>	CRPR Listing Status <sup>1</sup>	Habitat
Small-flowered calycadenia <i>Calycadenia micrantha</i>	–	–	1B.2	Rocky talus or scree; sparsely vegetated areas. Occasionally on roadsides; sometimes on serpentine. 1,420–4,610 feet in elevation. Blooms June–September. Annual.
Three-fingered morning-glory <i>Calystegia collina</i> ssp. <i>tridactylosa</i>	–	–	1B.2	Chaparral, cismontane woodland. Rocky, gravelly openings in serpentine. 1,980–2,320 feet in elevation. Blooms April–June. Geophyte.
Coastal bluff morning-glory <i>Calystegia purpurata</i> ssp. <i>saxicola</i>	–	–	1B.2	Coastal dunes, coastal scrub, coastal bluff scrub, North Coast coniferous forest. 30–350 feet in elevation. Blooms April–September. Perennial.
Grassland suncup <i>Camissonia lacustris</i>	–	–	1B.2	Valley and foothill grassland, cismontane woodland, lower montane coniferous forest, and chaparral. Gravelly, serpentine, or granitic soils. 590–4,010 feet in elevation. Blooms April–June. Annual.
Seaside bittercress <i>Cardamine angulata</i>	–	–	2B.1	North Coast coniferous forest, lower montane coniferous forest. Wet areas, streambanks. 290–510 feet in elevation. Blooms March–July. Perennial.
Northern clustered sedge <i>Carex arcta</i>	–	–	2B.2	Wetland. Bogs and fens, North Coast coniferous forest. Mesic sites. 190–4,610 feet in elevation. Blooms June–September. Perennial.
California sedge <i>Carex californica</i>	–	–	2B.2	Meadows, drier areas of swamps, and marsh margins. 290–1,100 feet in elevation. Blooms May–August. Geophyte.
Bristly sedge <i>Carex comosa</i>	–	–	2B.1	Marshes and swamps, coastal prairie, valley and foothill grassland. Lake margins and wet places. 10–5,320 feet in elevation. Blooms May–September. Geophyte.
Lagoon sedge <i>Carex lenticularis</i> var. <i>limnophila</i>	–	–	2B.2	Bogs and fens, marshes and swamps, North Coast coniferous forest. Lakeshores, beaches. Often in gravelly substrates. 0–20 feet in elevation. Blooms June–August. Perennial.
Livid sedge <i>Carex livida</i>	–	–	2A	Bogs and fens. Historically known from a sphagnum bog in California. 0–330 feet in elevation. Blooms June. Geophyte.
Lyngbye's sedge <i>Carex lyngbyei</i>	–	–	2B.2	Marshes and swamps (brackish or freshwater). 0–660 feet in elevation. Blooms April–August. Geophyte.
Northern meadow sedge <i>Carex praticola</i>	–	–	2B.2	Meadows and seeps. Moist to wet meadows. 50–10,500 feet in elevation. Blooms May–July. Perennial.
Deceiving sedge <i>Carex saliniformis</i>	–	–	1B.2	Coastal prairie, coastal scrub, meadows and seeps, marshes and swamps (coastal salt). Mesic sites. 10–760 feet in elevation. Blooms June. Geophyte.
Green yellow sedge <i>Carex viridula</i> ssp. <i>viridula</i>	–	–	2B.3	Bogs and fens, marshes and swamps (freshwater), North Coast coniferous forest. Mesic sites. 0–5,600 feet in elevation. Blooms July–September. Perennial.
Humboldt Bay owl's-clover <i>Castilleja ambigua</i> var. <i>humboldtensis</i>	–	–	1B.2	Salt marsh, Wetland. Marshes and swamps. In coastal saltmarsh. 0–70 feet in elevation. Blooms April–August. Annual.
Oregon coast paintbrush <i>Castilleja litoralis</i>	–	–	2B.2	Coastal bluff scrub, coastal dunes, coastal scrub. Sandy sites. 10–840 feet in elevation. Blooms June. Perennial.
Mendocino Coast paintbrush <i>Castilleja mendocinensis</i>	–	–	1B.2	Coastal bluff scrub, coastal scrub, coastal prairie, closed-cone coniferous forest, coastal dunes. Often on sea bluffs or cliffs in coastal bluff scrub or prairie. 0–530 feet in elevation. Blooms April–August. Perennial.
Pink creamsacs <i>Castilleja rubicundula</i> var. <i>rubicundula</i>	–	–	1B.2	Chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland. Openings in chaparral or grasslands. On serpentine. 60–3,000 feet in elevation. Blooms April–June. Annual.

Species	Federal Listing Status <sup>1</sup>	State Listing Status <sup>1</sup>	CRPR Listing Status <sup>1</sup>	Habitat
Rincon Ridge ceanothus <i>Ceanothus confusus</i>	–	–	1B.1	Closed-cone coniferous forest, chaparral, cismontane woodland. Known from volcanic or serpentine soils, dry shrubby slopes. 240–3,500 feet in elevation. Blooms February–June. Perennial.
Calistoga ceanothus <i>Ceanothus divergens</i>	–	–	1B.2	Chaparral. Rocky, serpentine, or volcanic sites. 560–3,120 feet in elevation. Blooms February–April. Perennial.
Vine Hill ceanothus <i>Ceanothus foliosus</i> var. <i>vineatus</i>	–	–	1B.1	Sandy, acidic soil in chaparral. 150–1,000 feet in elevation. Blooms March–May. Perennial.
Dwarf soaproot <i>Chlorogalum</i> <i>pomeridianum</i> var. <i>minus</i>	–	–	1B.2	Chaparral. Serpentine. 1,000–3,280 feet in elevation. Blooms May–August. Geophyte.
Howell's spineflower <i>Chorizanthe howellii</i>	FE	ST	1B.2	Sand dunes, sandy slopes, and sandy areas in coastal prairie. 0–70 feet in elevation. Blooms May–July. Annual.
Whitney's farewell-to-spring <i>Clarkia amoena</i> ssp. <i>whitneyi</i>	–	–	1B.1	Coastal bluff scrub, coastal scrub. 30–330 feet in elevation. Blooms June–August. Annual.
Round-headed Chinese-houses <i>Collinsia</i> <i>corymbosa</i>	–	–	1B.2	Coastal dunes. 30–100 feet in elevation. Blooms April–June. Annual.
Pennell's bird's-beak <i>Cordylanthus tenuis</i> ssp. <i>capillaris</i>	FE	SR	1B.2	Closed-cone coniferous forest, chaparral. In open or disturbed areas on serpentine within forest or chaparral. 290–710 feet in elevation. Blooms June–September. Annual.
Bunchberry <i>Cornus unalaschensis</i>	–	–	2B.2	North Coast coniferous forest, bogs and fens, meadows and seeps. 240–6,300 feet in elevation. Blooms May–July. Geophyte.
Serpentine cryptantha <i>Cryptantha dissita</i>	–	–	1B.2	Chaparral. Serpentine outcrops. 440–2,410 feet in elevation. Blooms April–June. Annual.
Deep-scarred cryptantha <i>Cryptantha excavata</i>	–	–	1B.1	Cismontane woodland. Sandy, gravelly, dry streambanks. 330–1,640 feet in elevation. Blooms April–May. Annual.
Jepson's dodder <i>Cuscuta jepsonii</i>	–	–	1B.2	North Coast coniferous forest. Streamsides. 390–9,010 feet in elevation. Blooms July–September. Annual.
Mendocino dodder <i>Cuscuta pacifica</i> var. <i>papillata</i>	–	–	1B.2	Coastal dunes. Interdune depressions. Annual parasitic vine observed on cudweed and lupine. 0–170 feet in elevation. Blooms July–October. Annual.
Swamp harebell <i>Campanula californica</i>	–	–	1B.2	Bogs and marshes in a variety of habitats; uncommon where it occurs. 5–1,330 feet in elevation. Blooms June–October. Geophyte.
Glandular ditaxis <i>Ditaxis claryana</i>	–	–	2B.2	Desert wash. Mojavean desert scrub, Sonoran desert scrub. In dry washes and on rocky hillsides. Sandy soils. 0–1,530 feet in elevation. Blooms October–March. Perennial.
Cascade downingia <i>Downingia willamettensis</i>	–	–	2B.2	Cismontane woodland, valley and foothill grasslands, vernal pools. Lake margins. 50–3,640 feet in elevation. Blooms June–July. Annual.
Koch's cord moss <i>Entosthodon kochii</i>	–	–	1B.3	Cismontane woodland. Moss growing on soil on riverbanks. 600–1,200 feet in elevation. Perennial.
Snow Mountain willowherb <i>Epilobium nivium</i>	–	–	1B.2	Upper montane coniferous forest, chaparral. Crevices of volcanic and metavolcanic rock outcrops and associated talus. 4,590–7,220 feet in elevation. Blooms June–October. Perennial.

Species	Federal Listing Status <sup>1</sup>	State Listing Status <sup>1</sup>	CRPR Listing Status <sup>1</sup>	Habitat
Oregon fireweed <i>Epilobium oreganum</i>	–	–	1B.2	In and near springs and bogs; at least sometimes on serpentine. 1,640–7,350 feet in elevation. Blooms June–September. Perennial.
Brandegee's eriastrum <i>Eriastrum brandegeae</i>	–	–	1B.1	Chaparral, cismontane woodland. On barren volcanic soils; often in open areas. 1,340–2,770 feet in elevation. Blooms April–August. Annual.
Greene's narrow-leaved daisy <i>Erigeron greenei</i>	–	–	1B.2	Chaparral. Serpentine and volcanic substrates, generally in shrubby vegetation. 290–2,740 feet in elevation. Blooms May–September. Perennial.
Mad River fleabane daisy <i>Erigeron maniopotamicus</i>	–	–	1B.2	Meadows and seeps (open and dry), lower montane coniferous forest. Open slopes, disturbed areas (road cuts); tan-colored, rocky soils. 4,200–4,940 feet in elevation. Blooms May–August. Perennial.
Serpentine daisy <i>Erigeron serpentinus</i>	–	–	1B.3	Chaparral. Serpentine seeps. 390–1,310 feet in elevation. Blooms May–August. Perennial.
Supple daisy <i>Erigeron supplex</i>	–	–	1B.2	Coastal bluff scrub, coastal prairie. Usually in grassy sites. 10–610 feet in elevation. Blooms May–July. Perennial.
Cedars buckwheat <i>Eriogonum cedrorum</i>	–	–	1B.3	Closed-cone coniferous forest. Serpentine. Barren rock and talus steep slopes. 1,200–1,810 feet in elevation. Blooms June–September. Perennial.
Kellogg's buckwheat <i>Eriogonum kelloggii</i>	–	SE	1B.2	Lower montane coniferous forest. Rocky, serpentine sites. 2,980–3,910 feet in elevation. Blooms June–August. Perennial.
Snow Mountain buckwheat <i>Eriogonum nervulosum</i>	–	–	1B.2	Chaparral. Dry serpentine outcrops, balds, and barrens. 1,460–6,910 feet in elevation. Blooms June–September. Geophyte.
Loch Lomond button-celery <i>Eryngium constancei</i>	FE	SE	1B.1	Volcanic ash flow vernal pools. 1,510–2,810 feet in elevation. Blooms April–June. Annual/perennial.
Bluff wallflower <i>Erysimum concinnum</i>	–	–	1B.2	Coastal dunes, coastal bluff scrub, coastal prairie. More or less a coastal generalist within coastal habitat types. 10–200 feet in elevation. Blooms February–July. Annual/perennial.
Menzies' wallflower <i>Erysimum menziesii</i>	FE	SE	1B.1	Localized on dunes and coastal strand. 5–80 feet in elevation. Blooms March–September. Perennial.
Giant fawn lily <i>Erythronium oregonum</i>	–	–	2B.2	Cismontane woodland, meadows and seeps. Openings. Sometimes on serpentine; rocky sites. 980–4,710 feet in elevation. Blooms March–June. Perennial.
Coast fawn lily <i>Erythronium revolutum</i>	–	–	2B.2	Wetland. Bogs and fens, broadleaved upland forest, North Coast coniferous forest. Mesic sites; streambanks. 190–4,610 feet in elevation. Blooms March–July. Geophyte.
Minute pocket moss <i>Fissidens pauperculus</i>	–	–	1B.2	Redwood. North Coast coniferous forest. Moss growing on damp soil along the coast. In dry streambeds and on stream banks. 30–3,360 feet in elevation. Perennial.
Roderick's fritillary <i>Fritillaria roderickii</i>	–	SE	1B.1	Coastal bluff scrub, coastal prairie, valley and foothill grassland. Grassy slopes, mesas. 50–2,000 feet in elevation. Blooms March–May. Geophyte.
Mendocino gentian <i>Gentiana setigera</i>	–	–	1B.2	Lower montane coniferous forest. Meadows, seeps and bogs. Usually or always on serpentine. 1,610–3,500 feet in elevation. Blooms August–September. Perennial.
Pacific gilia <i>Gilia capitata</i> ssp. <i>pacifica</i>	–	–	1B.2	Coastal bluff scrub, chaparral, coastal prairie, valley and foothill grassland. 15–4,420 feet in elevation. Blooms April–August. Annual.
Woolly-headed gilia <i>Gilia capitata</i> ssp. <i>tomentosa</i>	–	–	1B.1	Coastal bluff scrub, valley and foothill grassland. Rocky outcrops on the coast, serpentine. 60–410 feet in elevation. Blooms May–July. Annual.



Species	Federal Listing Status <sup>1</sup>	State Listing Status <sup>1</sup>	CRPR Listing Status <sup>1</sup>	Habitat
Dark-eyed gilia <i>Gilia millefoliata</i>	–	–	1B.2	Coastal dunes. 5–200 feet in elevation. Blooms April–July. Annual.
American manna grass <i>Glyceria grandis</i>	–	–	2B.3	Wet meadows, ditches, streams, and ponds, in valleys and lower elevations in the mountains. 190–6,710 feet in elevation. Blooms June–August. Geophyte.
Boggs Lake hedge-hyssop <i>Gratiola heterosepala</i>	–	SE	1B.2	Clay soils; usually in vernal pools, sometimes on lake margins. 30–7,790 feet in elevation. Blooms April–August. Annual.
Toren's grimmia <i>Grimmia torenii</i>	–	–	1B.3	Cismontane woodland, lower montane coniferous forest, chaparral. Openings, rocky, boulder and rock walls, carbonate, volcanic. 1,060–3,810 feet in elevation. Perennial.
Guggolz's harmonia <i>Harmonia guggolziorum</i>	–	–	1B.1	Chaparral. Open areas on serpentine. 520–640 feet in elevation. Blooms April–May. Annual.
Hall's harmonia <i>Harmonia hallii</i>	–	–	1B.2	Serpentine hills and ridges. Open, rocky areas within chaparral. 1,100–3,050 feet in elevation. Blooms April–June. Annual.
Congested-headed hayfield tarplant <i>Hemizonia congesta</i> ssp. <i>congesta</i>	–	–	1B.2	Grassy valleys and hills, often in fallow fields; sometimes along roadsides. 60–2,140 feet in elevation. Blooms April–November. Annual.
Short-leaved evax <i>Hesperovax sparsiflora</i> var. <i>brevifolia</i>	–	–	1B.2	Coastal bluff scrub, coastal dunes, coastal prairie. Sandy bluffs and flats. 0–710 feet in elevation. Blooms March–June. Annual.
Monterey cypress <i>Hesperocyparis macrocarpa</i>	–	–	1B.2	Closed-cone coniferous forest. Granitic soils. 30–70 feet in elevation. Perennial.
Pygmy cypress <i>Hesperocyparis pygmaea</i>	–	–	1B.2	Closed-cone coniferous forest. On podzol-like blacklock soil in pygmy cypress forest community. 100–1,970 feet in elevation. Perennial.
Two-carpellate western flax <i>Hesperolinon bicarpellatum</i>	–	–	1B.2	Serpentine barrens at edge of chaparral. 190–3,300 feet in elevation. Blooms May–July. Annual.
Drymaria-like western flax <i>Hesperolinon drymarioides</i>	–	–	1B.2	Serpentine soils, mostly within chaparral. 1,290–6,560 feet in elevation. Blooms May–August. Annual.
Bolander's horkelia <i>Horkelia bolanderi</i>	–	–	1B.2	Grassy margins of vernal pools and meadows. 1,490–2,810 feet in elevation. Blooms June–August. Perennial.
Point Reyes horkelia <i>Horkelia marinensis</i>	–	–	1B.2	Sandy flats and dunes near the coast; in grassland or scrub plant communities. 5–2,550 feet in elevation. Blooms May–September. Perennial.
Thin-lobed horkelia <i>Horkelia tenuiloba</i>	–	–	1B.2	Broadleaved upland forest, chaparral, valley and foothill grassland. Sandy soils; mesic openings. 160–1,640 feet in elevation. Blooms May–July. Perennial.
Water howellia <i>Howellia aquatilis</i>	FD	–	2B.2	In clear ponds with other aquatics and surrounded by ponderosa pine forest and sometimes riparian associates. 3,590–4,530 feet in elevation. Blooms June. Annual.
Island tube lichen <i>Hypogymnia schizidiata</i>	–	–	1B.3	Chaparral, closed-cone coniferous forest. On bark and wood of hardwoods and conifers. 1,180–1,330 feet in elevation. Perennial.
California satintail <i>Imperata brevifolia</i>	–	–	2B.1	Mesic sites, alkali seeps, riparian areas. 10–4,910 feet in elevation. Blooms September–May. Geophyte.
Rau's jaffueliobryum moss <i>Jaffueliobryum raii</i>	–	–	2B.3	Alpine dwarf scrub, chaparral, Mojavean desert scrub, Sonoran desert scrub. Dry openings, rock crevices, carbonate. 1,610–6,890 feet in elevation. Perennial.

Species	Federal Listing Status <sup>1</sup>	State Listing Status <sup>1</sup>	CRPR Listing Status <sup>1</sup>	Habitat
Hair-leaved rush <i>Juncus supiniformis</i>	–	–	2B.2	Marshes and swamps, bogs and fens. 60–330 feet in elevation. Blooms April–May. Geophyte.
Small groundcone <i>Kopsiopsis hookeri</i>	–	–	2B.3	North Coast coniferous forest. Open woods, shrubby places, generally on <i>Gaultheria shallon</i> . 390–4,710 feet in elevation. Blooms April–August. Geophyte.
Burke's goldfields <i>Lasthenia burkei</i>	FE	SE	1B.1	Most often in vernal pools and swales. 50–1,970 feet in elevation. Blooms April–June. Annual.
Baker's goldfields <i>Lasthenia californica</i> ssp. <i>bakeri</i>	–	–	1B.2	Closed-cone coniferous forest, coastal scrub, meadows and seeps, marshes and swamps. Openings. 190–1,710 feet in elevation. Blooms April–October. Perennial.
Perennial goldfields <i>Lasthenia californica</i> ssp. <i>macrantha</i>	–	–	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub. 10–610 feet in elevation. Blooms January–November. Perennial.
Contra Costa goldfields <i>Lasthenia conjugens</i>	FE	–	1B.1	Alkali playa, wetland. Valley and foothill grassland, vernal pools, alkaline playas, cismontane woodland. Vernal pools, swales, low depressions, in open grassy areas. 5–1,480 feet in elevation. Blooms March–June. Annual.
Marsh pea <i>Lathyrus palustris</i>	–	–	2B.2	Wetland. Bogs and fens, lower montane coniferous forest, marshes and swamps, North Coast coniferous forest, coastal prairie, coastal scrub. Moist coastal areas. 5–460 feet in elevation. Blooms March–August. Perennial.
Colusa layia <i>Layia septentrionalis</i>	–	–	1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Scattered colonies in fields and grassy slopes in sandy or serpentine soil. 50–3610 feet in elevation. Blooms April–May. Annual.
Legenere <i>Legenere limosa</i>	–	–	1B.1	In beds of vernal pools. 5–2,890 feet in elevation. Blooms April–June. Annual.
Jepson's leptosiphon <i>Leptosiphon jepsonii</i>	–	–	1B.2	Chaparral, cismontane woodland. Open to partially shaded grassy slopes. On volcanics or the periphery of serpentine substrates. 180–2,810 feet in elevation. Blooms March–May. Annual.
Stebbins' lewisia <i>Lewisia stebbinsii</i>	–	–	1B.2	Upper montane coniferous forest, lower montane coniferous forest. Relatively barren exposed ridges and slopes in nutrient-poor soils (mostly serpentine). 5,560–6,730 feet in elevation. Blooms May–July. Perennial.
Coast lily <i>Lilium maritimum</i>	–	–	1B.1	Closed-cone coniferous forest, coastal prairie, coastal scrub, broadleaved upland forest, North Coast coniferous forest, marshes and swamps. Historically in sandy soil, often on raised hummocks or bogs; today mostly in roadside ditches. 15–1,560 feet in elevation. Blooms May–August. Geophyte.
Baker's meadowfoam <i>Limnanthes bakeri</i>	–	SR	1B.1	Seasonally moist or saturated sites within grassland; also in swales, roadside ditches, and margins of freshwater marshy areas. 570–3,000 feet in elevation. Blooms April–May. Annual.
Sebastopol meadowfoam <i>Limnanthes vinculans</i>	FE	SE	1B.1	Swales, wet meadows, and marshy areas in valley oak savanna; on poorly drained soils of clays and sandy loam. 50–380 feet in elevation. Blooms April–May. Annual.
Anthony Peak lupine <i>Lupinus antoninus</i>	–	–	1B.2	Upper montane coniferous forest, lower montane coniferous forest. Open areas with surrounding forest; rocky sites. 3,980–7,520 feet in elevation. Blooms May–July. Perennial.
Milo Baker's lupine <i>Lupinus milo-bakeri</i>	–	ST	1B.1	Cismontane woodland (often on roadsides), valley and foothill grassland. 1,290–1,410 feet in elevation. Blooms June–September. Annual.

Species	Federal Listing Status <sup>1</sup>	State Listing Status <sup>1</sup>	CRPR Listing Status <sup>1</sup>	Habitat
Cobb Mountain lupine <i>Lupinus sericatus</i>	–	–	1B.2	Chaparral, cismontane woodland, lower montane coniferous forest, broadleaved upland forest. In stands of knobcone pine-oak woodland, on open wooded slopes in gravelly soils; sometimes on serpentine. 900–5,010 feet in elevation. Blooms March–June. Perennial.
Mendocino bush-mallow <i>Malacothamnus mendocinensis</i>	–	–	1B.1	Cismontane woodland. Open, roadside banks. 1,390–1,890 feet in elevation. Blooms May–June. Perennial.
Northern microseris <i>Microseris borealis</i>	–	–	2B.1	Wetland. Bogs and fens, meadows and seeps, lower montane coniferous forest. 150–3,510 feet in elevation. Blooms June–September. Perennial.
Marsh microseris <i>Microseris paludosa</i>	–	–	1B.2	Closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland. 10–990 feet in elevation. Blooms April–June. Perennial.
Howell's montia <i>Montia howellii</i>	–	–	2B.2	Meadows and seeps, North Coast coniferous forest, vernal pools. Vernal wet sites; often on compacted soil. 30–3,300 feet in elevation. Blooms March–May. Annual.
Baker's navarretia <i>Navarretia leucocephala</i> ssp. <i>bakeri</i>	–	–	1B.1	Cismontane woodland, meadows and seeps, vernal pools, valley and foothill grassland, lower montane coniferous forest. Vernal pools and swales; adobe or alkaline soils. 10–5,710 feet in elevation. Blooms April–July. Annual.
Few-flowered navarretia <i>Navarretia leucocephala</i> ssp. <i>pauciflora</i>	FE	ST	1B.1	Vernal pools, wetland. Volcanic ash flow, and volcanic substrate vernal pools. 1,390–2,810 feet in elevation. Blooms May–June. Annual.
Many-flowered navarretia <i>Navarretia leucocephala</i> ssp. <i>plieantha</i>	FE	SE	1B.2	Volcanic ash flow vernal pools. 100–3,000 feet in elevation. Blooms May–June. Annual.
Wolf's evening-primrose <i>Oenothera wolfii</i>	–	–	1B.1	Coastal bluff scrub, coastal dunes, coastal prairie, lower montane coniferous forest. Sandy substrates; usually mesic sites. 0–410 feet in elevation. Blooms May–October. Perennial.
Northern adder's-tongue <i>Ophioglossum pusillum</i>	–	–	2B.2	Marsh edges, low pastures, grassy roadside ditches. Also described as "open swamp." 3,560–6,350 feet in elevation. Blooms July. Geophyte.
Slender Orcutt grass <i>Orcuttia tenuis</i>	FT	SE	1B.1	Vernal pools, wetland. Often in gravelly substrate. 80–5,760 feet in elevation. Blooms May–September. Annual.
Seacoast ragwort <i>Packera bolanderi</i> var. <i>bolanderi</i>	–	–	2B.2	Coastal scrub, North Coast coniferous forest. Sometimes along roadsides. 100–3,000 feet in elevation. Blooms May–July. Geophyte.
Geysers panicum <i>Panicum acuminatum</i> var. <i>thermale</i>	–	SE	1B.2	Closed-cone coniferous forest, riparian forest, valley and foothill grassland. Usually around moist, warm soil in the vicinity of hot springs. 1,490–8,110 feet in elevation. Blooms June–August. Annual/perennial.
Sonoma beardtongue <i>Penstemon newberryi</i> var. <i>sonomensis</i>	–	–	1B.3	Chaparral. Crevices in rock outcrops and talus slopes. 590–4,610 feet in elevation. Blooms April–August. Perennial.
North Coast phacelia <i>Phacelia insularis</i> var. <i>continentis</i>	–	–	1B.2	Coastal bluff scrub, coastal dunes. Open maritime bluffs, sandy soil, sometimes rocky habitats. 0–510 feet in elevation. Blooms March–May. Annual.
Bolander's beach pine <i>Pinus contorta</i> ssp. <i>bolanderi</i>	–	–	1B.2	Closed-cone coniferous forest. Podzol-like soils with Mendocino cypress and bishop pine; within pygmy cypress forest. 240–820 feet in elevation. Perennial.

Species	Federal Listing Status <sup>1</sup>	State Listing Status <sup>1</sup>	CRPR Listing Status <sup>1</sup>	Habitat
White-flowered rein orchid <i>Piperia candida</i>	–	–	1B.2	North Coast coniferous forest, lower montane coniferous forest, broadleaved upland forest. Sometimes on serpentine. Forest duff, mossy banks, rock outcrops, and muskeg. 150–5,300 feet in elevation. Blooms May–September. Perennial.
Mayacamas popcornflower <i>Plagiobothrys lithocaryus</i>	–	–	1A	Chaparral, cismontane woodland, valley and foothill grassland. Moist sites. 980–1,480 feet in elevation. Blooms April–May. Annual.
North Coast semaphore grass <i>Pleuropogon hooverianus</i>	–	ST	1B.1	Wet grassy, usually shady areas, sometimes freshwater marsh; associated with forest environments. 150–3,810 feet in elevation. Blooms April–June. Geophyte.
Nuttall's ribbon-leaved pondweed <i>Potamogeton epihydrus</i>	–	–	2B.2	Shallow water, ponds, lakes, streams, irrigation ditches. 970–8,660 feet in elevation. Blooms July–September. Geophyte.
Eel-grass pondweed <i>Potamogeton zosteriformis</i>	–	–	2B.2	Ponds, lakes, streams. 290–7,010 feet in elevation. Blooms June–July. Annual.
Dwarf alkali grass <i>Puccinellia pumila</i>	–	–	2B.2	Mineral spring meadows and coastal salt marshes. 5–40 feet in elevation. Blooms July. Perennial.
Angel's hair lichen <i>Ramalina thrausta</i>	–	–	2B.1	North Coast coniferous forest. On dead twigs and other lichens. 240–1,410 feet in elevation. Perennial.
White beaked-rush <i>Rhynchospora alba</i>	–	–	2B.2	Freshwater marshes and sphagnum bogs. 190–6,700 feet in elevation. Blooms June–August. Geophyte.
Round-headed beaked-rush <i>Rhynchospora globularis</i>	–	–	2B.1	Freshwater marsh. 150–200 feet in elevation. Blooms July–August. Geophyte.
Great burnet <i>Sanguisorba officinalis</i>	–	–	2B.2	Rocky serpentine seepage areas and along streams. 10–4,600 feet in elevation. Blooms July–October. Geophyte.
Siskiyou jellyskin lichen <i>Scytinium siskiyouense</i>	–	–	1B.1	Lower montane coniferous forest, North Coast coniferous forest Lower montane coniferous forest, North Coast coniferous forest. Epiphytic, usually on the bark of Fagaceae, such as <i>Quercus</i> spp. Or <i>Chrysolepis</i> spp. 2,080–4,790 feet in elevation. Lichen.
Lake County stonecrop <i>Sedella leiocarpa</i>	FE	SE	1B.1	Valley and foothill grassland, vernal pools, cismontane woodland. Level areas that are seasonally wet and dry out in late spring; substrate usually of volcanic origin. 1,690–2,100 feet in elevation. Blooms April–May. Annual.
Red Mountain stonecrop <i>Sedum eastwoodiae</i>	–	–	1B.2	Lower montane coniferous forest. Serpentine soils among rocks. 2,980–3,710 feet in elevation. Blooms May–July. Perennial.
Sanhedrin Mountain stonecrop <i>Sedum sanhedrinum</i>	–	–	1B.2	Chaparral, lower montane coniferous forest, upper montane coniferous forest. Openings, rocky, talus, rock crevices, serpentinite, gabbroic, metamorphic. 4,430–4,920 feet in elevation. Perennial.
Point Reyes checkerbloom <i>Sidalcea calycosa</i> ssp. <i>rhizomata</i>	–	–	1B.2	Freshwater marshes near the coast. 15–310 feet in elevation. Blooms April–September. Geophyte.
Lake Pillsbury checkerbloom <i>Sidalcea hickmanii</i> ssp. <i>pillsburiensis</i>	–	–	1B.2	Openings in chaparral on Franciscan soils. 2,300 feet in elevation. Blooms July–August. Perennial.
Siskiyou checkerbloom <i>Sidalcea malviflora</i> ssp. <i>patula</i>	–	–	1B.2	Coastal bluff scrub, coastal prairie, North Coast coniferous forest. Open coastal forest; roadcuts. 15–4,115 feet in elevation. Blooms May–August. Geophyte.

Species	Federal Listing Status <sup>1</sup>	State Listing Status <sup>1</sup>	CRPR Listing Status <sup>1</sup>	Habitat
Purple-stemmed checkerbloom <i>Sidalcea malviflora</i> ssp. <i>purpurea</i>	–	–	1B.2	Broadleaved upland forest, coastal prairie. 50–280 feet in elevation. Blooms May–June. Geophyte.
Marsh checkerbloom <i>Sidalcea oregana</i> ssp. <i>hydrophila</i>	–	–	1B.2	Meadows and seeps, riparian forest. Wet soil of streambanks and meadows. 3,610–7,545 feet in elevation. Blooms July–August. Perennial.
Kenwood Marsh checkerbloom <i>Sidalcea oregana</i> ssp. <i>valida</i>	FE	SE	1B.1	Edges of freshwater marshes. 375–410 feet in elevation. Blooms June–September. Geophyte.
Bolander's catchfly <i>Silene bolanderi</i>	–	–	1B.2	Cismontane woodland, lower montane coniferous forest, North Coast coniferous forest, meadows and seeps, chaparral (edges). Usually grassy openings, sometimes dry rocky slopes, canyons, or roadsides; sometimes serpentinite. 1,380–3,775 feet in elevation. Blooms May–June. Perennial.
Hooker's catchfly <i>Silene hookeri</i>	–	–	2B.2	Cismontane woodland, lower montane coniferous forest, chaparral. Grassy openings (often), rocky slopes (sometimes), serpentinite (sometimes). 490–4,140 feet in elevation. Blooms April–June. Perennial.
Socrates Mine jewelflower <i>Streptanthus brachiatus</i> ssp. <i>brachiatus</i>	–	–	1B.2	Chaparral, closed-cone coniferous forest. Serpentine areas and serpentine chaparral. 1,980–6,400 feet in elevation. Blooms May–June. Perennial.
Freed's jewelflower <i>Streptanthus brachiatus</i> ssp. <i>hoffmanii</i>	–	–	1B.2	Chaparral, cismontane woodland. Serpentine rock outcrops, primarily in geothermal development areas. 1,610–4,010 feet in elevation. Blooms May–July. Perennial.
Hoffman's bristly jewelflower <i>Streptanthus glandulosus</i> ssp. <i>hoffmanii</i>	–	–	1B.3	Chaparral, cismontane woodland, valley and foothill grassland. Moist, steep rocky banks, in serpentine and nonserpentine soil. 190–2,510 feet in elevation. Blooms March–July. Annual.
Green jewelflower <i>Streptanthus hesperidis</i>	–	–	1B.2	Chaparral, cismontane woodland. Openings in chaparral or woodland; serpentine, rocky sites. 780–2,510 feet in elevation. Blooms May–July. Annual.
Morrison's jewelflower <i>Streptanthus morrisonii</i> ssp. <i>morrisonii</i>	–	–	1B.2	Chaparral. Serpentine outcrops in the Austin Creek area. 0–0 feet in elevation. Blooms May–September. Perennial.
Northern slender pondweed <i>Stuckenia filiformis</i> ssp. <i>alpina</i>	–	–	2B.2	Shallow, clear water of lakes and drainage channels. 980–7,060 feet in elevation. Blooms May–July. Geophyte.
Twisted horsehair lichen <i>Sulcaria spiralifera</i>	–	–	1B.2	North Coast coniferous forest (immediate coast), coastal dunes. Usually on conifers. 0–300 feet in elevation. Perennial.
Robust false lupine <i>Thermopsis robusta</i>	–	–	1B.2	North coast coniferous forest, broadleaved upland forest. Ridgetops; sometimes on serpentine. 1,200–4,610 feet in elevation. Blooms May–July. Geophyte.
Beaked tracyina <i>Tracyina rostrata</i>	–	–	1B.2	Cismontane woodland, valley and foothill grassland. Open grassy meadows within oak woodland and grassland habitats. 290–2,590 feet in elevation. Blooms May–June. Annual.
Cylindrical trichodon <i>Trichodon cylindricus</i>	–	–	2B.2	Broadleaved upland forest, upper montane coniferous forest. Moss growing in openings on sandy or clay soils on roadsides, stream banks, trails or in fields. 160–4,920 feet in elevation. Perennial.
Napa bluecurls <i>Trichostema ruygtii</i>	–	–	1B.2	Cismontane woodland, chaparral, valley and foothill grassland, vernal pools, lower montane coniferous forest. Often in open, sunny areas. Also has been found in vernal pools. 100–2,230 feet in elevation. Blooms June–October. Annual.

Species	Federal Listing Status <sup>1</sup>	State Listing Status <sup>1</sup>	CRPR Listing Status <sup>1</sup>	Habitat
Santa Cruz clover <i>Trifolium buckwestiorum</i>	–	–	1B.1	Coastal prairie, broadleaved upland forest, cismontane woodland. Moist grassland. Gravelly margins. 340–2,000 feet in elevation. Blooms April–October. Annual.
Saline clover <i>Trifolium hydrophilum</i>	–	–	1B.2	Wetland. Marshes and swamps, valley and foothill grassland, vernal pools. Mesic, alkaline sites. 0–990 feet in elevation. Blooms April–June. Annual.
Monterey clover <i>Trifolium trichocalyx</i>	FE	SE	1B.1	Closed-cone coniferous forest. Openings, burned areas, and roadsides. Sandy soils. 190–690 feet in elevation. Blooms April–June. Annual.
Coastal triquetrella <i>Triquetrella californica</i>	–	–	1B.2	Coastal bluff scrub, coastal scrub. Grows within approximately 100 feet from the coast in coastal scrub, grasslands and in open gravels on roadsides, hillsides, rocky slopes, and fields. On gravel or thin soil over outcrops. 30–330 feet in elevation. Perennial.
Oval-leaved viburnum <i>Viburnum ellipticum</i>	–	–	2B.3	Chaparral, cismontane woodland, lower montane coniferous forest. 700–4,600 feet in elevation. Blooms May–June. Perennial.
Alpine marsh violet <i>Viola palustris</i>	–	–	2B.2	Wetland. Coastal scrub, bogs and fens. Swampy, shrubby places in coastal scrub or coastal bogs. 0–490 feet in elevation. Blooms March–August. Geophyte.

Notes: CRPR = California Rare Plant Rank; CEQA = California Environmental Quality Act; CESA = California Endangered Species Act; ESA = Endangered Species Act; NPPA = Native Plant Protection Act.

<sup>1</sup> Legal Status Definitions

**Federal:**

- FE Federally Listed as Endangered (legally protected by ESA)
- FT Federally Listed as Threatened (legally protected by ESA)
- FD Federally Delisted

**State:**

- SE State Listed as Endangered (legally protected by CESA)
- ST State Listed as Threatened (legally protected by CESA)
- SR State Listed as Rare (legally protected by NPPA)

**California Rare Plant Ranks (CRPR):**

- 1A Plant species that are presumed extirpated or extinct because they have not been seen or collected in the wild in California for many years. A plant is extinct if it no longer occurs anywhere. A plant that is extirpated from California has been eliminated from California but may still occur elsewhere in its range.
- 1B Plant species considered rare or endangered in California and elsewhere (protected under CEQA, but not legally protected under the ESA or CESA).
- 2B Plant species considered rare or endangered in California but more common elsewhere (protected under CEQA, but not legally protected under the ESA or CESA).

**CRPR Threat Ranks:**

- 0.1 Seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)
- 0.2 Moderately threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat)
- 0.3 Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

Sources: CNDDB 2023; CNPS 2023a.

## Special-Status Wildlife

A total of 59 special-status wildlife species have potential to occur within Mendocino County (see Table 3.5-4).

**Table 3.5-4 Special-Status Wildlife Species Known to Occur in Mendocino County and Their Potential for Occurrence**

Species	Federal Listing Status <sup>1</sup>	State Listing Status <sup>1</sup>	Habitat	Potential for Occurrence
<b>Amphibians and Reptiles</b>				
California giant salamander <i>Dicamptodon ensatus</i>	–	SSC	Wet coastal forests near streams and seeps from Mendocino County south to Monterey County and east to Napa County. Aquatic larvae found in cold, clear streams, occasionally in lakes and ponds. Adults known from wet forests under rocks and logs near streams and lakes.	The range of California giant salamander includes southern Mendocino County, south and west of Boonville and primarily west of SR 128. Streams, seeps, and wet forest habitats in southern Mendocino County provide habitats suitable for this species.
California red-legged frog <i>Rana draytonii</i>	FT	SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby, or emergent riparian vegetation. Requires 11–20 weeks of permanent water for larval development. Must have access to estivation habitat.	The range of California red-legged frog includes the southern and southwestern portions of Mendocino County, primarily south of SR 128. California red-legged frogs have been documented within Stewart Creek and in coastal creeks near Point Arena (CNDDDB 2023). Aquatic habitat (e.g., ponds, pools) with surrounding upland and movement habitats (e.g., riparian areas, wetlands) potentially suitable for this species are present within this portion of the County.
Foothill yellow-legged frog North Coast DPS pop. 1 <i>Rana boylei</i>	–	SSC	Northern Coast Ranges north of San Francisco Bay Estuary, Klamath Mountains, and Cascade Range, including the Lower Pit, Battle Creek, Thomes Creek, and Big Chico Creek. watershed subbasins (HU 8) in Lassen, Shasta, Tehama, and Butte Counties. Partly shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need at least some cobble-sized substrate for egg-laying. Need at least 15 weeks to attain metamorphosis.	The range of foothill yellow-legged frog includes all of Mendocino County. There are many documented occurrences of foothill yellow-legged frogs in Mendocino County, including within the Eel River, Ten Mile River, Noyo River, Big River, Navarro River, Garcia River, and tributary creeks associated with these rivers (CNDDDB 2023). Stream habitat throughout the County provides habitat potentially suitable for this species.
Green turtle <i>Chelonia mydas</i>	FT	–	Green sea turtles are found worldwide, primarily in subtropical and temperate regions of the Atlantic, Pacific, and Indian Oceans and in the Mediterranean Sea. In the United States, nesting green turtles are found primarily in the Hawaiian Islands, US Pacific Island territories (i.e., Guam, the Commonwealth of the Northern Mariana Islands, American Samoa), Puerto Rico, the Virgin Islands, and Florida. Nesting also occurs annually in Georgia, South Carolina, North Carolina, and Texas. This species is completely herbivorous and needs adequate supply of seagrasses and algae.	Green sea turtles may occasionally occur in marine habitats off the coast of Mendocino County; however, commercial cannabis cultivation activities would not occur in these habitats.

Species	Federal Listing Status <sup>1</sup>	State Listing Status <sup>1</sup>	Habitat	Potential for Occurrence
Pacific leatherback sea turtle <i>Dermochelys coriacea</i>	FE	SE	The Pacific leatherback sea turtle has the widest global distribution of any reptile, occurring in the Atlantic, Pacific, and Indian Oceans. This species nests mainly on tropical or subtropical beaches. Pacific leatherback sea turtles undertake the longest migrations between breeding and feeding areas of any sea turtle, some averaging 3,700 miles each way.	Pacific leatherback sea turtles may occasionally occur in marine habitats off the coast of Mendocino County; however, commercial cannabis cultivation activities would not occur in these habitats.
Northern red-legged frog <i>Rana aurora</i>	–	SSC	Humid forests, woodlands, grasslands, and streamsides in northwestern California, usually near dense riparian cover. Generally near permanent water, but can be found far from water, in damp woods and meadows, during nonbreeding season.	The range of northern red-legged frog includes the western half of Mendocino County from the Mendocino County-Humboldt County border south to the Navarro River. Documented occurrences of northern red-legged frog are primarily in coastal areas near Fort Bragg, Mendocino, and Little River (CNDDDB 2023).
Pacific tailed frog <i>Ascaphus truei</i>	–	SSC	Occurs in montane hardwood-conifer, redwood, Douglas fir and ponderosa pine habitats. Restricted to perennial montane streams. Tadpoles require water below 15 degrees Celsius.	The range of Pacific tailed frog includes the western half of Mendocino County. Documented occurrences of Pacific tailed frog are present within coastal streams throughout the County (CNDDDB 2023).
Red-bellied newt <i>Taricha rivularis</i>	–	SSC	Coastal drainages from Humboldt County south to Sonoma County, inland to Lake County. Lives in terrestrial habitats, juveniles generally underground, adults active at surface in moist environments. Will migrate over 0.6 mile (1 kilometer) to breed, typically in streams with moderate flow and clean, rocky substrate.	The range of red-bellied newt includes most of Mendocino County west of the Eel River. This species has been documented throughout this range near streams (CNDDDB 2023). Creeks and streams and surrounding terrestrial habitat throughout Mendocino County may provide habitat suitable for red-bellied newts.
Southern torrent salamander <i>Rhyacotriton variegatus</i>	–	SSC	Coastal redwood, Douglas fir, mixed conifer, montane riparian, and montane hardwood-conifer habitats. Old-growth forest. Cold, well-shaded, permanent streams and seepages or within splash zone or on moss-covered rock within trickling water.	The range of southern torrent salamander includes the western half of Mendocino County south to the Garcia River. Documented occurrences of southern torrent salamander are present in coastal streams throughout the County (CNDDDB 2023).
Western pond turtle <i>Emys marmorata</i>	FP	SSC	Ponds, marshes, rivers, streams, and irrigation ditches, usually with aquatic vegetation, below 6,000-foot elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to approximately 0.3 mile (0.5 kilometer) from water for egg-laying.	The range of western pond turtle includes all of Mendocino County. In Mendocino County, western pond turtles have been documented in the Russian River and Eel River, in addition to several smaller streams (CNDDDB 2023). Rivers, streams, ponds, and artificial aquatic habitat throughout Mendocino County map provide habitat suitable for this species.



Species	Federal Listing Status <sup>1</sup>	State Listing Status <sup>1</sup>	Habitat	Potential for Occurrence
<b>Birds</b>				
Ashy storm-petrel <i>Hydrobates homochroa</i>	–	SSC	Protected deepwater coastal communities. Colonial nester on off-shore islands. Usually nests on driest part of islands. Forages over open ocean. Nest sites on islands are in crevices beneath loosely piled rocks or driftwood or in caves.	Ashy storm-petrels have been documented nesting on offshore rocks near Little River; however, commercial cannabis cultivation activities would not occur in these habitats (CNDDDB 2023).
American peregrine falcon <i>Falco peregrinus anatum</i>	FD	SD	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	The range of American peregrine falcon includes all of Mendocino County. Nesting peregrine falcons have been documented near Montgomery Woods State Natural Reserve (CNDDDB 2023), and there are many documented observations of peregrine falcons throughout Mendocino County (eBird 2023). Cliff habitat throughout the County may provide nesting opportunities for this species.
Bald eagle <i>Haliaeetus leucocephalus</i>	FD	SE, FP	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	The year-round range of bald eagle includes eastern Mendocino County, and the western portion of the County overlaps the winter range of this species. Nesting bald eagles have been documented adjacent to Mill Creek near Potter Valley (CNDDDB 2023), and there are many additional documented observations of bald eagles throughout Mendocino County (eBird 2023). Forest habitats near river, creek, lake, reservoir, and ocean habitats throughout the County may provide habitat suitable for this species.
Burrowing owl <i>Athene cunicularia</i>	–	SSC	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent on burrowing mammals, most notably, the California ground squirrel.	Portions of Mendocino County (i.e., coastal areas, east of the Coast Ranges) are in the winter range of burrowing owl, and two small areas near Ukiah and Potter Valley are within the year-round range of the species. Documented observations of burrowing owl are limited to these areas of the County (eBird 2023). Grasslands and agricultural areas in the County may provide habitat suitable for this species.
Golden eagle <i>Aquila chrysaetos</i>	–	FP	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	The range of golden eagle includes all of Mendocino County. There are many documented observations of golden eagles throughout Mendocino County (eBird 2023). Large trees with surrounding foraging habitat throughout the County may provide habitat suitable for this species.

Species	Federal Listing Status <sup>1</sup>	State Listing Status <sup>1</sup>	Habitat	Potential for Occurrence
Grasshopper sparrow <i>Ammodramus savannarum</i>	–	SSC	Dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes. Favors native grasslands with a mix of grasses, forbs, and scattered shrubs. Loosely colonial when nesting.	The range of grasshopper sparrow includes all of Mendocino County. There are many documented observations of grasshopper sparrows throughout Mendocino County (eBird 2023). Grassland habitats throughout the County may provide habitat suitable for this species.
Hawaiian petrel <i>Pterodroma sandwichensis</i>	FE	–	Nests in the mountains on several of the main Hawaiian Islands. Since the 1990s it has been found year-round in small numbers on offshore trips from Oregon and northern California, and less regularly north to British Columbia and south to southern California.	Hawaiian petrels may forage in open ocean environments offshore of Mendocino County; however, commercial cannabis cultivation activities would not occur in these habitats.
Little willow flycatcher <i>Empidonax traillii brewsteri</i>	–	SE	Mountain meadows and riparian habitats in the Sierra Nevada and Cascade Range. Nests near the edges of vegetation clumps and near streams.	The range of little willow flycatcher includes all of Mendocino County. There are many documented observations of willow flycatchers throughout Mendocino County (eBird 2023). Riparian habitats throughout the County may provide nesting habitat for this species.
Marbled murrelet <i>Brachyramphus marmoratus</i>	FT	SE	Lower montane coniferous forest, old-growth, redwood. Feeds near-shore; nests inland along coast from Eureka to Oregon border and from Half Moon Bay to Santa Cruz. Nests in old-growth redwood-dominated forests, up to 6 miles inland, often in Douglas fir.	Marbled murrelet is known to occur in inland coniferous forests in Mendocino County, including Russian Gulch State Park, near Admiral William Standley State Recreation Area, and near Alder Creek (CNDDDB 2023). Marbled murrelets have been observed along the Mendocino County coastline, but they typically occur in the greatest concentrations offshore of areas with intact old-growth forests (eBird 2023). Critical habitat for this species is present within the County (see “Critical Habitat” section, below, and Figure 3.5-7).
Northern goshawk <i>Accipiter gentilis</i>	–	SSC	Nests primarily in conifer forest and aspen stands with high canopy closure (typically greater than 70 percent), relatively high density of large live and dead trees, low density of small trees, and low shrub/sapling and ground cover. Reuses old nests and maintains alternate nest sites. Often nests on gentle to moderate north slopes and near water. Forages in moderately dense, mature forests and younger forests, some openings, and along forest edges. Usually nests on north slopes, near water. Red fir, lodgepole pine, Jeffrey pine, and aspens are typical nest trees.	The range of northern goshawk includes all of Mendocino County except for coastal areas. This species has been documented primarily on US Forest Service and other reserve land and private timberland, including in Mendocino National Forest, the Angelo Coast Range Reserve, and Mailliard Redwoods State Reserve (CNDDDB 2023). Forest habitats with appropriate conditions (e.g., high canopy closure, large live and dead trees) in the County may provide habitat suitable for this species.

Species	Federal Listing Status <sup>1</sup>	State Listing Status <sup>1</sup>	Habitat	Potential for Occurrence
Northern harrier <i>Circus hudsonius</i>	–	SSC	Coastal salt and freshwater marsh. Nests and forages in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.	The range of northern harrier includes coastal areas of Mendocino County. Marsh, riparian, and grassland habitats within the range of this species may provide nesting habitat suitable for northern harriers.
Northern spotted owl <i>Strix occidentalis caurina</i>	FT	ST, SSC	North Coast coniferous forest, old-growth, redwood. Old-growth forests or mixed stands of old-growth and mature trees. Occasionally in younger forests with patches of big trees. High, multistory canopy dominated by big trees, many trees with cavities or broken tops, woody debris and space under canopy.	Spotted owls have been observed nesting throughout Mendocino County, including within Mendocino National Forest and coastal forests, much of which is owned by private timber companies (CNDDDB 2023). Critical habitat for this species is present in the County (see “Critical Habitat” section, below, and Figure 3.5-7).
Olive-sided flycatcher <i>Contopus cooperi</i>	–	SSC	Nesting habitats are mixed conifer, montane hardwood-conifer, Douglas fir, redwood, red fir, and lodgepole pine. Most numerous in montane conifer forests where tall trees overlook canyons, meadows, lakes, or other open terrain.	The range of olive-sided flycatcher includes all of Mendocino County. Forest habitats throughout the County may provide nesting habitat suitable for this species.
Purple martin <i>Progne subis</i>	–	SSC	Inhabits low-elevation coniferous forest of Douglas fir, ponderosa pine, and Monterey pine. Nests in old woodpecker cavities mostly, also in human-made structures. Nest often is located in a tall, isolated tree/snag.	The range of purple martin includes all of Mendocino County. There are many documented observations of purple martin throughout Mendocino County (eBird 2023). Trees and human-made habitats throughout the County may provide nesting habitat for this species.
Short-tailed albatross <i>Phoebastria albatrus</i>	FE	SSC	The species breeds primarily on remote islands in the western Pacific. During the nonbreeding season, short-tailed albatross range along the Pacific Rim, from southern Japan to the west coast of Canada and the United States, primarily along the continental shelf margin.	Short-tailed albatross may forage in open ocean environments offshore of Mendocino County; however, commercial cannabis cultivation activities would not occur in these habitats.
Tricolored blackbird <i>Agelaius tricolor</i>	–	ST, SSC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony.	The range of tricolored blackbird in Mendocino County is patchy, largely limited to areas where breeding colonies have been observed, including near Hopland, Fort Bragg, and Potter Valley (CNDDDB 2023). Riparian habitats throughout the County may provide nesting habitat for this species.
Tufted puffin <i>Fratercula cirrhata</i>	–	SSC	Protected deepwater coastal communities. Open-ocean bird; nests along the coast on islands, islets, or (rarely) mainland cliffs. Requires sod or earth into which the birds can burrow, on island cliffs or grassy island slopes.	Tufted puffins have been documented nesting on offshore rocks near Goat Island and Fish Rocks; however, commercial cannabis cultivation activities would not occur in these habitats (CNDDDB 2023).

Species	Federal Listing Status <sup>1</sup>	State Listing Status <sup>1</sup>	Habitat	Potential for Occurrence
Western snowy plover <i>Charadrius nivosus nivosus</i>	FT	SSC	Sandy beaches, salt pond levees, and shores of large alkali lakes. Needs sandy, gravelly, or friable soils for nesting.	Western snowy plovers are known to nest in coastal areas near MacKerricher State Park and Manchester State Park (CNDDDB 2023). Commercial cannabis cultivation activities would not occur in these habitats.
Western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	FT	SE	Riparian forests along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Mendocino County is within the historical range of western yellow-billed cuckoo; however, there are currently no known nesting occurrences of the species in the County (CNDDDB 2023). The species was detected in 1997 near Navarro River Redwoods State Park (eBird 2023), and it is possible that cuckoos could occasionally be detected in the County. Riparian habitats throughout the County may provide nesting habitat for this species.
White-tailed kite <i>Elanus leucurus</i>	–	FP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	The range of white-tailed kite includes all of Mendocino County. There are many documented observations of white-tailed kites throughout Mendocino County (eBird 2023). Woodland and riparian habitats throughout the County may provide nesting habitat for this species.
Yellow warbler <i>Setophaga petechia</i>	–	SSC	Riparian plant associations close to water. Also nests in montane shrubbery in open conifer forests in the Cascade Range and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets and in other riparian plants, including cottonwoods, sycamores, ash, and alders.	The range of yellow warbler includes all of Mendocino County. There are many documented observations of yellow warbler throughout Mendocino County (eBird 2023). Riparian habitats throughout the County may provide nesting habitat for this species.
Yellow-breasted chat <i>Icteria virens</i>	–	SSC	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 feet of ground.	The range of yellow-breasted chat includes all of Mendocino County. There are many documented observations of yellow-breasted chat throughout Mendocino County (eBird 2023). Riparian habitats throughout the County may provide nesting habitat for this species.
<b>Fish</b>				
Coho salmon Central California Coast ESU pop. 4 <i>Oncorhynchus kisutch</i>	FE	SE	Federal listing applies to populations between Punta Gorda and San Lorenzo River. State listing includes populations south of Punta Gorda. Require beds of loose, silt-free, coarse gravel for spawning. Also needs cover, cool water, and sufficient dissolved oxygen.	The coho salmon Central California Coast ESU is known to occur in Mendocino County in the Ten Mile and Garcia Rivers and associated tributaries (CNDDDB 2023). Critical habitat for this species is present in the County (see “Critical Habitat” section, below, and Figure 3.5-7).

Species	Federal Listing Status <sup>1</sup>	State Listing Status <sup>1</sup>	Habitat	Potential for Occurrence
Coho salmon Southern Oregon/Northern California Coast ESU pop. 2 <i>Oncorhynchus kisutch</i>	FT	ST	Federal listing refers to populations between Cape Blanco, Oregon, and Punta Gorda, Humboldt County, California. State listing refers to populations between the Oregon border and Punta Gorda, California.	The coho salmon Southern Oregon/Northern California Coast ESU is known to occur in Mendocino County in the Mattole River and associated tributaries (CNDDDB 2023).
Gualala roach <i>Hesperoleucus parvipinnis</i>	–	SSC	Confined to the Gualala River and its tributaries. Warm water adapted.	The Gualala roach range overlaps the southwestern corner of Mendocino County in the Gualala River and its tributaries.
Hardhead <i>Mylopharodon conocephalus</i>	–	SSC	Low- to mid-elevation streams in the Sacramento–San Joaquin River drainage. Also present in the Russian River. Clear, deep pools with sand-gravel-boulder bottoms and slow water velocity. Not found where exotic centrarchids predominate.	The range of hardhead in Mendocino County includes the eastern portion of the County in the Russian River.
Northern coastal roach <i>Hesperoleucus venustus navarroensis</i>	–	SSC	Habitat generalist. Found generally in a wide variety of habitats in the Navarro River and Russian River basins where there is cover (e.g., fallen trees) and where alien predators are absent. Most abundant in tributaries with clear, well-oxygenated water with dominant substrates of cobble and boulder and shallow depths (average 10–50 centimeters) with pools up to 1 meter deep.	Northern coastal roach has been documented in the Navarro River (CNDDDB 2023), and this species could occur in stretches of the Navarro River and its tributaries in the County where habitat conditions are appropriate.
Pacific lamprey <i>Entosphenus tridentatus</i>	–	SSC	Found in Pacific Coast streams north of San Luis Obispo County; however, regular runs present in Santa Clara River. The size of runs is declining. Swift-current gravel-bottomed areas for spawning with water temperatures between 12 and 18 degrees Celsius. Lamprey larvae need soft sand or mud.	The range of Pacific lamprey includes all of Mendocino County, and the species has been documented within Ten Mile River (CNDDDB 2023). This species may occur in coastal streams throughout the County.
Russian River tule perch <i>Hysteroecarpus traskii pomo</i>	–	SSC	Low-elevation streams of the Russian River system. Requires clear, flowing water with abundant cover. They also require deep (greater than 1 meter) pool habitat.	Russian River tule perch occurs in the Russian River and may occur in stretches of the river in Mendocino County.
Steelhead Central California Coast DPS pop. 8 <i>Oncorhynchus mykiss irideus</i>	FT	–	From Russian River, south to Soquel Creek and to, but not including, Pajaro River. Also San Francisco and San Pablo Bay basins.	The range of the steelhead Central California Coast DPS includes the eastern portion of Mendocino County—specifically, the Russian River. This species may be present in the Russian River and its tributaries. Critical habitat for this species is present in the County (see “Critical Habitat” section, below, and Figure 3.5-7).

Species	Federal Listing Status <sup>1</sup>	State Listing Status <sup>1</sup>	Habitat	Potential for Occurrence
Steelhead Northern California DPS summer-run pop. 48 <i>Oncorhynchus mykiss irideus</i>	FT	SE	Naturally spawning population of the stream-maturing summer-run ecotype. From Redwood Creek watershed south to and inclusive of Gualala River watershed. Distribution within range more limited. Requires cool water (less than 23 degrees Celsius), holding habitat to withstand higher temperatures, lower flows in summer/fall, and loose gravels at pool tails for redd construction. Favors cool, clear, fast-flowing riffles; ample riparian cover; undercut banks; and diverse prey.	The range of the steelhead Northern California DPS includes most of Mendocino County, excluding the Russian River. This summer-run DPS has been documented in the Eel River and its tributaries (CNDDDB 2023). Critical habitat for this species is present in the County (see “Critical Habitat” section, below, and Figure 3.5-7).
Steelhead Northern California DPS winter-run pop. 49 <i>Oncorhynchus mykiss irideus</i>	FT	–	From Redwood Creek watershed south to and inclusive of Gualala River watershed. Distribution throughout range. Adults require high flows of 18–20 centimeters for passage and loose gravels at pool tails for redd construction. Juveniles favor areas with cool (10–17 degrees Celsius), clear, fast-flowing riffles; ample riparian cover; undercut banks; and diverse prey.	The range of the steelhead Northern California DPS includes most of Mendocino County, excluding the Russian River. The winter-run DPS has been documented in the Eel River, Mattole River, Ten Mile River, Little River, Albion River, Navarro River, Garcia River, and Gualala River; associated tributaries; and coastal creeks in the County (CNDDDB 2023). Critical habitat for this species is present in the County (see “Critical Habitat” section, below, and Figure 3.5-7).
Tidewater goby <i>Eucyclogobius newberryi</i>	FE	SSC	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County, to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, needs fairly still but not stagnant water and high oxygen levels.	The range of tidewater goby in Mendocino County includes coastal areas south of the North Fork Ten Mile River south to Point Arena. This species has been detected in lagoons near the Ten Mile River, Fort Bragg, and Point Arena (CNDDDB 2023). Critical habitat for this species is present in the County (see “Critical Habitat” section, below, and Figure 3.5-7).
<b>Invertebrates</b>				
Behren’s silverspot butterfly <i>Speyeria zerene behrensii</i>	FE	–	Coastal prairie. Restricted to the Pacific side of the Coast Ranges, from Point Arena to Cape Mendocino, Mendocino County. Inhabits coastal terrace prairie habitat. Food plant is <i>Viola</i> spp.	Within the limited range of this species, Behren’s silverspot butterflies have been documented near Mendocino, Albion, and Point Arena (CNDDDB 2023). Areas near the coast from Point Arena to Cape Mendocino with coastal prairie habitat may provide habitat suitable for this species.
Crotch bumble bee <i>Bombus crotchii</i>	–	SC	Found primarily in California: mediterranean, Pacific coast, western desert, Great Valley, and adjacent foothills through most of southwestern California. Habitat includes open grassland and scrub. Nests underground.	Although all of Mendocino County is located within the historic range of this species, the current range of Crotch bumble bee includes only the northwest corner of the County, east of Covelo, and mostly in Mendocino National Forest land. Nesting, overwintering, and foraging habitat for this species is likely present in natural habitats (including ruderal areas) in the County.

Species	Federal Listing Status <sup>1</sup>	State Listing Status <sup>1</sup>	Habitat	Potential for Occurrence
Lotis blue butterfly <i>Plebejus anna lotis</i>	FE	–	Inhabits wet meadows or poorly drained sphagnum-willow bogs, where soils are waterlogged and acidic; north coastal California. Inhabits upper edges of peat bog between peat and surrounding low willows; host plant is suspected to be <i>Hosackia gracilis</i> .	The range of lotis blue butterfly includes coastal areas in Mendocino County. Within the limited range of this species, lotis blue butterflies have been documented near Point Cabrillo and Point Arena (CNDDDB 2023). Coastal areas with appropriate microhabitat conditions may provide habitat suitable for this species.
Monarch California overwintering population pop. 1 <i>Danaus plexippus plexippus</i>	FC	–	Winter roost sites extend along the coast from northern Mendocino County to Baja California, Mexico. Roosts located in wind-protected tree groves (e.g., eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	Several monarch overwintering sites have been documented in Mendocino County, which is the northern extent of overwintering for this species; two of these sites are considered active (Xerces Society 2016). Foraging habitat (i.e., floral resources) and breeding habitat (i.e., milkweed ( <i>Asclepias</i> spp.)) are likely also present in the County.
Western bumble bee <i>Bombus occidentalis</i>	–	SC	Once common throughout much of its range, in California, this species is currently largely restricted to high-elevation sites in the Sierra Nevada and the northern California coast. Habitat includes open grassy areas, chaparral, scrub, and meadows. Requires suitable nesting sites for the colonies, availability of nectar and pollen from floral resources throughout the duration of the colony period (spring, summer, and fall), and suitable overwintering sites for the queens.	Although all of Mendocino County is located within the historic range of this species, the current range of western bumble bee includes only the northwest corner of the County, east of Covelo, and mostly in Mendocino National Forest land. Nesting, overwintering, and foraging habitat for this species is likely present in natural habitats (including ruderal areas) in the County.
<b>Mammals</b>				
American badger <i>Taxidea taxus</i>	–	SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats with friable soils. Needs sufficient food; friable soils; and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	The range of American badger includes all of Mendocino County. Documented occurrences of badgers in Mendocino County are limited to historic museum collections; however, open forest and grassland habitats throughout the County may provide habitat suitable for the species.
Fisher West Coast DPS <i>Pekania pennanti</i>	–	SSC	Intermediate to large-tree stages of coniferous forests and deciduous-riparian areas with high-percent canopy closure. Uses cavities, snags, logs, and rocky areas for cover and denning. Needs large areas of mature, dense forest. Endangered status applies to Southern Sierra Nevada DPS.	The historic range of fisher included all of Mendocino County; however, the species is now limited to the northeastern portion of the County. Modern occurrences of fisher are primarily located in federal wilderness areas and Mendocino National Forest (CNDDDB 2023).
Humboldt marten <i>Martes caurina humboldtensis</i>	FT	SE, SSC	North Coast coniferous forest, old-growth redwood. Occurs only in the coastal redwood zone from the Oregon border south to Sonoma County. Associated with late-successional coniferous forests; prefer forests with low overhead cover.	Although Mendocino County is located within the historic range of this species, Humboldt marten has been extirpated in the County.

Species	Federal Listing Status <sup>1</sup>	State Listing Status <sup>1</sup>	Habitat	Potential for Occurrence
Northern California ringtail <i>Bassariscus astutus raptor</i>	–	FP	Dens most often in rock crevices, boulder piles, or talus, but also in tree hollows, root cavities, and rural buildings. Rarely uses the same den for more than a few days. Females with litters change dens within 10 days of birth and almost daily after 20 days.	The range of ringtail includes all of Mendocino County. Forest, shrub, and riparian habitats throughout the County likely provide habitat suitable for this species.
Pallid bat <i>Antrozous pallidus</i>	–	SSC	Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Tree roosting has also been documented in large conifer snags, inside basal hollows of redwoods and giant sequoias, and in bole cavities in oaks. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	The range of pallid bat includes all of Mendocino County. There are several documented occurrences of pallid bat in eastern Mendocino County, and rocky areas and large trees throughout the County likely provide habitat suitable for this species (CNDDDB 2023).
Point Arena mountain beaver <i>Aplodontia rufa nigra</i>	FE	SSC	Coastal areas of Point Arena with springs or seepages. North-facing slopes of ridges and gullies with friable soils and thickets of undergrowth.	The range of Point Arena is limited to coastal habitats to approximately 5 miles inland in the immediate area surrounding Point Arena. There are many documented occurrences of this species near creeks and drainages within this limited range (CNDDDB 2023).
Sonoma tree vole <i>Arborimus pomo</i>	–	SSC	North Coast fog belt from Oregon border to Sonoma County. In old-growth Douglas fir, redwood, and montane hardwood-conifer forests. Feeds almost exclusively on Douglas fir needles. Will occasionally take needles of grand fir, hemlock, or spruce.	The range of Sonoma tree vole includes all of Mendocino County except for the northeastern portion of the County. There are many documented occurrences of this species throughout the County (CNDDDB 2023).
Steller sea lion <i>Eumetopias jubatus</i>	FD, MMPA	–	Marine intertidal and splash zone communities, protected deepwater coastal communities, rock shore. Breeds on Año Nuevo, San Miguel, and Farallon islands; Point St. George, and Sugarloaf. Hauls out on islands and rocks. Needs haul-out and breeding sites with unrestricted access to water, near aquatic food supply and with no human disturbance.	Steller sea lions forage off the coast of Mendocino County and have been documented breeding on coastal rocks near Cape Mendocino. However, commercial cannabis cultivation activities would not occur in these coastal and offshore habitats.
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	–	SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Requires large cavities for roosting, which may include abandoned buildings and mines, caves, and basal cavities of trees. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	The range of Townsend's big-eared bat includes all of Mendocino County. There are many documented occurrences of Townsend's big-eared bats in Mendocino County, including within basal hollows of large trees and in buildings (CNDDDB 2023). Roost habitat, including trees, buildings, bridges, and caves, is present throughout Mendocino County.
Western red bat <i>Lasiurus frantzii</i>	–	SSC	Cismontane woodland, lower montane coniferous forest, riparian forest, riparian woodland. Roosts primarily in trees, 2–40 feet above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	The range of western red bat includes all of Mendocino County. This species has been documented in Mendocino County near Covelo (CNDDDB 2023). Tree roost habitat suitable for western red bats is present throughout Mendocino County.



Species	Federal Listing Status <sup>1</sup>	State Listing Status <sup>1</sup>	Habitat	Potential for Occurrence
Wolverine <i>Gulo gulo</i>	FT	FT, FP	Found in the North Coast mountains and the Sierra Nevada. Found in a wide variety of high-elevation habitats. Needs water source. Uses caves, logs, burrows for cover and den area. Hunts in more open areas. Can travel long distances.	Although Mendocino County is located within the historic range of this species, the only modern sightings of wolverines in California have been in Tahoe National Forest (Nevada County) and the eastern Sierra Nevada (Inyo and Mono Counties). These locations are a considerable distance from Mendocino County; therefore, this species is unlikely to occur in the County.

Notes: CEQA = California Environmental Quality Act; DPS = distinct population segment; ESU = evolutionarily significant unit; SR = state route.

<sup>1</sup> Legal Status Definitions

**Federal:**

- FE Federally Listed as Endangered (legally protected)
- FT Federally Listed as Threatened (legally protected)
- FD Federally Delisted
- FP Proposed for Listing under the federal Endangered Species Act
- MMPA Marine Mammal Protection Act (legally protected)

**State:**

- FP Fully Protected (legally protected)
- SSC Species of Special Concern (no formal protection other than CEQA consideration)
- SE State Listed as Endangered (legally protected)
- ST State Listed as Threatened (legally protected)
- SC State Candidate for Listing (legally protected)
- SD State Delisted

Sources: CNDDDB 2023; eBird 2023; Xerces Society 2016.

## CRITICAL HABITAT

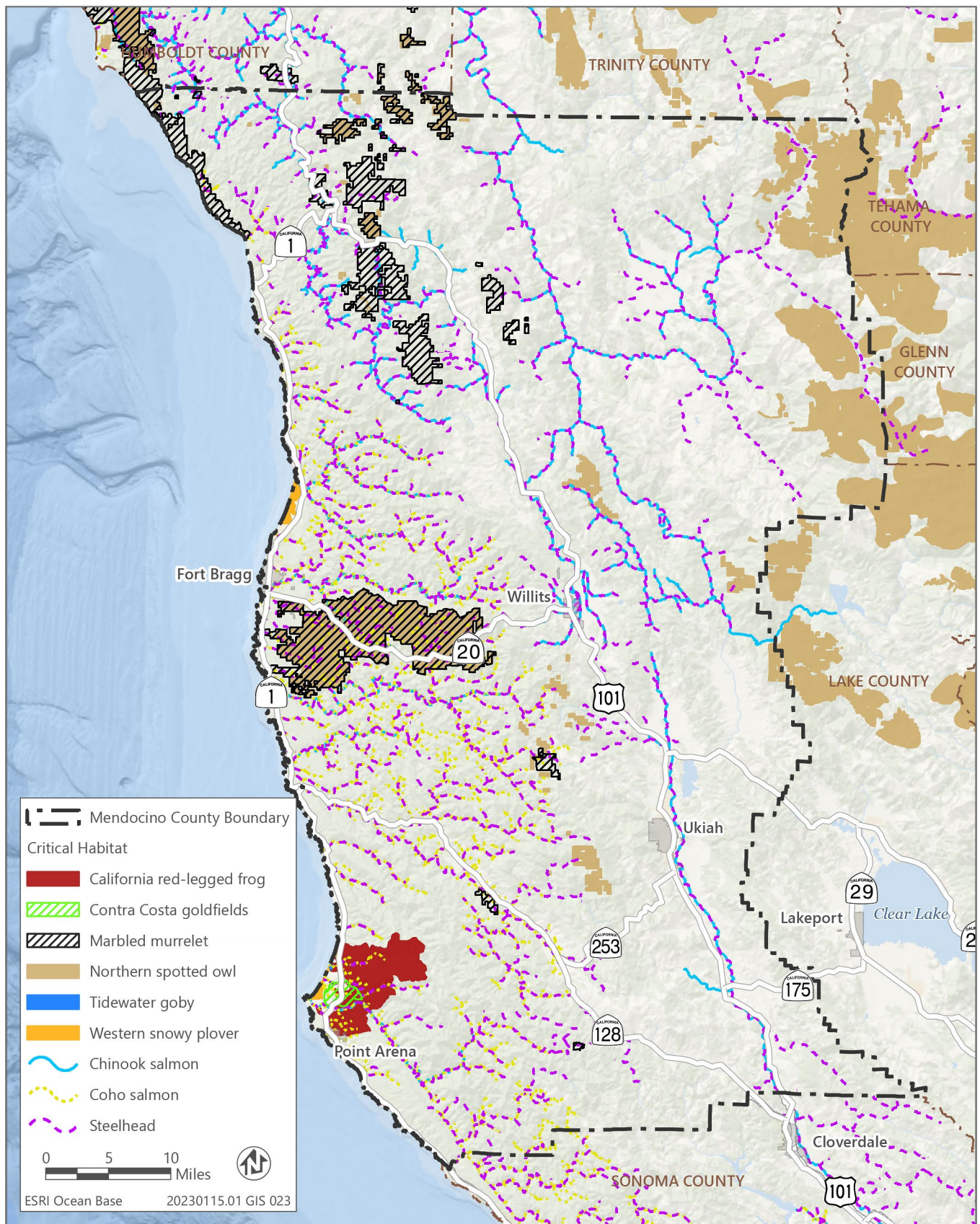
“Critical habitat” is a term defined and used in the ESA. It refers to specific geographic areas designated by USFWS or the National Marine Fisheries Service that contain features essential to the conservation of an endangered or threatened species and that may require special management and protection. Critical habitat designations affect only federal agency actions or federally funded or permitted activities. Critical habitat designations do not affect activities by private landowners if there is no federal “nexus”—that is, no federal funding or authorization. Critical habitat for nine species (four fish, one amphibian, three birds, and one plant) is present in Mendocino County (Figure 3.5-7).

### Coho Salmon

Approximately 1,089 miles of critical habitat for Coho salmon occurs in Mendocino County. Critical habitat for this species is within the western portion of the County and concentrated mostly in southwestern Mendocino County. Coho salmon critical habitat includes Daugherty Creek, Rancheria Creek, Navarro River, and Garcia River (Figure 3.5-7).

### Chinook Salmon

Approximately 634 miles of critical habitat for Chinook salmon occurs in Mendocino County. Critical habitat for this species is mainly in the northern and central portions of the County but also extends south along the Russian River to the County line (Figure 3.5-7). Additionally, this critical habitat also includes Eel River, Ten Mile River, and Noyo River (Figure 3.5-7).



Source: Data downloaded from NMFS in 2022 and USFWS in 2023.

**Figure 3.5-7 Critical Habitat**

### Steelhead

Approximately 1,522 acres of critical habitat for steelhead occurs in Mendocino County. Critical habitat for this species is mainly concentrated in the western portions of the County but also is present in the central and eastern portions in the Eel River watershed and south to the County line within the Russian River (Figure 3.5-7). Additionally, this critical habitat includes Ten Mile River, Garcia River, and Mill Creek (Figure 3.5-7).

### Tidewater Goby

Approximately 102 acres of critical habitat for tidewater goby occurs in Mendocino County, along the coast of the Pacific Ocean. The critical habitat comprises a portion of the Ten Mile River in the western middle portion of the County starting south of Seaside Creek Beach, Virgin and Pudding Creeks (also in the western middle portion of the County), and wetlands along Manchester State Beach in the southwestern portion of the County (Figure 3.5-7).

### California Red-Legged Frog

Approximately 21,694 acres of critical habitat for California red-legged frog occurs in Mendocino County, located in Point Arena and continuing north past Manchester. This critical habitat is in one large patch located in and outside of the coastal zone, with some areas as far as approximately 8 miles inland. It includes Nye Creek, Tin Can Creek, and Hathaway Creek, as well as portions of Brush Creek (Figure 3.5-7).

### Marbled Murrelet

Approximately 99,590 acres of critical habitat for marbled murrelet occurs in Mendocino County. Critical habitat for this species is concentrated mostly in the western portions of the County, with large areas identified near SR 20, along the northwestern coastline of the County, as well as large patches inland in the northwestern portion of the County, north and south of SR 1 (Figure 3.5-7).

### Northern Spotted Owl

Approximately 134,020 acres of critical habitat for northern spotted owl occurs in Mendocino County. Critical habitat for this species is dispersed in patches in the northern and central portions of the County (Figure 3.5-7). The largest patches of designated critical habitat are located in the northeastern portion of the County, in the Mendocino National Forest (Figure 3.5-7).

### Western Snowy Plover

Approximately 1,660 acres of critical habitat for western snowy plover occurs in Mendocino County, along the coastline. Critical habitat for this species is located in Manchester at Manchester State Park and in Inglenook at MacKerricher State Park and Inglenook Fen-Ten Miles Dunes Natural Preserve (Figure 3.5-7).

### Contra Costa Goldfields

Approximately 2,638 acres of critical habitat for Contra Costa goldfields occurs in Mendocino County. Critical habitat for this species is located in and around Manchester, south of Brush Creek (Figure 3.5-7).

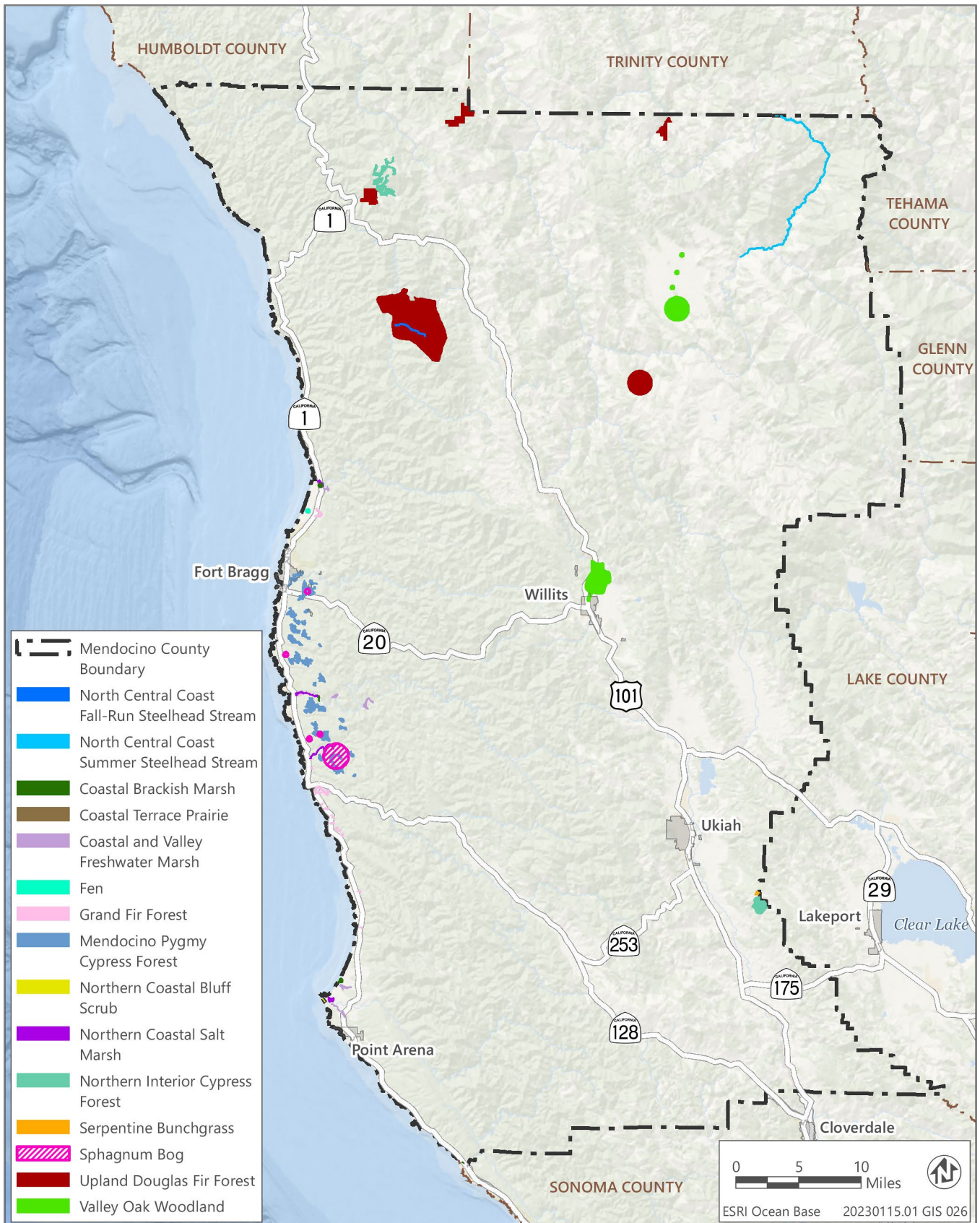
## SENSITIVE NATURAL COMMUNITIES AND OTHER SENSITIVE HABITATS

Sensitive habitats include those that are of special concern to resource agencies or are afforded specific consideration through CEQA, section 1602 of the Fish and Game Code,

section 404 of the CWA, and the state Porter-Cologne Act, as discussed in Section 3.5.1, “Regulatory Setting,” above. Sensitive natural habitat may be of special concern to agencies and conservation organizations for a variety of reasons, including their locally or regionally declining status or because they provide important habitat to common and special-status species. Sensitive natural communities are those native plant communities defined by CDFW as having limited distribution statewide or in a county or region and that are often vulnerable to environmental effects of projects (CDFW 2018a). In addition to habitats officially identified by CDFW as sensitive natural communities or habitats meeting the definition of waters of the United States, other sensitive habitats include riparian habitats, oak woodlands, chaparral, and coastal sage scrub.

CDFW maintains a list of plant communities that are native to California. Sensitive natural communities are ranked by CDFW from S1 to S3, where S1 is critically imperiled, S2 is imperiled, and S3 is vulnerable. CDFW natural-community rarity rankings follow the 2009 NatureServe Conservation Status Assessments: Methodology for Assigning Ranks (Faber-Langendoen et al. 2012), in which all alliances are listed with a global (G) and state (S) rank, where G1 is critically imperiled, G2 is imperiled, G3 is vulnerable, G4 is apparently secure, and G5 is secure. These communities may or may not contain special-status species or their habitat. Known occurrences of sensitive natural communities are included in the California Natural Diversity Database (CNDDDB); however, no new occurrences have been added to the CNDDDB since the mid-1990s, when funding was cut for this portion of the CNDDDB program. Additionally, the sensitive natural communities included in the CNDDDB are based on the Holland (1986) classification and are not consistent with the state’s current vegetation mapping and classification standards. The legacy sensitive natural community data from CNDDDB is currently being validated and moved to Biogeographic Information and Observation System (BIOS). Sensitive natural communities are currently being mapped as part of the Vegetation Classification and Mapping Program (VegCAMP) statewide vegetation mapping program and are being added to BIOS as mapping is completed and verified. Accordingly, VegCAMP data, the BIOS website, and local or regional vegetation maps would need to be reviewed during project-specific analyses to help identify potentially occurring sensitive natural communities. The Manual of California Vegetation Online (CNPS 2023b) was used to develop a list of sensitive natural communities that may occur in each California Wildlife Habitat Relationships type in the County.

Fifteen legacy sensitive natural communities were reported in the CNDDDB and occur in Mendocino County (Figure 3.5-8, Table 3.5-5) (CNDDDB 2023). Some of these communities reported by the CNDDDB overlap with communities identified as sensitive natural communities in the new system using the Manual of California Vegetation Online (CNPS 2023b) and mapped by VegCAMP. This includes the legacy sensitive natural community coastal and valley freshwater marsh (Table 3.5-5), which contains sensitive natural communities identified in the Manual of California Vegetation Online (CNPS 2023b), including slough sedge–water-parsley–small-fruited bulrush marsh (S3; Table 3.5-6), which is known to occur in Mendocino County, and small-fruited bulrush marsh (S2; Table 3.5-6), which has potential to occur in the County (Figure 3.5-8, Table 3.5-5). The legacy sensitive natural community Mendocino pygmy cypress forest (Figure 3.5-8, Table 3.5-5) is now contained in California coastal cypress woodland (Table 3.5-6), although pygmy forest ecosystems in particular have special protections provided by Policy RM-87 in the Mendocino County General Plan (see Section 3.5-1, “Regulatory Setting”).



Source: Data downloaded from CDFW in 2023; adapted by Ascent in 2023.

**Figure 3.5-8 Sensitive Habitats**

**Table 3.5-5 Legacy Sensitive Natural Communities Known to Occur in Mendocino County**

<b>Sensitive Natural Community</b>	<b>Habitat Type</b>
Upland Douglas fir	Douglas Fir
Mendocino pygmy cypress forest	Closed-Cone Pine-Cypress
Grand fir forest	Redwood
Valley oak woodland	Valley Oak Woodland
Great valley mixed riparian forest	Valley Foothill Riparian
Valley needlegrass grassland	Perennial Grassland
Serpentine bunchgrass	Perennial Grassland
Coastal terrace prairie	Fresh Emergent Wetland; Perennial Grassland; Wet Meadow
Northern basalt flow vernal pool	Annual Grassland; Fresh Emergent Wetland
Fen	Fresh Emergent Wetland; Wet Meadow
Sphagnum bog	Alpine Dwarf-Shrub; Fresh Emergent Wetland; Wet Meadow
Coastal and valley freshwater marsh	Fresh Emergent Wetland
Coastal brackish marsh	Saline Emergent Wetland
North-central coast fall-run steelhead stream	Riverine
North-central coast summer steelhead stream	Riverine

Source: CNDDDB 2023, compiled by Ascent in 2023.

Mendocino pygmy cypress forest is mapped in the western portion of the County, mainly between SR 20 and SR 128 (Figure 3.5-8). The legacy sensitive natural community upland Douglas fir does not have a comparable community in the Manual of California Vegetation Online (CNPS 2023b). Upland Douglas fir forest is old-growth forests or stands of Douglas fir that are greater than 200 years old. Features of old-growth Douglas fir forests include presence of Douglas fir trees with a diameter at breast height of 40 inches or greater, coarse woody debris on the forest floor, and large snags or dead trees (Franklin and Spies 1991). When sensitive natural communities were no longer tracked in the CNDDDB in the mid-1990s, only 10,000–50,000 acres of upland Douglas fir forest remained in California. There are likely old-growth Douglas fir forest stands in Mendocino County in addition to those reported in the CNDDDB (Figure 3.5-6). Additionally, since these legacy sensitive natural communities in Table 3.5-5 have not been tracked in the CNDDDB since the mid-1990s, these communities have potential to occur in the associated habitat type listed in Table 3.5-5 throughout the County.

Sensitive natural communities identified in the new system using the Manual of California Vegetation Online (CNPS 2023b) and mapped by VegCAMP that are known to occur or have potential to occur in the County are presented in Table 3.5-6. Vegetation communities indicated with an asterisk in Table 3.5-6 are known to occur in Mendocino County, and the other communities have potential to occur in the County within the habitat types identified in the table in the County. Additionally, approximately 119,714 acres of chaparral, 27,377 acres of oak woodland (comprising blue oak woodland, blue oak-foothill pine, coastal oak woodland, and valley oak woodland), 5,644 acres of riparian habitat, 398 acres of wet meadow habitat—all considered sensitive habitat—are mapped in Mendocino County and are discussed above under “Land Cover Types” (Figure 3.5-5) (Aerial Information Systems 2007; Keeler-Wolf et al. 2019; Buck-Diaz et al. 2020; US Forest Service 2023). Coastal scrub, which is present in approximately 11,753 acres of the County, also potentially contains the sensitive habitat coastal sage scrub. Furthermore, the USFWS National Wetland Inventory has mapped

approximately 6,753 acres of freshwater forested/shrub wetland, 2,665 acres of freshwater emergent wetland habitat, 1,950 acres of freshwater pond habitat, 1,250 acres of estuarine and marine wetland habitat, 2,742 acres of lacustrine (i.e., lake) habitat, and 24,442 acres of riverine habitat (USFWS 2023).

**Table 3.5-6 Sensitive Natural Communities Known to Occur and with Potential to Occur in Mendocino County**

<b>Sensitive Natural Community<sup>1</sup></b>	<b>Rarity Rank<sup>2</sup></b>	<b>Habitat Type</b>
California coastal cypress woodland*	S2	Closed-Cone Pine-Cypress
Bishop pine–Monterey pine forest and woodland*	S3	Closed-Cone Pine-Cypress
Beach pine forest and woodland*	S3	Closed-Cone Pine-Cypress
Ultramafic cypress woodland	S3	Closed-Cone Pine-Cypress
Redwood forest and woodland*	S3	Redwood
Grand fir forest	S2	Redwood
Sitka spruce forest and woodland	S2	Redwood
Douglas fir–canyon live oak forest and woodland association*	S3?	Douglas Fir
Bigleaf maple forest and woodland*	S3	Douglas Fir; Montane Hardwood; Montane Hardwood-Conifer
Western hemlock forest	S2	Douglas Fir
Douglas fir–incense cedar forest and woodland	S3	Douglas Fir; Sierran Mixed Conifer
Incense cedar forest and woodland	S3	Sierran Mixed Conifer
Foxtail pine woodland	S3	Subalpine Conifer
California bay forest and woodland*	S3	Coastal Oak Woodland; Montane Hardwood
Oregon white oak woodland and forest*	S3	Montane Hardwood
Tanoak forest*	S3	Montane Hardwood
Valley oak woodland and forest*	S3	Valley Oak Woodland
Shining willow groves*	S3	Valley Foothill Riparian
Western Labrador-tea thickets*	S2	Coastal Scrub; Montane Riparian
Mountain alder thicket	S3	Montane Riparian
Torrent sedge patches	S3	Montane Riparian; Valley Foothill Riparian
Oregon ash grove	S3	Montane Riparian
Fremont cottonwood forest	S3	Montane Riparian; Valley Foothill Riparian
Black cottonwood forest and woodland	S3	Montane Riparian; Valley Foothill Riparian
Wild grape shrubland	S3	Montane Riparian; Valley Foothill Riparian
Box-elder forest and woodland	S3	Valley Foothill Riparian
Goodding's willow–red willow riparian woodland and forest	S3	Valley Foothill Riparian
Glossy leaf manzanita–golden chinquapin chaparral*	S2	Mixed Chaparral
Baker's manzanita chaparral	S3	Mixed Chaparral
Hoary, common, and Stanford manzanita chaparral	S3	Mixed Chaparral
Hairy leaf–woolly leaf ceanothus chaparral	S3	Mixed Chaparral
Green leaf manzanita–pinemat manzanita chaparral	S3S4	Montane Chaparral
Bush chinquapin chaparral	S3	Montane Chaparral

<b>Sensitive Natural Community<sup>1</sup></b>	<b>Rarity Rank<sup>2</sup></b>	<b>Habitat Type</b>
Dune mat*	S3	Coastal Scrub
Seaside woolly-sunflower–seaside daisy–buckwheat patches*	S3	Coastal Scrub
Salmonberry–wax myrtle scrub*	S3	Coastal Scrub
Slough sedge–water-parsley–small-fruited bulrush marsh*	S3	Coastal Scrub; Fresh Emergent Wetland; Saline Emergent Wetland
Soft and western rush–sedge marshes*	S3S4	Coastal Scrub; Fresh Emergent Wetland; Wet Meadow
Silver dune lupine–mock heather scrub	S3	Coastal Scrub
Goldenaster patches	S3	Annual Grassland; Coastal Scrub; Wet Meadow
California brome–blue wildrye prairie*	S3	Perennial Grassland; Wet Meadow
Pacific reed grass meadows*	S2	Perennial Grassland
Coastal tufted hair grass–meadow barley–California oatgrass meadow*	S3	Perennial Grassland; Fresh Emergent Wetland; Wet Meadow
Needle grass–melic grass grassland*	S3S4	Perennial Grassland
Pacific reed grass meadows	S2	Perennial Grassland
Sea lyme grass patches	S2	Perennial Grassland
Idaho fescue–California oatgrass grassland	S3	Perennial Grassland
Ashy ryegrass–creeping wildrye turfs	S3	Perennial Grassland
Water foxtail meadows	S3	Perennial Grassland; Wet Meadow
California brome–blue wildrye prairie	S3	Perennial Grassland; Wet Meadow
Woodland sedge fens	S2	Wet Meadow
Water sedge and lakeshore sedge meadows	S3	Wet Meadow
Common monkey flower–thistle–hedgenettle seeps	S3	Wet Meadow
Floating mats of weak manna grass	S3	Wet Meadow
Long-stalk clover meadows	S3	Wet Meadow
Northwest manna grass marshes	S3	Wet Meadow
Iris-leaf rush seeps	S2	Wet Meadow
California coffeeberry–western azalea scrub– Brewer’s willow*	S3	Fresh Emergent Wetland; Valley Foothill Riparian
Coastal dune willow–Sitka willow–Douglas spiraea thickets*	S3	Fresh Emergent Wetland
Lynbye’s sedge swathes	S1	Saline Emergent Wetland
Tufted hairgrass–red fescue brackish salt marsh	S2	Saline Emergent Wetland
Gum plant patches	S2S3	Saline Emergent Wetland
Salt marsh bulrush marshes	S3	Saline Emergent Wetland
Pickleweed mats	S3	Saline Emergent Wetland

Notes: Vegetation communities shown with an asterisk (\*) are known to occur in Mendocino County. The other communities have potential to occur in the habitat types identified in the County.

<sup>1</sup> These are designated sensitive natural communities with a state rarity rank of S1 (critically imperiled), S2 (imperiled), or S3 (vulnerable).

<sup>2</sup> A question mark (?) denotes an inexact numeric rank when there is an insufficient number of samples over the full expected range of the type, but existing information points to this rank.

<sup>3</sup> For S2S3 and S3S4 there remains uncertainty whether the alliance should be defined as either S2 or S3 and S3 or S4, respectively.

Source: Sawyer et al. 2009, compiled by Ascent in 2023.



## INVASIVE PLANT SPECIES AND NOXIOUS WEEDS

An invasive plant is one that is not native to a region, but rather is introduced, and tends to crowd out native vegetation and thereby adversely affecting the wildlife that feeds on it. Invasive plant species in Mendocino County occur throughout several different habitat types (Calflora 2023). Aggressive noxious weeds, such as Scotch broom (*Cytisus scoparius*), French broom (*Genista monspessulana*), and knapweed (*Centaurea* spp.), can invade grasslands and exclude native grassland species. Invasive plant species, such as pampas grass (*Cortaderia jubata*), English ivy (*Hedera helix*), Himalayan knotweed (*Persicaria wallichii*), and Himalayan blackberry (*Rubus armeniacus*), can invade forest or riparian habitats and exclude native understory species.

## AQUATIC HABITATS

The preeminent aquatic feature in Mendocino County is the Eel River, which flows through 166 miles of the eastern portion of the County. The Eel River watershed is the third largest in California and drains 3,684 square miles in five counties, including Mendocino County (Figure 3.5-4). Other major aquatic features in the County include Van Arsdale Reservoir, Walker Lake, Leonard Lake, and Howard Lake. Many of these aquatic features have nearby associated wetland habitat, including saline and freshwater wetlands, and approximately 5,644 acres of mapped sensitive riparian habitat (see “Land Cover Types” section).

## CANNABIS PRIORITY WATERSHEDS

SWRCB, in coordination with CDFW, has identified “Cannabis Priority Watersheds” throughout the state (SWRCB 2024). All Cannabis Priority Watersheds contain a high concentration of commercial cannabis cultivation. Noncompliant commercial cannabis cultivation in these high-value areas has the potential to cause severe environmental impacts. Pursuant to Business and Professions Code section 26060(a)(2) and CCR, title 4, section 15011(a)(11), in issuing commercial cannabis cultivation licenses, DCC shall consider issues, including, but not limited to, water use and environmental impacts. If SWRCB or CDFW finds, based on substantial evidence, that commercial cannabis cultivation is causing significant adverse impacts on the environment in a watershed or other geographic area, DCC shall not issue new licenses or increase the total number of plant identifiers within that watershed area. To that end, CCR, title 4, section 15011(a)(11) provides that applicants for annual licensure shall provide evidence that their proposed commercial cannabis cultivation site is not located in whole or in part in a watershed or other geographic area that SWRCB or CDFW has determined to be significantly adversely affected by cannabis cultivation pursuant to section 26060(a)(2) of the Business and Professions Code. A plant identifier is a Unique Identifier (UID), which is an alphanumeric code or designation used for reference to a specific plant on licensed sites and any cannabis or cannabis product derived or manufactured from that plant.

A “Cannabis Priority Watershed” may also meet some or all of the following criteria:

- ▶ Contains or supports critical habitat for terrestrial or aquatic species (see “Critical Habitat” section, above);
- ▶ Contains water courses with low-flow conditions where water levels recede or are at risk of receding into the “danger zone” for aquatic life (survival-level flows at which aquatic habitat and species will be harmed);
- ▶ Contains a critical water supply, where excessive water use or diversions present unreasonable stress or pose a significant threat to long-term and sustainable water use;

- ▶ Is the subject of complaints that allege commercial cannabis cultivation that contributes to or causes natural resources violations or that affects senior water right holders;
- ▶ Is part of past or ongoing restoration efforts;
- ▶ Is listed under CWA section 303(d) as an impaired water body;
- ▶ Contains a surface water body listed as a fully appropriated stream; and/or
- ▶ Contains a water body designated as a “Wild and Scenic River” pursuant to PRC section 5093.

The current (2024) Cannabis Priority Watersheds (SWRCB 2024) in Mendocino County are:

- ▶ Portions of Mattole River,
- ▶ Middle South Fork Eel River,
- ▶ Headwaters of the Russian River,
- ▶ East Fork Russian River,
- ▶ Navarro River,
- ▶ Small portions of Kelsey Creek-Clear Lake, and
- ▶ Dry Creek.

## WILDLIFE MOVEMENT CORRIDORS

Mendocino County contains several large areas of relatively undisturbed wildlife habitat, including protected forest in the Mendocino National Forest, which contains Snow Mountain Wilderness and Sanhedrin Wilderness, as well as Yuki Wilderness and Yolla Bolly-Middle Eel Wilderness, which are both only partially located in Mendocino National Forest. Additionally, major river systems throughout the County also contain undisturbed wildlife habitat. Although the Eel River is dammed in two locations in Mendocino County, these areas of the river still provide value as movement corridors for fish and wildlife species, although many areas of the river are unassessed. Mule deer have a substantial amount of core habitat available in Mendocino County; “core habitat” is defined as areas likely capable of supporting the species for several generations (although with erosion of genetic material if the population is isolated) (Figure 3.5-9) (SC Wildlands 2014). Mule deer migration corridors are mapped in the northwestern portion of the County, including winter range areas, migration stopovers, and moderate-use corridors (Figure 3.5-9) (CDFW 2022). Mule deer critical winter habitat is present in Trinity County just north of the Mendocino County line, so it is likely this critical habitat extends into Mendocino County (Figure 3.5-9) (CDFG 2006). Additionally, fawning habitat mapped in Tehama County just east of the Mendocino County line could potentially extend into Mendocino County (Figure 3.5-9) (CDFG 2006). In Lake and Glenn Counties, there is a large swath of fawning ground, as well as patches of critical winter range habitat (Figure 3.5-9) (CDFW 2013)

Some of these important areas were mapped as Natural Landscape Blocks (Figure 3.5-10), which are connected by Essential Connectivity Areas (ECAs). These were mapped for the California Essential Habitat Connectivity Project, which was commissioned by the California Department of Transportation and CDFW with the purpose of making transportation and land use planning more efficient and less costly while helping reduce dangerous wildlife-vehicle collisions (Spencer et al. 2010) (Figure 3.5-9). The ECAs were not developed for the purposes of defining areas subject to specific regulations by CDFW or other agencies. As shown in Figure

3.5-10, ECAs occur in large portions of Mendocino County, especially in rugged designated Wilderness areas. The ECAs are not regulatory delineations and are identified as lands likely important to wildlife movement between large, mostly natural areas at the statewide level. The ECAs form a functional network of wildlands important to the continued support of California's diverse natural communities.

## NATIVE WILDLIFE NURSERY SITES

Nursery sites are locations where fish and wildlife concentrate for hatching and/or raising young, such as nesting rookeries for birds, spawning areas for native fish, fawning areas for deer, and maternal roosts for bats. Nursery sites are considered in this analysis for native wildlife that are not defined and otherwise considered under CEQA as special-status species. The project area could contain a variety of wildlife nursery sites. Native nursery sites are not mapped for the project area and would need to be identified and evaluated at a site-specific level; however, fawning ground is mapped in Tehama and Glenn Counties on the border of Mendocino County (Figure 3.5-9). Data of this nature were not available for Mendocino County.

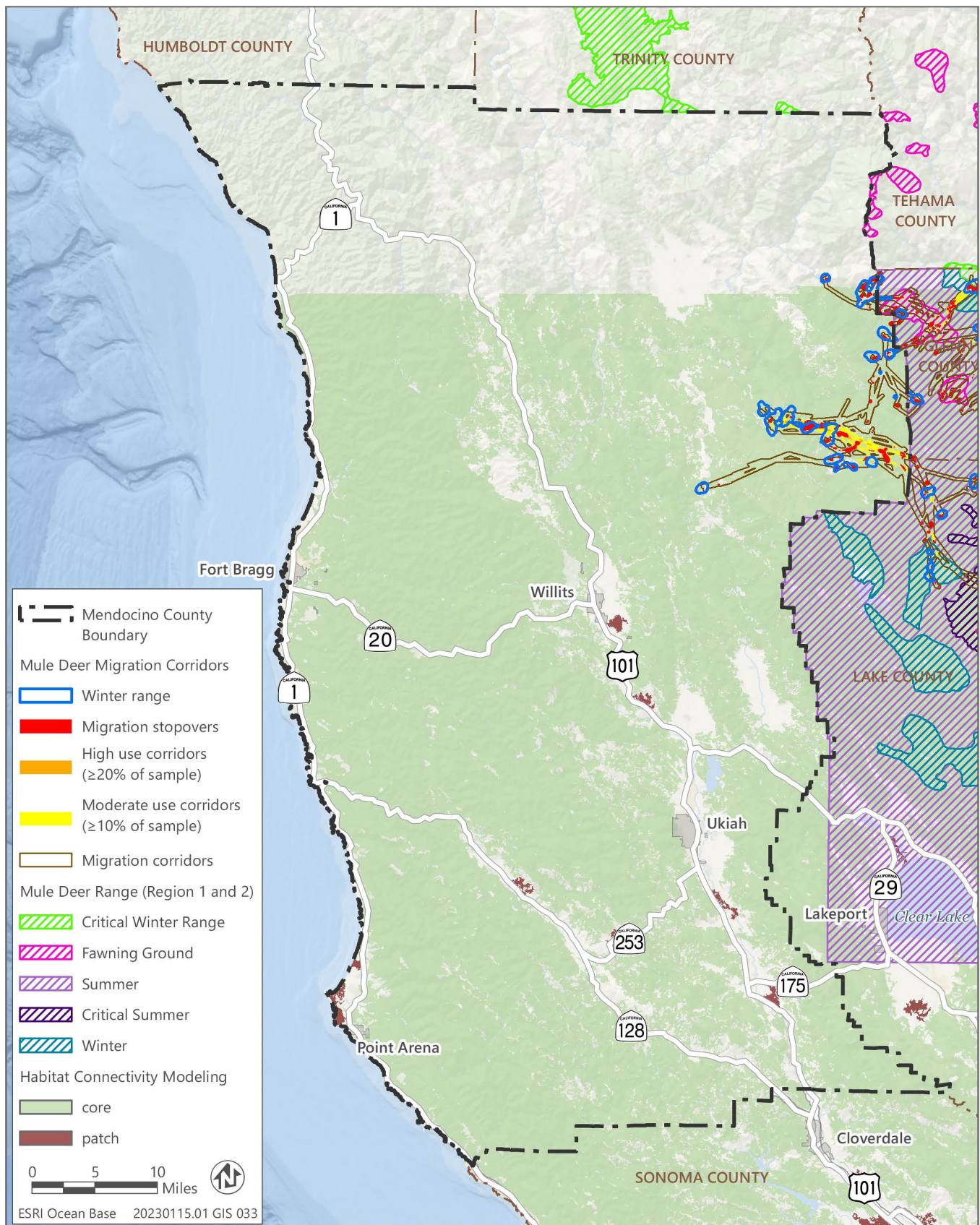
## HABITAT CONSERVATION PLANS

Although no active habitat conservation plans (HCPs) apply to the County, Mendocino Redwood Company owns Humboldt Redwood Company, which implements an active adopted HCP (Humboldt Redwood Company 2019). Mendocino Redwood Company, a timber company, owns approximately 350 square miles (228,800 acres) of redwood and Douglas fir forest in Sonoma and Mendocino Counties, and Humboldt Redwood Company, also a timber company, owns 327 square miles (209,300 acres) of redwood and Douglas fir forest in Humboldt County. Mendocino Redwood Company's purpose is to demonstrate that a successful timber company can have a high standard of environmental stewardship while managing productive timberlands (Mendocino Redwood Company 2023). Mendocino Redwood Company is the arbiter of the HCP, although the HCP covers only land holdings outside the County. Additionally, Mendocino Redwood Company is developing an HCP/natural community conservation plan (NCCP). The plan is not yet adopted.

## EXISTING STRESSORS ON BIOLOGICAL RESOURCES IN MENDOCINO COUNTY

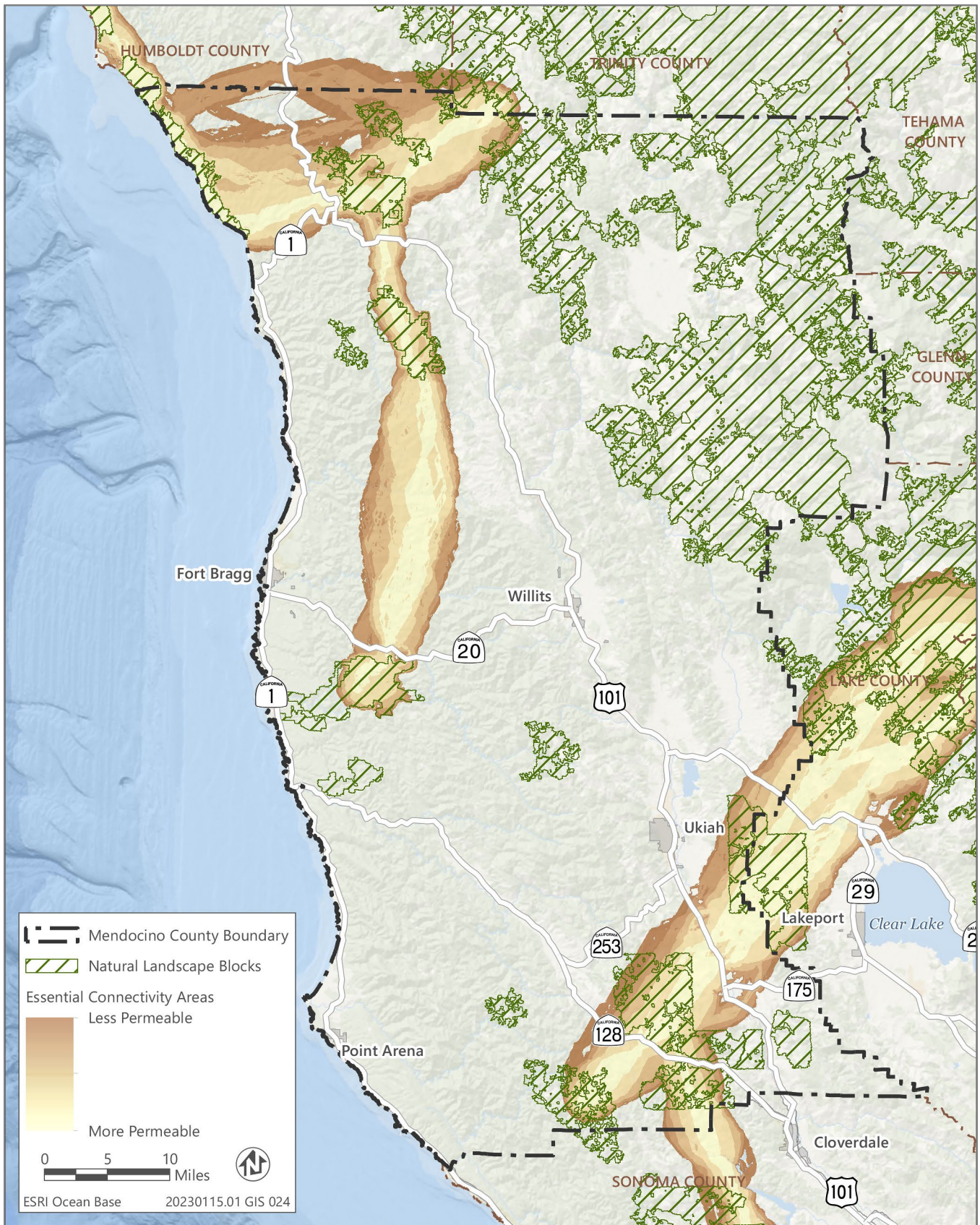
Historic and modern development in Mendocino County that has resulted in adverse effects on natural resources in the region includes timber harvest (beginning in the mid-19th century), watershed alteration related to dam construction, mining, agricultural activities, urban development, and introduction of invasive plant and wildlife species. More recently, unlicensed cannabis cultivation operations on public and private lands have led to illegal water diversions, unpermitted removal of sensitive vegetation, and direct mortality to protected species from exposure to rodenticides and insecticides (Gabriel et al. 2012).

As identified in the "Approach to the Environmental Analysis" section in the introduction of this chapter, there are an estimated 3,850 unlicensed cannabis cultivation sites that were identified in an analysis conducted by Ascent for the project in September 2023. CDFW scientists have collected cultivation data in Mendocino County from 2016 to 2022. Figures 3-2 and 3-3 in the beginning of this chapter provide a summary of the changes in total cultivation area in the county from 2016 to 2022. The largest concentration of sites are located in the northern and central inland portions of the County. From 2016 to 2022 licensed and unlicensed sites increased the most east of Fort Bragg in the middle of the County.



Source: Data downloaded from CDFW in 2023; adapted by Ascent in 2023

**Figure 3.5-9 Mule Deer**



Source: Data downloaded from CDFW in 2018.

**Figure 3.5-10** Habitat Connectivity

## PROJECTED ALTERATION OF HABITAT CONDITIONS ATTRIBUTABLE TO CLIMATE CHANGE

Global climate change is a major challenge to the conservation of California's natural resources. This section summarizes major projected climate change effects in the North Coast region of California identified in the California State Wildlife Action Plan (CDFW 2015). Resulting stressors to species and ecosystems from climate change effects include changes in the duration, frequency, or severity of extreme events, such as wildfire, storms, floods, and extreme temperatures. Also, longer-term climate trends and associated ecological vulnerabilities in response to these stressors may result in vegetation shifts and modified hydrology, directly threatening sensitive habitats and species, particularly those with limited adaptive capacity.

Vulnerability to climate change can be defined as the degree to which a system is exposed to, sensitive to, and unable to cope with or adapt to the adverse effects of change (CEC 2012). The degree of vulnerability of California's wildlife to climate change will vary considerably depending on many factors, such as the intrinsic sensitivity of a given species and/or its habitat to climate exposure and related stressors, the adaptive capacity of species and habitat to these effects, and other existing environmental stressors unrelated to climate change.

### Temperature

Climatic changes along the northern California coastline and the North Coast Ranges are expected to include increased average temperatures of 1.7 to 1.9 degrees Celsius (°C) (3.0 to 3.4 degrees Fahrenheit (°F)) by 2070 and 1.5 to 4.5°C (2.7 to 8.1°F) by 2099 (Cayan et al. 2008; PRBO Conservation Science 2011). Mean maximum and minimum temperatures are projected to increase by 2.5°C (4.5°F) and 2.3°C (4.1°F), respectively, and the frequency of extremely hot days (exceeding long-term 95th percentile) is projected to increase by 27 days per year. Prolonged hot spells are projected to increase by 1.6 events per year and increase in duration by 3 days (Bell et al. 2004). Many of these changes will be slightly less pronounced in coastal regions and amplified in inland regions.

### Precipitation and Snowpack

Historically, Mendocino County experienced an average of 51.6 inches of precipitation per year from 1895 to 2000 and 49.2 inches of precipitation from 2000 to 2023 (NCEI 2024), with averages varying widely across the County. Drier places in Mendocino County include Ukiah CA, which from 2000 to 2024 rain averaged 31.9 inches per year with a range of 7.5 inches of rain falling in 2013 to a maximum of 51.9 inches per year 2010 (NOAA 2024). In the future, changes in annual precipitation in North Coast counties (i.e., Mendocino, Humboldt, Del Norte, Lake) are projected to vary by location with a subtle decrease throughout the century in most areas. Areas of heavy rainfall (203 centimeters (cm) (80 inches) or more per year) are projected to lose 13–18 cm (5–7 inches) by 2050 and 28–38 cm (11–15 inches) by the end of the century. Slightly drier places are projected to experience a decrease of around 8–10 cm (3–4 inches) by 2050 and 15 cm (6 inches) of precipitation by 2100 (CalEMA 2012). March snow levels in the higher-elevation, mountainous portions of region could drop to almost zero by the 2090s, a decrease of 5–25 cm (2–10 inches) from 2010 levels. In areas with more snow, 8–13 cm (3–5 inches) of reduction in snowfall will occur by 2050. In areas with currently little snow (less than 8 cm (3 inches) per year), the snowpack is projected to be near zero by 2050 (CalEMA 2012).

### Freshwater Hydrologic Regimes

Though snowpack does not have a huge influence on the hydrology of Mendocino County, projected loss of snowpack in this region would potentially result in a decrease in duration and magnitude of stream flows. Eastern Mendocino County would experience the most impact because this is the location in the County that receives the most snow, though minimal. Decrease of rain as precipitation will also result in decreased stream flow magnitude and duration. Although hydrologic changes have not been modeled, observational data show that non-snowmelt-dominated streams in northwestern California have been trending toward later stream flow timing. There could also be a shift in timing of the heaviest runoff. Observational data from the last 50 years show that in non-snowmelt dominated streams, the center of mass of annual flow (i.e., half of annual streamflow in any given year) has shifted from 5 to 25 days later in the season (PRBO Conservation Science 2011).

### Wildfire Risk

A substantial increase in fire risk is projected throughout the northwestern California region. Modest increases in area burned are projected for 2050. By 2100, the projected frequency of wildfire increases dramatically: eight times greater in parts of Del Norte, Humboldt, and Mendocino Counties than current values. Lake County and northern Mendocino County are projected to have up to 2.5 times greater wildfire frequency by 2100 compared to current values (CalEMA 2012). As identified in Section 3.17, "Wildfire," Mendocino County and the surrounding region have experienced multiple significant fires recently. This includes the August Complex (in 2020), Ranch Fire (in 2018), and River Fire (in 2018), which burned approximately 192,193 acres, 14,937 acres, and 10,383 acres, respectively (CAL FIRE 2022).

## 3.5.3 Environmental Impacts and Mitigation Measures

### METHODOLOGY

The analysis of potential impacts on biological resources resulting from project implementation is based on the data review described previously in Section 3.5.2, "Environmental Setting." The project does not apply to tribal lands or to public lands managed by the US Forest Service, the California Department of Parks and Recreation (California State Parks), the US Bureau of Land Management, or CDFW. Impact mechanisms for development under the project could include clearing of native vegetation; ground disturbance from construction of storage ponds, installation of irrigation systems and water storage, road and building construction, extension of electrical facilities and infrastructure, installation of fencing, planting, and harvest activities; and operation of artificial lights and generators. Project implementation associated with new commercial cannabis cultivation uses may include conversion of natural habitats. The reader is referred to the "Approach to the Environmental Analysis" section in the introduction of this chapter for a further description of the development assumptions for the project.

Federal agencies, including USACE and USFWS, may not issue permits for activities associated with commercial cannabis cultivation activities. Consequently, operations applying for new commercial cannabis cultivation licenses under the project would be required to avoid federally regulated resources, including plant and wildlife species listed under the ESA and waters of the United States, as required under Attachment A (General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ. In addition, the MCCR currently does not allow commercial cannabis cultivation uses in the coastal zone, which avoids impacts to special-status species and habitats that occur within the coastal zone.

## THRESHOLDS OF SIGNIFICANCE

An impact on biological resources would be significant if implementation of the project would:

- ▶ have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- ▶ have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by CDFW or USFWS;
- ▶ have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- ▶ interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- ▶ conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- ▶ conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

## ISSUES NOT DISCUSSED FURTHER

### Special-Status Wildlife Species

Two special-status wildlife species that were identified as having potential to occur in the County were determined to be unlikely to occur in Mendocino County upon review of current species range and occurrence records: Humboldt marten and wolverine. Although Mendocino County is within the historic range of these species, their current ranges are restricted and do not include the County. Both species have large home ranges and prefer large expanses of wilderness habitat. Most of this type of habitat is present on public lands managed by the US Forest Service, where commercial cannabis cultivation activities would not be permitted. If either of these species becomes reestablished in Mendocino County, it would likely be associated with this habitat, where it would not be adversely affected by commercial cannabis cultivation activities. Further, nine special-status wildlife species associated exclusively with marine and coastal habitats would not be adversely affected by commercial cannabis cultivation activities, because these activities would not occur in marine or coastal habitats, and because commercial cannabis cultivation activities would be limited in the coastal zone pursuant to the Mendocino County Code. These species are green turtle, Pacific leatherback sea turtle, ashly storm-petrel, Hawaiian petrel, short-tailed albatross, tufted puffin, Steller sea lion, Behren's silverspot butterfly, and lotis blue butterfly. These species are not discussed further; however, 50 additional special-status wildlife species that could be affected with implementation of the project are addressed in the discussion of Impact 3.5-2.

### Consistency with Habitat Conservation Plans

There are currently no adopted HCPs in Mendocino County. Although an HCP/NCCP associated with Mendocino Redwood Company is currently in the planning stage, covered activities under this HCP/NCCP would include timber harvest and potentially other activities related to timber harvest. The HCP/NCCP would also cover only activities conducted by



Mendocino Redwood Company on private land. Commercial cannabis cultivation operations under the project would not qualify as a covered activity under this HCP/NCCP. This issue is not discussed further.

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Impact 3.5-1: Result in Disturbance to or Loss of Special-Status Plant Species and Habitat

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Potential land use conversion and development from the potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations under the project could result in disturbance to or loss of special-status plant species if they are present. Additionally, expanded and new licensed commercial cannabis cultivation sites could result in the introduction or spread of invasive plants during vegetation removal, ground disturbance, or introduction of off-site soils, which could result in exclusion of special-status plants. Because the loss of special-status plants could substantially affect the abundance, distribution, and viability of local and regional populations of these species, this impact would be **potentially significant**.

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A total of 171 special-status plants were identified as having potential to occur in Mendocino County (Table 3.5-3). However, as noted in the Table 3.5-3, some of these special-status plant species have ranges that only encompass the coastal zone, where cannabis uses are not allowed to occur in Mendocino County, or may be restricted to wetlands that would be delineated and protected through implementation of setbacks as part of the SWRCB Order WQ 2023-0102-DWQ, and therefore would not be adversely affected by cannabis uses. These plant species occur in a wide variety of habitat types, including coniferous forests, chaparral, scrub, coastal dunes, grasslands, wetlands, marshes, and riparian habitats. New commercial cannabis cultivation-related activities may include ground disturbance, vegetation removal, roadway construction, construction of water storage facilities, extension of electrical facilities, and grading, which could result in the direct loss of special-status plants or their habitat if they are present. Invasive plant species cover can increase due to some cultivation-related activities, such as ground disturbance, which could result in indirect effects to special-status plants and direct loss of their habitats. Attachment A of the SWRCB Order WQ 2023-0102-DWQ uses the California Invasive Plant Council's (CalIPC's) definition of invasive species, which defines them as organisms (plants, animals, or microbes) that are not native to an environment and that, once introduced, establish, quickly reproduce and spread, and cause harm to the environment, economy, or human health. For the purposes of this analysis, noxious weeds are also considered to be invasive species. Noxious weeds are designated under California law by the California Department of Farm and Agriculture (CDFA) and are defined as likely to be troublesome, aggressive, intrusive, detrimental, or destructive to agriculture, silviculture, or important native species, and difficult to control or eradicate (CDFA 2024). The loss of special-status plants and their habitat could substantially affect the abundance, distribution, and viability of local and regional populations of these species. Licensed commercial cannabis cultivation uses would be required to comply with Term 10 of Attachment A (General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ, which requires that the special-status plant species be avoided and buffers be provided in consultation with CDFW and CAL FIRE. Avoidance of impacts on special-status plant species listed under ESA, CESA, or CRPR 1B.1 and 1B.2 is also provided in Term 4 of Attachment A (Section 1, General Requirements and Prohibitions). Term 11 of Attachment A

(Section 1, General Requirements and Prohibitions) put forth guidance on equipment use requirements to prevent the spread of invasive species. Additionally, commercial cannabis operations are required to comply with Term 3 (General Requirements and Prohibitions), which requires application for a LSA Agreement, and requirements therein, or consultation with CDFW for any activity that may substantially divert, obstruct, alter, or deposit into any river, stream, or lake. Compliance of MCCR section 10A.17.100(A)(2) would also be required, which could include a potential site inspection or additional studies at CDFW's request. Additionally, Term 10 of Attachment A (General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ requires site evaluations by a qualified biologist to determine whether sensitive plant species occur on the site before development or site expansion. At the time of SWRCB Order WQ 2023-0102-DWQ development, specifics (e.g., bloom dates for potential special-status plants, special-status plants, and habitats in the project area) were not known.

#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites, including processing and/or distribution transport-only operations, transitioning to annual licensure would not result in additional impacts on special-status plant species as operations are not anticipated to be altered through the annual licensing process. Commercial cannabis cultivation activities associated with these sites would continue to be subject to Terms 4 and 10 of Attachment A (General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ, which require avoidance of impacts on some special-status plants and a site evaluation for any future site expansion activities (CRPR 2A and 2B plants are not protected by Term 4). Additionally, compliance of MCCR section 10A.17.100(A)(2) would also be required, which could include a potential site inspection or additional studies at CDFW's request. Thus, when sites retain the extent of their existing licensed commercial cannabis cultivation, no impact would be associated with existing provisionally licensed commercial cannabis cultivation operations.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation operations features would continue to be subject to Term 4 and 10 of Attachment A (Section 1, General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ, which require avoidance of impacts on special-status plants and a site evaluation for any future site expansion activities. Additionally, compliance of MCCR section 10A.17.100(A)(2) would also be required, which could include a potential site inspection or additional studies at CDFW's request. However, the potential expansion of existing provisionally licensed commercial cannabis cultivation sites and uses could still result in direct loss of special-status plants or their habitat. Therefore, this impact would be potentially significant.

#### Future Licensed Sites

New commercial cannabis cultivation and associated processing or distribution transport-only uses may include ground disturbance, vegetation removal, and grading, which could result in the direct loss of special-status plants or their habitat if they are present. The loss of special-status plants and their habitat could substantially affect the abundance, distribution, and viability of local and regional populations of these species. Additionally, there is potential for the introduction or spread of invasive plants during vegetation removal, ground disturbance, and introduction of off-site soils. The introduction or spread of invasive plants could adversely affect special-status plant species by excluding them from suitable habitat. Although projects

would have to comply with MCCR section 10A.17.100(A)(2), which could include a potential site inspection or additional studies at CDFW's request, and Term 4 of Attachment A (General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ, this does not require protections for CRPR 2A and 2B plant species. Similarly, though projects are required to comply with Term 3 of Attachment A (General Requirements and Prohibitions) which requires and LSA Agreement and requirements therein, or consultation with CDFW, this is only required for activities that may substantially divert, obstruct, alter, or deposit into any river, stream, or lake. Therefore, the project-related loss of special-status plant species would be a potentially significant impact.

### Summary

Although it was determined that no impact would occur on existing provisionally licensed sites, because potential expansion of existing provisionally licensed and future licensed commercial cannabis cultivation sites could substantially affect the abundance, distribution, and viability of local and regional populations of special-status plant species, the impact related to these species would be **potentially significant**.

### Mitigation Measures

#### Mitigation Measure 3.5-1a: Conduct Preapproval Biological Surveys

As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A: General Requirements and Prohibitions – Term 4 and 10 and MCCR 10A.17.100(A)(2)), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to provide the following technical information. It shall be used to determine whether there is potential for special-status plant species, special-status wildlife species, or sensitive habitats identified in this Program EIR to be present within a proposed expanded or new commercial cannabis cultivation sites seeking a license from DCC.

- ▶ Before approval of any application for commercial cannabis operations, a biological survey shall be conducted by a qualified biologist. The survey area shall include the proposed expanded or new commercial cannabis cultivation sites, including areas of anticipated construction and ground disturbance, as well as staging areas, areas of anticipated light or noise impact, ingress and egress routes, and utility routes. The survey area shall be large enough to encompass areas subject to both direct and indirect impacts. The qualified biologist shall assess the habitat suitability of the proposed development area for all special-status plants, special-status wildlife, and sensitive habitats identified as having potential to occur in the County. The biologist shall provide a letter report to the project applicant and DCC with evidence to support a conclusion as to whether special-status species and sensitive habitats are present or are likely to occur in the proposed development area. At a minimum, the letter report shall include:
  - date, time, and weather conditions if a reconnaissance survey is conducted as part of the biological survey;
  - a description and explanation of whether the site conditions are considered typical or atypical, if a reconnaissance survey is conducted as part of the biological survey;
  - a map depicting the proposed development area and the unique, rare, and special-status species, sensitive habitats, or sensitive natural communities found;

- a vegetation map of the proposed development area using the National Vegetation Classification System (e.g., *A Manual of California Vegetation*) and an associated table, including acreage of vegetation types that could be adversely affected by project implementation;
  - a special-status species table generated from review of the CNDDDB, the California Native Plant Society Inventory of Rare and Endangered Plants, lists maintained by USFWS, and the most recent, best-available range information for special-status species;
  - a description of survey methods and any protocols utilized during the survey; and
  - a list of common and special-status species and habitats observed in the proposed development area.
- ▶ If the biological survey identifies no potential for special-status plants, special-status wildlife, or sensitive habitats to occur, the applicant shall not be subject to any additional biological resource protection measures identified in the ordinance.
- ▶ If special-status species or sensitive habitats are present or have the potential to be present, the letter report will include a discussion of potential direct and indirect impacts on these resources, and the appropriate biological resource protection measures identified in Mitigation Measures 3.5-1b, 3.5-1c, 3.5-2a through 3.5-2o, 3.5-4a, 3.5-4b, 3.5-5, and 3.5-6b shall be implemented.

**Mitigation Measure 3.5-1b: Conduct Special-Status Plant Surveys and Implement Avoidance Measures and Mitigation**  
As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to provide the following information should special-status plant species are determined to have potential to be present on the proposed commercial cannabis cultivation sites:

- ▶ During the blooming period for the special-status plant species with potential to occur on the site, a qualified botanist shall conduct protocol-level surveys for special-status plants in all proposed disturbance areas following survey methods from the CDFW *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018a).
- ▶ If special-status plants are not identified, the botanist shall document the findings in a letter report to the applicant, DCC, and CDFW, and no further mitigation shall be required.
- ▶ If special-status plant species are found, the qualified botanist shall consult with CDFW to designate a no-disturbance buffer and/or redesign of the commercial cannabis cultivation site improvements that shall be reflected in application materials to DCC. If the special-status plant species cannot be avoided, the application shall be denied.

**Mitigation Measure 3.5-1c: Implement Measures to Avoid Introduction or Spread of Invasive Plant Species**  
As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 11), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for

associated processing and distribution uses to provide documentation that the following measures will be implemented:

- ▶ The application shall include identification of invasive plant species that occur on the site and where they are located. The application shall identify specific measures to be employed for the removal of invasive species and on-site management practices.
- ▶ Invasive plant species (defined above in the impact discussion) shall be removed from the site to the extent feasible, using measures appropriate to the species. For example, species that cannot easily reroot, resprout, or disperse seeds may be left on site in a debris pile. Species that resprout readily (e.g., English ivy) or disperse seeds (e.g., pampas grass) should be hauled off-site and disposed of appropriately at a landfill site. A qualified botanist shall determine the appropriate percent cover of invasive species to remove for the site and what type of restoration plantings will be appropriate for the site.
- ▶ The site shall be monitored annually to ensure successful removal and prevention of new infestations of invasive species.
- ▶ Heavy equipment and other machinery shall be inspected for the presence of invasive species before on-site use, and shall be cleaned before entering the site, to reduce the risk of introducing invasive plant species.

#### Significance after Mitigation

Implementation of Mitigation Measures 3.5-1a, 3.5-1b, and 3.5-1c would reduce significant impacts on special-status plants to a **less-than-significant** level because it would require applicants to identify and avoid special-status plants and would prevent the spread of invasive weeds by removal of existing populations on-site and inspecting machinery. These mitigation measures are consistent with the requirements of Attachment A (Section 1, General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ.

#### Impact 3.5-2: Result in Disturbance to or Loss of Special-Status Wildlife Species and Habitat

Potential land use conversion and development from the potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations under the project could adversely affect several special-status wildlife species. Expanded and new licensed commercial cannabis cultivation sites may include ground disturbance, vegetation removal, and overall conversion of wildlife habitat, which could result in the disturbance to or loss of individuals and reduced breeding productivity of these species. Special-status wildlife species are protected under the ESA, CESA, the Fish and Game Code, CEQA, and other regulations. Because the loss of special-status wildlife species and their habitat could substantially affect the abundance, distribution, and viability of local and regional populations of these species, this impact would be **potentially significant**.

Table 3.5-4 identifies special-status wildlife species that have potential to occur in Mendocino County, including amphibians, reptiles, birds, and mammals that could be adversely affected by new licensed commercial cannabis cultivation uses. Commercial cannabis cultivation sites are required to comply with Term 10 of Attachment A (General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ, which requires that special-status wildlife species be avoided and buffers be provided in consultation with CDFW and CAL FIRE. Avoidance of impacts on special-status wildlife species is also provided in Term 4 of Attachment A (General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ. Additionally, Term 10

of Attachment A (General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ requires site evaluations by a qualified biologist to determine whether special-status wildlife species occur on the site before development or site expansion. Commercial cannabis operations are required to comply with Term 3 (General Requirements and Prohibitions), which requires application for a LSA Agreement, and requirements therein, or consultation with CDFW for any activity that may substantially divert, obstruct, alter, or deposit into any river, stream, or lake. Furthermore, commercial cannabis operations are required to comply with Term 63 of Attachment A (Requirements Related to Water Diversions and Waste Discharge for Cannabis Cultivation) of SWRCB Order WQ 2023-0102-DWQ, which requires no disturbance of aquatic or riparian habitat, such as pools, spawning sites, large wood, or shading vegetation unless authorized under proper permits (e.g., CDFW LSA Agreement) as well as Term 64 of Attachment A (Requirements Related to Water Diversions and Waste Discharge for Cannabis Cultivation) which requires maintaining riparian habitat. Compliance of MCCR section 10A.17.100(A)(2) requires Mendocino County to consult with CDFW prior to the County's issuance of a commercial cannabis cultivation license issuance, which could include a potential site inspection or additional studies at CDFW's request.

#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites, including processing and/or distribution transport-only operations, transitioning to annual licensure would not result in additional impacts to special-status wildlife species and their habitats as operations are not anticipated to be altered through the annual licensing process. Commercial cannabis cultivation activities associated with these sites would continue to be subject to Terms 4 and 10 of Attachment A (General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ, which require avoidance of impacts on special-status wildlife and a site evaluation for any future site expansion activities. Term 4 includes a stipulation that commercial cannabis cultivators are responsible for meeting all requirements under the CESA and the ESA, so impact avoidance would include all impacts on CESA- and ESA-listed species. Additionally, compliance of MCCR section 10A.17.100(A)(2) would also be required, which could include a potential site inspection or additional studies at CDFW's request. Thus, when sites retain the extent of their existing licensed commercial cannabis cultivation, no impact would be associated with existing provisionally licensed commercial cannabis cultivation operations.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation operations features would continue to be subject to Term 4 and 10 of Attachment A (General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ, which require avoidance of impacts on special-status wildlife and a site evaluation for any future site expansion activities. Additionally, compliance of MCCR section 10A.17.100(A)(2) would also be required, which could include a potential site inspection or additional studies at CDFW's request. However, the potential expansion of existing provisionally licensed commercial cannabis cultivation sites and uses could still result in direct loss of or injury of special-status wildlife, nest abandonment, nest failure, mortality of chicks or eggs, increased noise and visual disturbance, and loss of habitat. Therefore, this impact would be potentially significant.

### Future Licensed Sites

For newly licensed commercial cannabis cultivation sites compliance of MCCR section 10A.17.100(A)(2) would be required, which could include a potential site inspection or additional studies at CDFW's request. Compliance of SWRCB Order WQ 2023-0102-DWQ is also required which includes avoidance of impacts on special-status wildlife species is also provided in Term 4 of Attachment A (General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ and Term 10 of Attachment A (General Requirements and Prohibitions) of SWRCB Order WQ 2023-01022019-0001-DWQ requires site evaluations by a qualified biologist to determine whether special-status wildlife species occur on the site before development or site expansion.

### Special-Status Amphibians

California red-legged frog is listed as threatened under the ESA and is a CDFW species of special concern. California giant salamander, foothill yellow-legged frog, northern red-legged frog, Pacific tailed frog, red-bellied newt, and southern torrent salamander are also CDFW species of special concern. California giant salamander and California red-legged frog occur in the southern portion of the County, and northern red-legged frog, Pacific tailed frog, red-bellied newt, and southern torrent salamander occur in the western half of the County. Foothill yellow-legged frog occurs throughout the County, within or near suitable aquatic habitat (CNDDDB 2023).

California giant salamanders are typically found within approximately 165 feet of stream habitat, red-bellied newts spend dry summer months in areas relatively close to permanent water (i.e., approximately 100 feet), and Pacific tailed frog is associated closely with water and is rarely found more than a few meters (i.e., 3–20 feet) from aquatic habitat. Foothill yellow-legged frog is a highly aquatic species and normally not found farther than a few feet from streams; however, during wet periods, foothill yellow-legged frogs will follow wetted channels and range farther into uplands (i.e., approximately 200 feet), where they may shelter under logs and similar structures (CDFW 2018b).

California red-legged frogs and northern red-legged frogs are known to occur larger distances from water; however, studies have primarily focused on the federally listed California red-legged frog. Studies have demonstrated that California red-legged frogs remain close to breeding habitat during the breeding season and typically do not move more than approximately 300 feet into upland habitats (Bulger et al. 2003; Fellers and Kleeman 2007). However, adult and juvenile California red-legged frog are known to travel through upland habitat (e.g., riparian, woodland, grassland) to move between breeding and nonbreeding sites (e.g., other ponds, deep pools in streams, moist and cool riparian understory, burrows) for access to refugia and foraging habitat, or to disperse to new breeding locations. During migration, California red-legged frogs may travel long distances from aquatic habitat and typically travel in straight lines irrespective of vegetation types and have been documented to move more than 1.7 miles between aquatic habitat sites (Bulger et al. 2003). Cannabis operations are required to comply with SWRCB Order WQ 2023-0102 Term 37 of Attachment A (Section 1, General Requirements and Prohibitions), which requires setback areas from the edge of surface water of at least 50 feet of surface water, dependent on the type of stream (e.g., ephemeral, perennial) and requires water quality control measures. Compliance with the general order would help prevent direct effects on special-status amphibians in aquatic habitat but would not fully prevent direct effects on these species in upland habitat.

New commercial cannabis cultivation and associated processing or distribution transport-only uses could result in loss of or injury to special-status amphibians, if the species occur at the

site, through disturbance to suitable upland habitat during ground disturbance activities, such as construction of storage ponds and installation of commercial cannabis cultivation sites. This impact would be potentially significant.

### Summary

Although it was determined that no impact would occur on existing provisionally licensed sites, because potential expansion of existing provisionally licensed and future licensed commercial cannabis cultivation sites could result in loss of or injury to special-status amphibians, the impact related to special-status amphibian species would be **potentially significant**.

### Mitigation Measures

#### Mitigation Measure 3.5-2a: Conduct Preconstruction Surveys for Special-Status Amphibians

As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures if special-status amphibian species are determined to have potential to be present on the proposed commercial cannabis cultivation sites:

- ▶ If California red-legged frogs are detected during the initial biological survey (see Mitigation Measure 3.5-1a) or are determined to be likely to occur (i.e., aquatic or upland habitats potentially suitable for the species are present on the site), then it shall be assumed that commercial cultivation activities could result in take of this species, and the application shall be denied.
- ▶ If special-status amphibians other than California red-legged frog are detected during the initial biological survey (see Mitigation Measure 3.5-1a) or are determined to be likely to occur, consultation with CDFW shall be initiated to determine whether mitigation measures, such as project design modifications, relocation of the site, relocation of individual animals, or installation of exclusionary fencing, shall be necessary and appropriate.
- ▶ Regardless of detection during the initial biological survey, if habitat suitable for special-status amphibians other than California red-legged frog is present in the proposed development area, a qualified biologist familiar with the life cycle of California giant salamander, foothill yellow-legged frog, northern red-legged frog, Pacific tailed frog, red-bellied newt, and southern torrent salamander shall conduct preconstruction surveys of proposed new development activities 48 hours before new development activities. Preconstruction surveys for special-status amphibian species shall be conducted throughout the proposed construction area and a minimum 400-foot buffer around the proposed development area or other buffer size as recommended by CDFW. Surveys shall consist of “walk and turn” surveys of areas beneath surface objects (e.g., rocks, leaf litter, moss mats, coarse woody debris) for salamanders, and visual searches for frogs. Preconstruction surveys shall be conducted during the appropriate season to maximize potential for observation for each species, and appropriate surveys shall be conducted for the applicable life stages (i.e., eggs, larvae, adults).
- ▶ If special-status amphibians are not detected during the preconstruction survey and, for California red-legged frog, the species is determined to be unlikely to occur, then further mitigation is not required.



- ▶ If special-status amphibians other than California red-legged frog are detected during the preconstruction survey, work on the site shall not commence until the applicant has consulted with CDFW as described above. Injury to or mortality of special-status amphibians shall be avoided by modifying project design, relocating the commercial cannabis cultivation site, or relocating individual animals.

#### Significance after Mitigation

Implementation of Mitigation Measure 3.5-1a would apply to this impact and would determine whether there is potential for the species to be present. Implementing Mitigation Measure 3.5-2a would reduce potential impacts on special-status amphibians to a **less-than-significant** level by requiring preconstruction surveys and the protection of special-status frogs and salamanders from injury, mortality, or other disturbance.

#### Western Pond Turtle

Western pond turtle is a candidate for listing under the ESA and a CDFW species of special concern and could occur throughout the County. This species can be found in many different aquatic habitats, including ponds (natural or human-made), marshes, rivers, and irrigation ditches. Western pond turtles use upland habitat for basking and egg-laying. There are several known documented occurrences of western pond turtle in the County, including in the Russian River and Eel River, in addition to several smaller streams (CNDDDB 2023). Western pond turtle has potential to occur throughout the County in suitable habitat of rivers, streams, ponds, and artificial aquatic habitat.

Potential expansion of existing provisionally licensed and new commercial cannabis cultivation and associated processing and/or distribution transport-only operations could result in loss of or injury to western pond turtles, if the species occurs on the site, through disturbance to upland habitat during vegetation removal or ground disturbance activities or disturbance to aquatic habitat during construction of water storage ponds and other features. This impact would be potentially significant.

#### Summary

Although it was determined that no impact would occur on existing provisionally licensed sites, because potential expansion of existing provisionally licensed and future licensed commercial cannabis cultivation sites could result in loss of or injury to western pond turtles, the impact related to western pond turtles would be **potentially significant**.

#### Mitigation Measures

##### Mitigation Measure 3.5-2b: Conduct Surveys for Western Pond Turtle and Relocate Individuals

As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures if western pond turtle are determined to have potential to be present on the proposed commercial cannabis cultivation sites:

- ▶ If pond turtles are detected during the initial biological survey (see Mitigation Measure 3.5-1a) or are determined to be likely to occur, consultation with CDFW shall be initiated to determine whether additional measures, such as project design modifications, relocation of the site, relocation of individual animals by a qualified biologist with a valid CDFW Scientific

Collecting Permit, or installation of exclusionary fencing, shall be necessary and appropriate.

- ▶ Regardless of detection during the initial biological survey, if aquatic habitat suitable for western pond turtle is present in the proposed development area, a qualified biologist familiar with the life history of western pond turtle shall conduct preconstruction surveys of proposed new development activities within a minimum of 1,500 feet of any aquatic habitat 24 hours before such development activities or as recommended by CDFW.
- ▶ If pond turtles are not detected during the preconstruction survey, then no further mitigation is required.
- ▶ If pond turtles are detected during the preconstruction survey, then consultation with CDFW shall be initiated as described above. Injury or mortality of western pond turtle shall be avoided through project design modification, commercial cannabis cultivation site relocation, or relocation of the turtle by a qualified biologist with a valid CDFW Scientific Collecting Permit. If relocation of western pond turtles is determined to be necessary, turtles shall be relocated to similar nearby habitat free of predators (e.g., racoon, coyote, raptors, bullfrog, nonnative turtles, other western pond turtles) as determined by the qualified biologist. If western pond turtles are relocated, a report shall be submitted electronically to CDFW within 15 days of the relocation. The report shall include the location, date, time, and duration of collection and release; the number of individuals relocated; and identification of the qualified biologist.
- ▶ If western pond turtle, which is currently a candidate for listing under the ESA, is listed as threatened in the future, take shall be prohibited. If take cannot be avoided, the application shall be denied.

#### Significance after Mitigation

Implementation of Mitigation Measure 3.5-1a would apply to this impact and would determine whether there is potential for the species to be present. Implementing Mitigation Measure 3.5-2b would reduce potential impacts on western pond turtle to a **less-than-significant** level by requiring preconstruction surveys and the protection of western pond turtles from cannabis development-related injury, mortality, or other disturbance.

#### Nesting Raptors (Excluding Northern Spotted Owl)

The County contains nesting habitat and many known nesting occurrences for several raptor species, including American peregrine falcon, bald eagle, burrowing owl, golden eagle, northern goshawk, northern harrier, and white-tailed kite. Bald eagle, golden eagle, and white-tailed kite are fully protected under the Fish and Game Code. Bald eagle is also listed as endangered under CESA. Bald and golden eagles are also protected under the Bald and Golden Eagle Protection Act. Burrowing owl, northern goshawk, and northern harrier are CDFW species of special concern. Nesting habitat suitable for these species includes trees, snags, cliffs, burrows, marshes, grasslands, and human-made structures (e.g., utility poles). Additionally, other raptor species (e.g., red-tailed hawk, red-shouldered hawk, osprey (*Pandion haliaetus*)) could nest in Mendocino County; these species and their nests are protected by the Fish and Game Code.

Potential expansion of existing provisionally licensed and new commercial cannabis cultivation and associated processing and/or distribution transport-only operations could disturb nesting raptors if they are present, potentially resulting in nest abandonment, nest failure, or mortality of chicks or eggs. Additionally, human presence associated with construction of commercial

cannabis cultivation sites, roads, and commercial cannabis cultivation activities could result in increased noise and visual disturbance to nesting raptors. The potential loss of raptors and their nests would be a potentially significant impact.

### Summary

Although it was determined that no impact would occur on existing provisionally licensed sites, because potential expansion of existing provisionally licensed and future licensed commercial cannabis cultivation sites could result in loss of raptors and their nests, the impact related to nesting raptors would be **potentially significant**.

### Mitigation Measures

Mitigation Measure 3.5-2c: Conduct Preconstruction Nesting Raptor Surveys and Establish Protective Buffers  
As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of nesting raptors (excluding burrowing owl and northern spotted owl) that have potential to be present on or adjacent the proposed commercial cannabis cultivation sites:

- ▶ To minimize the potential for loss of nesting raptors, tree removal activities shall occur only during the nonbreeding season (September 1–January 31), if feasible.
- ▶ If removal of trees cannot be avoided during the breeding season, before removal of any trees or ground-disturbing activities between February 1 and August 31, a qualified biologist shall conduct preconstruction surveys for nesting raptors and shall identify active nests within a certain distance, depending on the species that are known or have potential to be present. For northern harrier, surveys shall occur at a minimum of 500 feet of the proposed development area or as recommended by CDFW. For northern goshawk and/or white-tailed kite, surveys shall occur at a minimum of 0.25 mile of the proposed development area or as recommended by CDFW. Additionally, for American peregrine falcon, bald eagle, and golden eagle, surveys shall occur at a minimum of 0.5 mile of the proposed development area or as recommended by CDFW. The surveys shall be conducted between February 1 and August 31.
- ▶ Impacts on nesting raptors, including direct impacts and indirect impacts (e.g., noise, presence of construction crews) shall be avoided by establishing appropriate buffers around active nest sites identified during preconstruction raptor surveys. Factors to be considered for determining buffer size shall include the presence of natural buffers provided by vegetation or topography, nest height, locations of foraging territory, and baseline levels of noise and human activity. Buffer size may be adjusted if the qualified biologist and the applicant, in consultation with CDFW, determine that such an adjustment would not be likely to adversely affect the nest. The buffer areas shall be protected with construction fencing, and no activity shall occur within the buffer areas until the qualified biologist has determined, in coordination with CDFW, that the young have fledged, the nest is no longer active, or reducing the buffer would not likely result in nest abandonment. Monitoring of the nest by a qualified biologist during and after construction activities (e.g., ground disturbance, vegetation removal, installation of commercial cannabis cultivation sites) shall be required if the activity has potential to adversely affect the nest.

- ▶ Removal of bald and golden eagle nests is prohibited regardless of the occupancy status under the federal Bald and Golden Eagle Protection Act. If bald or golden eagle nests are found during preconstruction surveys, then the nest tree shall not be removed.
- ▶ To avoid the potential for loss of northern goshawk and their nests, or loss or fragmentation of occupied or habitat suitable for northern goshawk, removal of old-growth habitat shall be prohibited, as outlined in Mitigation Measure 3.5-4a.
- ▶ Trees shall not be removed during the breeding season for nesting raptors unless a survey by the qualified biologist verifies that there is not an active nest in the tree.

Mitigation Measure 3.5-2d: Conduct Take Avoidance Survey for Burrowing Owl, Implement Avoidance Measures, and Compensate for Loss of Occupied Burrows

As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of burrowing owl that have potential to be present on or adjacent the proposed commercial cannabis cultivation sites:

- ▶ A qualified biologist shall conduct a focused survey for burrowing owls in areas of habitat suitable for the species (e.g., grasslands, agricultural areas) on and within a minimum of 1,640 feet (500 meters) of the commercial cannabis cultivation site no less than 14 days before initiating ground disturbance activities using survey methods described in Appendix D of the Staff Report on Burrowing Owl Mitigation (CDFG 2012) or as recommended by CDFW.
- ▶ If no occupied burrows are found, the qualified biologist shall submit a report documenting the survey methods and results to the applicant and CDFW, and no further mitigation shall be required.
- ▶ If an active burrow is found within a minimum of 1,640 feet of ground-disturbing activities (or as recommended by CDFW) that would occur during the nonbreeding season (September 1 through January 31), the applicant shall establish and maintain a minimum protection buffer of 164 feet (50 meters) around the occupied burrow throughout construction. The actual buffer size shall be determined by the qualified biologist based on the time of year and level of disturbance in accordance with guidance provided in the Staff Report on Burrowing Owl Mitigation (CDFG 2012). The protection buffer shall be adjusted if, during consultation with CDFW, a qualified biologist determines that an alternative buffer would not disturb burrowing owl use of the burrow because of particular site features or other buffering measures.
- ▶ If an active burrow is found during the breeding season (February 1 through August 31), occupied burrows shall not be disturbed and shall be provided with a protective buffer at a minimum of 164 feet unless a qualified biologist verifies through noninvasive means that either (1) the birds have not begun egg laying or (2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. There is an option for the size of the buffer to be adjusted depending on the time of year and level of disturbance as outlined in the burrowing owl staff report. The size of the buffer shall be reduced if a broad-scale, long-term monitoring program acceptable to CDFW is implemented so that burrowing owls are not adversely affected.

### Significance after Mitigation

Implementation of Mitigation Measure 3.5-1a would apply to this impact and would determine whether there is potential for the species to be present. Implementing Mitigation Measure 3.5-2c and 3.5-2d would reduce significant impacts on nesting raptors to a **less-than-significant** level because active raptor nests would be avoided and protected from construction activities (e.g., ground disturbance, vegetation removal, installation of commercial cannabis cultivation sites).

### Northern Spotted Owl

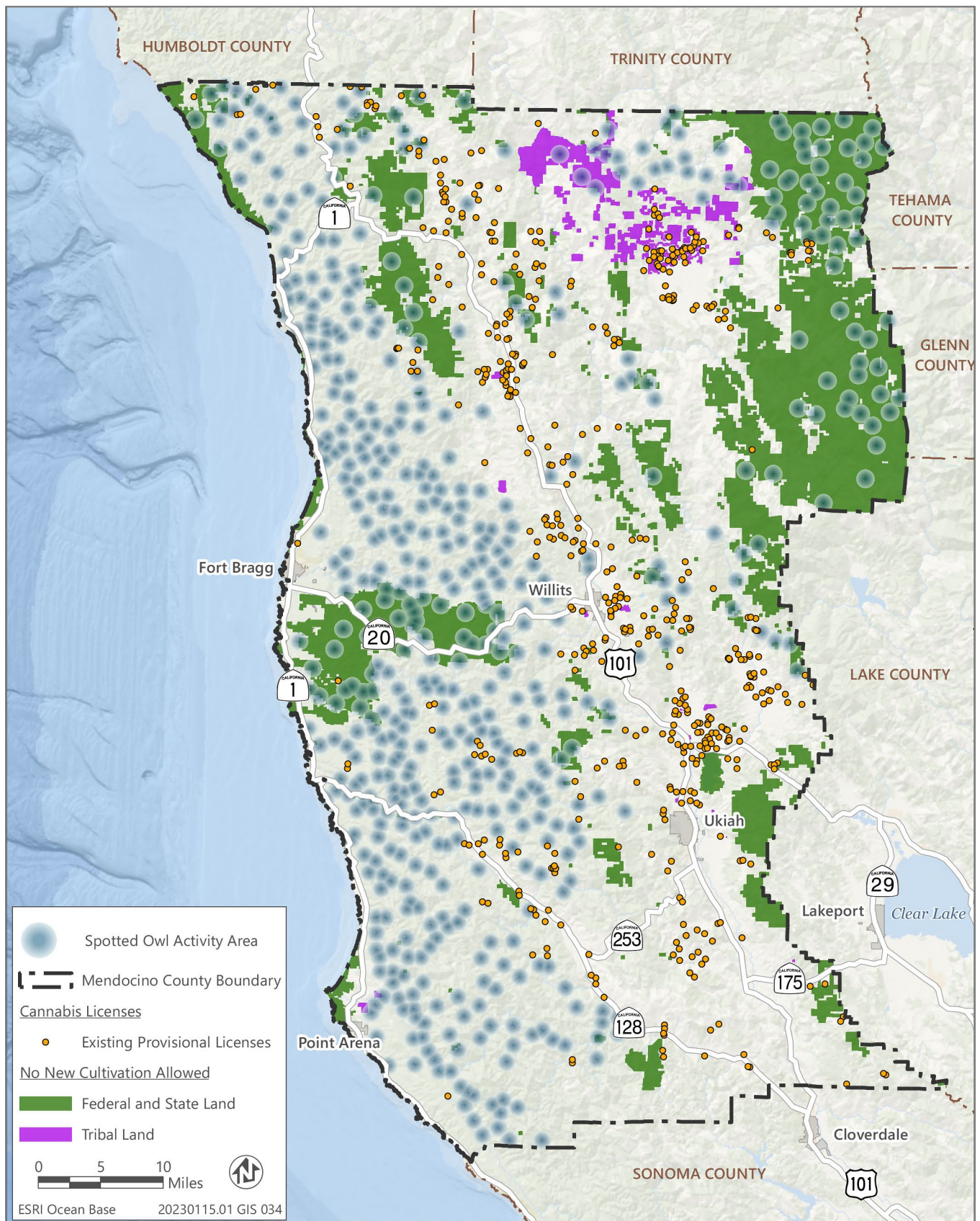
Northern spotted owl is listed as threatened under the ESA and CESA and is a CDFW species of special concern. Northern spotted owl is known to occur throughout forest habitats in Mendocino County (CNDDDB 2023). Critical habitat for this species is present within the County (Figure 3.5-7). Portions of this critical habitat are within public lands managed by the US Forest Service, CAL FIRE, and California State Parks, where new commercial cannabis operations would be prohibited under the project.

Figure 3.5-11 presents the distribution of known occurrences of spotted owls throughout Mendocino County and shows that many occurrences appear, only because of the scale of the map, to be in areas where new commercial cannabis cultivation is prohibited, including public land and land not zoned for commercial cannabis cultivation. There has been only a single application on lands prohibited for commercial cannabis cultivation in Mendocino County, and it was withdrawn. However, there are also many known northern spotted owl occurrences located on land zoned for commercial cannabis cultivation (Figure 3.5-11).

Potential expansion of existing provisionally licensed and new commercial cannabis cultivation and associated processing and/or distribution transport-only operations could result in potential impacts on habitat and vegetation removal, which could disturb nesting northern spotted owls if they are present, potentially resulting in nest abandonment, nest failure, or mortality of chicks or eggs. Additionally, human presence associated with construction of commercial cannabis operations, roads, and commercial cannabis cultivation activities could result in increased noise and visual disturbance to nesting northern spotted owl. In addition to direct impacts on the species, new cannabis-related development under the project could result in loss or fragmentation of northern spotted owl habitat. The potential loss of northern spotted owls, their nests, and their habitat would be a potentially significant impact.

### Summary

Although it was determined that no impact would occur on existing provisionally licensed sites, because potential expansion of existing provisionally licensed and future licensed commercial cannabis cultivation sites could result in loss of northern spotted owls, their nests, and their habitat, the impact related to northern spotted owls would be **potentially significant**.



Source: Data downloaded from CDFW in 2023; adapted by Ascent in 2023.

**Figure 3.5-11 Spotted Owl Activity Areas**

## Mitigation Measures

Mitigation Measure 3.5-2e: Conduct Northern Spotted Owl Preconstruction Habitat Suitability Surveys and Determine Presence or Absence of the Species

As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of northern spotted owl from proposed commercial cannabis cultivation sites:

- ▶ To avoid the potential for loss of northern spotted owl and their nests, or loss or fragmentation of occupied or habitat suitable for northern spotted owl, removal of old-growth habitat shall be prohibited, as outlined in Mitigation Measure 3.5-4a.
- ▶ If the area of proposed new development activities is within habitat suitable for northern spotted owl (e.g., mature forest), and a qualified biologist determines it is within a minimum of 1.3 miles (average species home range) of a known occurrence of northern spotted owl, or as recommended by CDFW, the following measures shall be followed:
  - Before removal of any trees or ground-disturbing activities adjacent or in nesting, roosting, or foraging habitat (e.g., forest clearings) for spotted owl, a qualified biologist familiar with the species and protocol, shall conduct preconstruction surveys for nests within a minimum 1.3-mile buffer around the site as described in *Protocol for Surveying Proposed Management Activities That May Impact Northern Spotted Owls* (USFWS 2012) and the 2019 revision to *Northern Spotted Owl Take Avoidance Analysis and Guidance for Private Lands in California* (USFWS 2019) or as recommended by CDFW. Surveys shall take place between March 1 and August 31. Three complete surveys spaced at least 7 days apart must be completed by June 30. Six complete surveys over the course of 2 years must be completed to determine presence or absence of northern spotted owl.
  - If northern spotted owls are determined to be absent at a minimum of 1.3 miles from the site or as recommended by CDFW, then further mitigation is not required.
  - If northern spotted owls are determined to be present within a minimum of 1.3 miles of the site or as recommended by CDFW, then it is presumed that habitat removal could cause harm to northern spotted owl populations in the area and could result in direct take of northern spotted owls. If northern spotted owls are determined to be present within a minimum of 1.3 miles of the site or as recommended by CDFW, proposed commercial cannabis cultivation activities shall not be permitted.

### Significance after Mitigation

Implementation of Mitigation Measure 3.5-1a would apply to this impact and would determine whether there is potential for the species to be present. Implementing Mitigation Measure 3.5-2e would reduce significant impacts to a **less-than-significant** level because direct take of northern spotted owls and disturbance or fragmentation of northern spotted owl habitat would be avoided through preconstruction surveys and, if northern spotted owls are found, through prohibition of proposed commercial cannabis cultivation activities consistent with the SWRCB policy.

### Other Special-Status Bird Species

Several additional special-status bird species could occur in the County: grasshopper sparrow, little willow flycatcher, marbled murrelet, olive-sided flycatcher, purple martin, tricolored blackbird, western yellow-billed cuckoo, yellow warbler, and yellow-breasted chat. Western yellow-billed cuckoo and marbled murrelet are listed as threatened under the ESA and endangered under CESA. Little willow flycatcher is listed as endangered under CESA, and tricolored blackbird is listed as threatened under CESA. Grasshopper sparrow, olive-sided flycatcher, purple martin, yellow warbler, and yellow-breasted chat are all CDFW species of special concern.

Habitat suitable for these species, including riparian, grassland, and old-growth forest habitat, is present throughout the County (Figures 3.5-3, 3.5-4, and 3.5-6). Additionally, native migratory bird nests are protected by the Fish and Game Code, and many of these more common species could nest in many different habitats in Mendocino County. New commercial cannabis cultivation and associated processing or distribution transport-only uses could result in the removal of vegetation, especially riparian vegetation, as well as conversion of natural habitats, could disturb nesting birds if they are present, potentially resulting in nest abandonment, nest failure, or mortality of chicks or eggs. Additionally, human presence associated with construction of commercial cannabis cultivation sites, roads, and commercial cannabis cultivation activities could result in increased noise and visual disturbance to nesting birds. This impact would be potentially significant.

### Summary

Although it was determined that no impact would occur on existing provisionally licensed sites, because potential expansion of existing provisionally licensed and future licensed commercial cannabis cultivation sites could result in loss of other special-status bird species, their nests, and their habitat, the impact related to other special-status bird species would be **potentially significant**.

### Mitigation Measures

Mitigation Measure 3.5-2f: Conduct Preconstruction Special-Status Nesting Bird Surveys and Establish Protective Buffers As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of grasshopper sparrow, little willow flycatcher, olive-sided flycatcher, purple martin, tricolored blackbird, western yellow-billed cuckoo, yellow warbler, yellow-breasted chat, or other bird nests from proposed commercial cannabis cultivation sites:

- ▶ To minimize the potential for disturbance to or loss of grasshopper sparrow, little willow flycatcher, olive-sided flycatcher, purple martin, tricolored blackbird, western yellow-billed cuckoo, yellow warbler, yellow-breasted chat, or other bird nests, vegetation removal activities shall occur only during the nonbreeding season (September 1–January 31).
- ▶ If little willow flycatcher is detected during the initial biological survey (see Mitigation Measure 3.5-1a) or is determined to be likely to occur based on the presence of suitable habitat, a protocol-level survey shall be conducted by a qualified biologist familiar with the species and the protocol before removal of any vegetation or any ground disturbance. The



protocol-level survey shall include methods outlined in A Willow Flycatcher Survey Protocol for California (Bombay et al. 2003).

- ▶ If little willow flycatcher is determined to be present during the protocol-level survey, no development activity shall occur during the breeding season (May 1 through August 31) in and within a minimum of 300 feet of the little willow flycatcher habitat, or as recommended by CDFW. Development activities in or adjacent to identified little willow flycatcher habitat shall not damage or destroy willows or other riparian shrubs unless agreed upon through consultation with CDFW.
- ▶ If grasshopper sparrow, olive-sided flycatcher, purple martin, tricolored blackbird, western yellow-billed cuckoo, yellow warbler, yellow-breasted chat, or other bird nests are detected during the initial biological survey (see Mitigation Measure 3.5-1a) or are determined to be likely to occur based on the presence of suitable habitat, before removal of any vegetation or any ground disturbance between February 1 and August 31, a qualified biologist shall conduct preconstruction surveys for nests on any structure or vegetation planned for removal, as well as nests located within a 100-foot buffer around the site or as recommended by CDFW. The surveys shall be conducted no more than 7 days before construction commences. If no active nests are found during focused surveys, no further action under this measure shall be required. If active nests are located during the preconstruction surveys, the biologist shall notify CDFW. If deemed necessary by CDFW, modifications to the project design to avoid removal of occupied habitat while still achieving project objectives may be required. If DCC determines in consultation with CDFW that avoidance is not feasible or conflicts with project objectives, construction shall be prohibited within a minimum of 100 feet of the nest to avoid disturbance, depending on the species identified, until the nest is no longer active. Final avoidance buffer size shall be determined by a qualified biologist in consultation with CDFW.

**Mitigation Measure 3.5-2g: Conduct Marbled Murrelet Preconstruction Habitat Suitability Surveys and Determine Presence or Absence of the Species**

As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of marbled murrelet from proposed commercial cannabis cultivation sites:

- ▶ To avoid the potential for loss of marbled murrelet and their nests, or loss or fragmentation of occupied or habitat suitable for marbled murrelet, removal of old-growth habitat shall be prohibited, as outlined in Mitigation Measure 3.5-4a.
- ▶ If the area of proposed new development activities is in or adjacent to habitat suitable for marbled murrelet (e.g., coniferous forest), as determined by a qualified biologist, the following measures shall be followed:
  - Before removal of any trees or ground-disturbing activities adjacent to or in habitat suitable for marbled murrelet between April 15 and August 5, a qualified biologist familiar with the life history of the marbled murrelet shall conduct preconstruction surveys for nests within a 0.25-mile buffer around the site as described in Methods for Surveying Marbled Murrelets in Forests: A Revised Protocol for Land Management and Research (Evans Mack et al. 2003) or as recommended by CDFW.

- If marbled murrelets are determined to be absent at a minimum of 0.25 mile from the site or as recommended by CDFW, then further mitigation is not required.
- ▶ If marbled murrelets are determined to be present on the site, a 0.25-mile buffer shall be established around occupied nest sites or a buffer as recommended by CDFW. No project activity may occur within the 0.25-mile buffer area or other recommended buffer by CDFW until the end of marbled murrelet breeding season (August 6). The nest tree and any adjacent trees that provide screening or canopy cover to the nest shall be retained regardless of the diameter of the tree.

### Significance after Mitigation

Implementation of Mitigation Measure 3.5-1a would apply to this impact and would determine whether there is potential for the species to be present. Implementing Mitigation Measures 3.5-2f and 3.5-2g would reduce significant impacts to a **less-than-significant** level because grasshopper sparrow, little willow flycatcher, marbled murrelet, olive-sided flycatcher, purple martin, tricolored blackbird, western yellow-billed cuckoo, yellow warbler, yellow-breasted chat, and other bird nests would be avoided and protected from new development related to cannabis activities.

### Special-Status Bumble Bees

Crotch bumble bee and western bumble bee are both candidates for listing under CESA and both have a current range that overlaps the northwest corner of Mendocino County, east of Covelo, and mostly on Mendocino National Forest land (CDFW 2023) managed by the US Forest Service, where new commercial cannabis operations would be prohibited. Nesting, overwintering, and foraging habitat for this species is likely present in natural habitats (including ruderal areas) in the County.

Potential expansion of existing provisionally licensed and new commercial cannabis cultivation and associated processing and/or distribution transport-only operations could include removal of floral resources and ground disturbance, which could result in loss of Crotch bumble bee and western bumble bee habitat or direct loss of or injury to Crotch bumble bee and western bumble bee. This impact would be potentially significant.

### Summary

Although it was determined that no impact would occur on existing provisionally licensed sites, because potential expansion of existing provisionally licensed and future licensed commercial cannabis cultivation sites could result in the direct loss or injury of special-status bee species and their habitat, the impact related special-status bee species would be **potentially significant**.

### Mitigation Measures

Mitigation Measure 3.5-2h: Conduct Crotch Bumble Bee and Western Bumble Bee Preconstruction Habitat Suitability Surveys and Focused Surveys

As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of Crotch bumble bee and western bumble bee from proposed commercial cannabis cultivation sites:

- ▶ Before implementation of ground-disturbing activities, a qualified biologist shall conduct a habitat assessment for Crotch bumble bee and western bumble bee following the guidance in the Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species (CDFW 2023). Results of the habitat assessment shall be submitted to the applicant, DCC, and CDFW before initiating ground-disturbing activities. If the area of proposed new development activities contains habitat suitable for Crotch bumble bee or western bumble bee (e.g., nesting habitat, foraging habitat), the following measures shall be followed:
  - To avoid impacts on Crotch bumble bee and western bumble bee, cannabis-related development activities shall not occur in habitats suitable for these species from April through September (i.e., flight season) if feasible.
  - Focused surveys for Crotch bumble bees and western bumble bees shall be conducted following the guidance in the Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species (CDFW 2023). Crotch bumble bee and western bumble bee presence may also be assumed. If Crotch bumble bees or western bumble bees are detected during focused surveys or presence is assumed, the following measure shall be implemented:
    - If Crotch bumble bees or western bumble bees are detected during review and surveys or presence is assumed, the qualified biologist shall contact CDFW for coordination regarding avoidance and mitigation. Avoidance and mitigation measures may include seasonal avoidance or physical avoidance of nest or overwintering sites.

#### Significance after Mitigation

Implementation of Mitigation Measure 3.5-1a would apply to this impact and would determine whether there is potential for the species to be present. Implementing Mitigation Measure 3.5-2h would reduce impacts on special-status bumble bees to a **less-than-significant** level because preconstruction surveys would be conducted and mitigation measures would be developed with CDFW to protect special-status bumble bees from impacts from new development related to cannabis activities.

#### Monarch

Monarch is a candidate for listing under the ESA. Several monarch overwintering sites have been documented in Mendocino County, which is the northern extent of overwintering for this species; two of the sites are considered active (Xerces Society 2016). Monarch winter roost sites extend along the coast from northern Mendocino County to Baja California, Mexico. Roosts are typically located in wind-protected tree groves (e.g., eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. Most overwintering sites are located in the coastal zone, except for one in the northern portion of the County (Xerces Society 2023). Foraging habitat (i.e., floral resources) and breeding habitat (i.e., milkweed) is likely also present in the County.

Potential expansion of existing provisionally licensed and new commercial cannabis cultivation and associated processing and/or distribution transport-only operations could include removal of floral resources, including potential breeding habitat, as well as potential overwintering habitat, including trees and other vegetation close to the coast, which could result in loss of monarch habitat or direct loss of or injury to monarchs. This impact would be potentially significant.

### Summary

Although it was determined that no impact would occur on existing provisionally licensed sites, because potential expansion of existing provisionally licensed and future licensed commercial cannabis cultivation sites could result in the direct loss of or injury to monarchs and their habitat, the impact related to monarch would be **potentially significant**.

### Mitigation Measures

Mitigation Measure 3.5-2i: Avoid Overwintering Monarch Habitat and Conduct Preconstruction Monarch Survey  
As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of the monarch from proposed commercial cannabis cultivation sites:

- ▶ To avoid impacts on monarch butterfly, new development related to cannabis activities shall not occur in overwintering sites identified by Xerces (2023).
- ▶ No more than 14 days before implementing project activities that would result in ground disturbance or vegetation removal during the time when milkweed plants could host monarch eggs or caterpillars (approximately mid-March through late September), a qualified biologist shall conduct focused surveys for milkweed plant and inspect these plants for monarch eggs, larvae (i.e., caterpillars), and pupae. If monarch eggs, caterpillars, or pupae are found, the host plants shall be avoided until metamorphosis is completed and adult butterflies emerge and leave the host plant. If no eggs or caterpillars are detected, no additional protection measures are necessary.

### Significance after Mitigation

Implementation of Mitigation Measure 3.5-1a would apply to this impact and would require avoidance of overwintering sites identified by Xerces (2023), determination of species presence, and avoidance if species is identified. Implementing Mitigation Measure 3.5-2i would reduce impacts on monarch to a **less-than-significant** level because preconstruction surveys would be conducted and milkweed plants with monarch larvae would be protected from new development related to cannabis activities.

### American Badger

American badger, which is a CDFW species of special concern, prefers open habitats with friable soils. Habitat potentially suitable for this species occurs throughout Mendocino County. Potential expansion of existing provisionally licensed and new commercial cannabis cultivation and associated processing and/or distribution transport-only operations could result in conversion of habitat, vegetation removal, and ground-disturbing activities, which could cause the direct loss of American badgers if they are occupying burrows on the site during these activities. Loss of American badger as a result of these activities would be a potentially significant impact.

### Summary

Although it was determined that no impact would occur on existing provisionally licensed sites, because potential expansion of existing provisionally licensed and future licensed commercial

cannabis cultivation sites could result in the direct loss of American badger, the impact related to American badger would be **potentially significant**.

### Mitigation Measures

Mitigation Measure 3.5-2j: Conduct Preconstruction American Badger Survey and Establish Protective Buffers  
As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of the American badger from proposed commercial cannabis cultivation sites:

- ▶ Before the commencement of construction activities, a qualified wildlife biologist shall conduct surveys of the grassland or agricultural habitats slated for conversion or disturbance on the site to identify any American badger burrows/dens. These surveys shall be conducted no more than 30 days before the start of construction.
- ▶ If occupied American badger burrows are not found, further mitigation shall not be required.
- ▶ If occupied American badger burrows are found, impacts on active badger dens shall be avoided through an exclusion zone around all active dens, the size and shape of which shall be established by a qualified biologist, in consultation with CDFW. Within the exclusion zone, all project activities shall be prohibited until denning activities are complete or the den is abandoned. The qualified biologist shall monitor each den once per week to track the status of the den and to determine when it is no longer occupied.

### Significance after Mitigation

Implementation of Mitigation Measure 3.5-1a would apply to this impact and would determine whether there is potential for the species to be present. Implementing Mitigation Measure 3.5-2j would reduce impacts on American badger to a **less-than-significant** level because preconstruction surveys would be conducted and active badger dens would be protected from construction activities.

### Fisher

The fisher in the northwestern portion of California is a CDFW species of special concern. Fisher is a medium-sized carnivore in the weasel family. Habitat suitable for this species includes old-growth or mature coniferous forests with high-percent canopy cover and sufficient coarse woody debris on the forest floor. Dens for fishers can include cavities in live trees or snags, rock piles, or woody debris piles. This species typically chooses the largest feature in an area for denning. Modern occurrences of fisher are primarily located in federal wilderness areas and Mendocino National Forest (CNDDDB 2023) on public land managed by the US Forest Service, where new commercial cannabis operations would be prohibited under the project.

Fishers and other carnivores (e.g., black bear, mountain lion) in Mendocino County and surrounding counties have experienced highly publicized mortality because of exposure to rodenticides and insecticides used on illegal cannabis “trespass grow” sites (Gabriel et al. 2012). Second-generation anticoagulant rodenticides (i.e., those containing ingredients such as brodifacoum, bromadiolone, difethialone, and difenacoum) are used inappropriately and illegally in these “trespass grow” sites, and carnivores can be exposed either directly (e.g.,

through poisoned bait) or indirectly after eating rodents that have been targeted by the poisons. Use of these rodenticides, which are restricted in California, requires licensing through the California Department of Pesticide Regulation (CDPR). The project requires adherence to California state law and to CDPR regulations that specify proper application and storage of pesticides, rodenticides, and insecticides to protect human health and the environment. Specifically, the project includes the following requirements:

- ▶ Any fuel, fertilizer, pesticide, fungicide, rodenticide, herbicide or other substance toxic to wildlife, children, or pets must be stored in a secured and locked structure or device (MCCR section 10A.17.090 (E)(3)).
- ▶ Any use of pesticide products shall be consistent with state law and regulations enforced by CDPR and the Agricultural Commissioner's Office. All agricultural use pesticides and concentrated fertilizers, amendments, and similar materials shall be stored in a locked, hard-faced enclosure to prevent unauthorized entry by humans, to exclude large animals that may be attracted by odors, and to ensure that they will not enter or be released into surface waters or groundwaters (MCCR section 10A.17.070 (Q)).

In addition, state cannabis pesticide and testing requirements for cannabis substantially limit the extent that pesticides can be used to mostly food-grade essential oils such as peppermint oil or rosemary oil. The reader is referred to Section 3.9, "Hazards and Hazardous Materials," for a further description of state testing requirements.

Proper licensed use of these pest control substances would preclude impacts on fishers and other carnivores, and the impact would be less than significant. Mitigation is not required.

Potential expansion of existing provisionally licensed and new commercial cannabis cultivation and associated processing and/or distribution transport-only operations could result in loss of suitable habitat for fisher because of tree or other vegetation removal. Vegetation removal could also result in disturbance of or direct loss to individuals or active dens. This impact would be potentially significant.

### Summary

Although it was determined that no impact would occur on existing provisionally licensed sites, because potential expansion of existing provisionally licensed and future licensed commercial cannabis cultivation sites could result in loss of fisher, their dens, and their habitat, the impact on fisher, other than the impact related to pest control substances, would be **potentially significant**.

### Mitigation Measures

#### Mitigation Measure 3.5-2k: Conduct Preconstruction Fisher Survey and Preserve Active Den Sites and Associated Habitats

As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of the fisher from proposed commercial cannabis cultivation sites:

- ▶ To minimize the potential for loss of or disturbance to fisher habitat and dens, removal of old-growth habitat shall be prohibited, as outlined in Mitigation Measure 3.5-4. Habitat features within non-old-growth habitat, such as large trees, large snags, coarse woody

debris, and understory vegetation (e.g., shrubs), in sites that overlap the range of fisher shall be retained on the site to the extent feasible, to maintain connectivity of fisher habitat.

- ▶ Before commencement of new development related to cannabis activities occurring during the fisher denning season (March 1 to July 31), including tree removal (non-old-growth), a qualified wildlife biologist shall conduct preconstruction surveys of all suitable habitat on the site and shall identify sightings of individual fishers, as well as potential dens.
- ▶ If individuals or potential or occupied dens are not found, further mitigation shall not be required.
- ▶ If fishers are identified or if potential dens of this species are located, an appropriate method shall be used by the qualified wildlife biologist to confirm whether a fisher is occupying the den. This may involve use of remote field cameras, track plates, or hair snares. Other devices, such as a fiber optic scope, may be used to determine occupancy. If no fisher occupies the potential den, the entrance shall be temporarily blocked so that no other animals occupy the area during ground disturbance, vegetation removal, or installation of commercial cannabis cultivation sites, but only after it has been fully inspected. The blockage shall be removed after these activities have been completed.
- ▶ If a den is found to be occupied by a fisher, a no-disturbance buffer shall be placed around the occupied den location. The no-disturbance buffer shall include the den tree (or other structure) plus a suitable buffer as determined by the biologist in coordination with CDFW. Construction activities in the no-disturbance buffer shall be avoided until the nest is unoccupied as determined by a qualified wildlife biologist in coordination with CDFW.

#### Significance after Mitigation

Implementation of Mitigation Measure 3.5-1a would apply to this impact and would determine whether there is potential for the species to be present. Implementing Mitigation Measure 3.5-2k would reduce impacts on fisher to a **less-than-significant** level because preconstruction surveys would be conducted and active dens would be protected from construction activities (e.g., vegetation removal, ground disturbance, installation of commercial cannabis cultivation sites).

#### Northern California Ringtail

Northern California ringtail is fully protected under the Fish and Game Code. Ringtail is a medium-sized carnivore and is one of two species in the procyonid family in North America (the other is racoon). Suitable habitat for this species includes riparian habitat, forest habitat, and shrub habitat in lower to middle elevations. Ringtail is usually found close to a permanent water source. Den habitat includes rock recesses, hollow trees, logs, snags, abandoned burrows, and woodrat nests.

Potential expansion of existing provisionally licensed and new commercial cannabis cultivation and associated processing and/or distribution transport-only operations could result in conversion of habitat, vegetation removal, and ground-disturbing activities, which could cause the direct loss of ringtail if present. Loss of ringtail because of project construction activities would be a potentially significant impact.

#### Summary

Although it was determined that no impact would occur on existing provisionally licensed sites, because potential expansion of existing provisionally licensed and future licensed commercial

cannabis cultivation sites could result in the direct loss of northern California ringtail, the impact related to northern California ringtail would be **potentially significant**.

### Mitigation Measures

Mitigation Measure 3.5-2l: Conduct Preconstruction Surveys for Ringtail and Implement Avoidance Measures  
As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of the ringtail from proposed commercial cannabis cultivation sites:

- ▶ Before commencement of new development related to cannabis activities occurring during the ringtail nesting season (not well defined but likely approximately March 1 to July 31), including tree or shrub removal, a qualified wildlife biologist shall conduct preconstruction surveys of all habitat suitable for ringtail on the site and shall identify sightings of individual ringtails, as well as potential dens.
- ▶ If individuals or potential or occupied dens are not found, further mitigation shall not be required.
- ▶ If ringtails are detected or if potential dens of this species are located, an appropriate method shall be used by the qualified wildlife biologist to confirm whether a ringtail is occupying the den. This may involve use of remote field cameras, track plates, or hair snares. Other devices, such as a fiber optic scope, may be used to determine occupancy. If no ringtail occupies the potential den, the entrance shall be temporarily blocked so that no other animals occupy the area during ground disturbance, vegetation removal, or installation of commercial cannabis cultivation sites, but only after it has been fully inspected. The blockage shall be removed after these activities have been completed.
- ▶ If a den is found to be occupied by a ringtail, a no-disturbance buffer shall be placed around the occupied den location. The no-disturbance buffer shall include the den tree (or other structure) plus a buffer the size of which shall be determined by the biologist in coordination with CDFW to prevent disturbance and abandonment. Construction activities in the no-disturbance buffer shall be avoided until the den is unoccupied as determined by a qualified wildlife biologist in coordination with CDFW.

### Significance after Mitigation

Implementation of Mitigation Measure 3.5-1a would apply to this impact and would determine whether there is potential for the species to be present. Implementing Mitigation Measure 3.5-2l would reduce significant impacts to a **less-than-significant** level because preconstruction surveys would be conducted and ringtail and occupied dens would be avoided and protected from new development related to cannabis activities.

### Special-Status Bats

Three special-status bat species—pallid bat, Townsend’s big-eared bat, and western red bat—have documented occurrences in the County and could occur throughout the County where roost habitats suitable for the species is present. All three species are CDFW species of special concern. These species use a variety of habitats to roost, including trees, caves, crevices, mines, hollow trees, and buildings. Roosting habitat could be present on commercial cannabis cultivation sites. Tree and building removal could result in the direct loss of pallid bat,



Townsend's big-eared bat, and western red bat roosts and individuals. This impact would be potentially significant.

### Summary

Although it was determined that no impact would occur on existing provisionally licensed sites, because potential expansion of existing provisionally licensed and future licensed commercial cannabis cultivation sites could result in the direct loss of special-status bat species, the impact related to special-status bat species would be **potentially significant**.

### Mitigation Measures

#### Mitigation Measure 3.5-2m: Conduct Preconstruction Bat Surveys and Establish Protective Buffers

As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of the pallid bat, Townsend's big-eared bat, and western red bat from proposed commercial cannabis cultivation sites:

- ▶ Before commencing any development related to cannabis activities, a qualified biologist shall conduct surveys for roosting bats. If evidence of bat use is observed, the species and number of bats using the roost shall be determined. Bat detectors may be used to supplement survey efforts. If no evidence of bat roosts is found, then no further study shall be required.
- ▶ If pallid bats, Townsend's big-eared bats, or western red bats are detected during the surveys, a program addressing mitigation for the specific occurrence shall be submitted to CDFW by the qualified biologist subject to the review and approval of CDFW. Implementation of the mitigation plan shall be a condition of project approval. The mitigation plan shall establish a buffer area around the roost during hibernation or while females in maternity colonies are nursing young that is large enough to prevent disturbance to the colonies.

### Significance after Mitigation

Implementation of Mitigation Measure 3.5-1a would apply to this impact and would determine whether there is potential for the species to be present. Implementing Mitigation Measure 3.5-2m would reduce impacts on special-status bats to a **less-than-significant** level because preconstruction surveys would be conducted and active special-status bat roosts would be protected from new development related to cannabis activities.

### Point Arena Mountain Beaver

Point Arena mountain beaver is listed as endangered under the ESA and is a CDFW species of special concern. This species is known from coastal habitats to approximately 5 miles inland in the immediate area surrounding Point Arena in Mendocino County (CNDDDB 2023).

Potential expansion of existing provisionally licensed and new commercial cannabis cultivation and associated processing and/or distribution transport-only operations could include removal of vegetation, which could result in loss of Point Arena mountain beaver habitat or direct loss of or injury to Point Arena mountain beaver. This impact would be potentially significant.

## Summary

Although it was determined that no impact would occur on existing provisionally licensed sites, because potential expansion of existing provisionally licensed and future licensed commercial cannabis cultivation sites could result in the direct loss or injury of Point Arena mountain beavers or their habitat, the impact related to Point Arena mountain beaver would be **potentially significant**.

## Mitigation Measures

Mitigation Measure 3.5-2n: Conduct Preconstruction Point Area Mountain Beaver Surveys and Avoid Active Burrows As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of the Point Arena mountain beaver from proposed commercial cannabis cultivation sites:

- ▶ To avoid impacts on Point Arena mountain beaver, focused surveys (i.e., burrow searches) for the species shall be conducted by a qualified biologist before new development related to cannabis activities within a minimum of 200 feet of aquatic habitat (e.g., near creeks and drainages) in coastal habitats in Point Arena, the immediate area surrounding Point Arena, and up to approximately 5 miles inland of Point Arena or as recommended by CDFW.
- ▶ If an active Point Arena mountain beaver burrow is not detected during focused surveys, then further mitigation for the species shall not be required.
- ▶ If an active Point Arena mountain beaver burrow is identified by a qualified biologist, a no-disturbance buffer of at least 250 feet shall be established around the burrow, or as recommended by CDFW, and no project related activities shall occur within this buffer.

## Significance after Mitigation

Implementation of Mitigation Measure 3.5-1a would apply to this impact and would determine whether there is potential for the species to be present. Implementing Mitigation Measure 3.5-2n would reduce impacts on Point Area mountain beaver to a **less-than-significant** level because preconstruction surveys would be conducted and active Point Area mountain beaver burrows would be protected from new development related to cannabis activities.

## Sonoma Tree Vole

Sonoma tree vole is a CDFW species of special concern and is known to occur in Mendocino County except for the northeastern portion of the County (CNDDDB 2023). This species occurs in coniferous forest, riparian forest, and montane-hardwood conifer forest, usually in areas near streams with dense shrubs. Sonoma tree vole exclusively eats conifer needles, with its diet mainly consisting of Douglas fir and grand fir needles. Large areas of habitat suitable for this species occur on public lands managed by the US Forest Service, where new commercial cannabis operations would be prohibited under the project.

Potential expansion of existing provisionally licensed and new commercial cannabis cultivation and associated processing and/or distribution transport-only operations could include removal of trees and other vegetation, which could result in loss of Sonoma tree vole habitat or direct loss of or injury to voles. This impact would be potentially significant.

## Summary

Although it was determined that no impact would occur on existing provisionally licensed sites, because potential expansion of existing provisionally licensed and future licensed commercial cannabis cultivation sites could result in the direct loss of or injury to Sonoma tree voles or loss of habitat, the impact related to Sonoma tree vole would be **potentially significant**.

## Mitigation Measures

### Mitigation Measure 3.5-2o: Conduct Preconstruction Sonoma Tree Vole Surveys and Relocate Individuals

As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of the Sonoma tree vole from proposed commercial cannabis cultivation sites:

- ▶ To minimize the potential for loss of or disturbance to Sonoma tree vole habitat and nests, removal of old-growth habitat shall be prohibited, as outlined in Mitigation Measure 3.5-4a.
- ▶ Before commencing any tree or other vegetation removal activities or ground disturbance, a qualified biologist shall conduct surveys for Sonoma tree vole nests (e.g., searching for nests in trees on the site and confirming that nests belong to voles rather than squirrels or birds). If no evidence of Sonoma tree vole nests is found, then no further mitigation for the species shall be required.
- ▶ If occupied trees or nests are identified within a minimum of 100 feet of the site or as recommended by CDFW, the qualified biologist shall determine whether project development activities shall adversely affect the voles, based on factors such as noise level of development activities or line of sight between the tree and the disturbance source. If it is determined that development activities would not affect the voles, then development can proceed without protective measures.
- ▶ If the biologist determines that development activities would likely disturb Sonoma tree voles, the proposed area of disturbance shall be relocated a minimum of 200 feet from the nest or as recommended by CDFW.

## Significance after Mitigation

Implementation of Mitigation Measure 3.5-1a would apply to this impact and would determine whether there is potential for the species to be present. Implementing Mitigation Measure 3.5-2o would reduce impacts on special-status voles to a **less-than-significant** level because preconstruction surveys would be conducted and active vole nests would be protected from new development related to cannabis activities.

## Effects of Nighttime Artificial Light on Special-Status Species

Commercial cannabis cultivation operations under the project would be allowed to use artificial lighting systems for indoor and mixed-light commercial cannabis cultivation and for security purposes. Artificial light can adversely affect many different wildlife species, especially nocturnal animals, such as bats. Bat behavior is affected by moonlight, so changes in light cycles can lead to changes in bat foraging behavior, emergence, roosting, breeding, and hibernation (Stone et al. 2015). Artificial light can also result in changes in amphibian mating behavior (Baker and Richardson 2006).

Existing provisionally licensed and new commercial cannabis cultivation sites are required to comply with MCCR section 10A.17.040(E) would ensure that commercial cannabis cultivation operations, including associated processing and/or distribution transport-only operations, using artificial lighting shall be fully contained within structures or otherwise be shielded. Compliance with state requirement would also require that outdoor lights used for safety or security purposes for commercial cannabis cultivation sites are shielded and downward facing as well as commercial cannabis cultivation artificial lighting is shielded from sunset to sunrise to reduce nighttime glare (CCR, title 4, section 16304). This would avoid adverse levels of artificial light and avoid disturbance to wildlife species, such as bats, amphibians, and birds, and would reduce the impact to less than significant. For additional analysis on nighttime artificial lighting, see Section 3.1.3, “Environmental Impacts and Mitigation Measures” in Section 3.1, “Aesthetics.”

### Summary

Project analysis determined that no impact would occur on existing provisionally licensed sites. Although potential expansion of existing provisionally licensed and future licensed commercial cannabis cultivation sites could result in impacts on special-status species, such as changes in foraging or mating behavior, state and County codes, as well as area plan policies, would reduce the impact to **less than significant**.

### Mitigation Measures

No mitigation is required.

### Effects of Generator Noise on Special-Status Species

New commercial cannabis cultivation and associated processing and/or distribution transport-only operations would be required to comply with MCCR section 10A.17.070(F), which does not allow commercial cannabis cultivation to have generators as the primary source of power for operations, but this requirement applies only to indoor and mixed-light commercial cannabis cultivation. The Mendocino County General Plan requires acoustical studies of significant new noise generation and new uses in certain areas (Action Item DE-99.2), but this action item does not address biological impacts specifically. Generator sound can range from approximately 52 decibels for the low end of a residential generator to approximately 84 decibels for the high end of an industrial generator (USFWS 2020). Effects of anthropogenic noise on wildlife species is an issue that is complex and poorly understood. Anthropogenic noise can result in elevated stress levels in wildlife species, including the northern spotted owl (Hayward et al. 2011). Stress in wildlife species can cause reduced overall fitness and reduced reproductive success, which could have far-reaching consequences for special-status or ESA- and CESA-listed species. Sound disturbance to marbled murrelets can lead to a behavioral response, which can draw the attention of predators (e.g., Steller’s jay, common raven) to their cryptic nests (Hebert et al. 2006). Although there has been concern for listed species like northern spotted owl and marbled murrelet, other avian species are also likely adversely affected by anthropogenic noise. Disturbance to or loss of northern spotted owl or other special-status wildlife species because of exposure to excessive project-generated sound could be a potentially significant impact.

### Summary

Although it was determined that no additional impact would occur on existing provisionally licensed sites, because potential expansion of existing provisionally licensed and future licensed commercial cannabis cultivation sites could result in the disturbance to or loss of

northern spotted owl or other special-status wildlife species, the impact related to effects of generator noise on special-status species would be **potentially significant**.

### Mitigation Measures

#### Mitigation Measure 3.5-2p: Implement Generator Noise Reduction Measures

As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 4 and 10), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses who wish to use a generator to comply with the following performance standards for generator noise levels to protect wildlife (USFWS 2020):

- ▶ The operation of generators at full operational speed shall meet the noise level standards as set forth in the MCCR and the Mendocino County General Plan policies DE100, 101, and 103. Conformance with these standards shall be confirmed by an acoustical engineer. All generators shall be, at a minimum, equipped with the manufacturer’s specified muffler. Additional measures for noise attenuation may include additional muffler features and/or a structure to enclose the generator designed for sound suppression (MCCR section 10A.17.070(F)(1)). The following additional noise performance standards shall apply to generator use for sites within 0.25 mile of habitat determined to be suitable for northern spotted owl or marbled murrelet by a qualified biologist:
  - Project-generated sound must not exceed ambient nesting conditions by 20–25 dBA.
  - Project-generated sound, when added to existing ambient conditions, must not exceed 90 A-weighted decibels (dBA).
- ▶ Time of day adjustment: Marbled murrelet and northern spotted owl are most active during dawn and dusk. Within approximately 2 hours of sunrise and sunset, ambient sound levels are lower than during the middle of the day (by approximately 5–10 decibels). This shall be accounted for when determining impacts of project-generated sound.

#### Significance after Mitigation

Implementation of Mitigation Measure 3.5-2p would reduce significant impacts to a **less-than-significant** level because project-generated sound would not exceed levels known to result in disturbance to northern spotted owl, marbled murrelet, and other special-status wildlife species. Disturbance to these species would be avoided.

#### Impact 3.5-3: Result in Disturbance to or Loss of Special-Status Fisheries

Surface water diversions for licensed commercial cannabis cultivation sites that may occur under the project could adversely affect several special-status fish species. Special-status fish species are protected under the ESA, CESA, and other regulations. The alteration of surface water conditions that support special-status fish species would be a **less-than-significant** impact.

Eleven special-status fish species are known to occur in the County: coho salmon (Central California Evolutionarily Significant Unit (ESU)), coho salmon (Southern Oregon/Northern California ESU), Gualala roach, hardhead, northern coastal roach, Pacific lamprey, Russian River tule perch, steelhead (Central California Coast Distinct Population Segment (DPS)), winter- and summer-run steelhead (Northern California DPS), and tidewater goby. Critical habitat for coho salmon (Central California ESU), steelhead (Central California Coast DPS),

winter- and summer-run steelhead (Northern California DPS), and tidewater goby is present in the County (Figure 3.5-7). As shown in Table 3.10-8 (see Section 3.10, “Hydrology and Water Quality”), commercial cannabis cultivation water demands would make up over 59 percent of the total water demands of the project, with a total estimated annual demand of 1,774 acre-feet per acre per site, which could result in surface water flow impacts if surface water diversions are used. See Section 3.10, “Hydrology and Water Quality,” for additional analysis.

All licensed commercial cannabis cultivation operations are required to comply with the numeric and narrative instream flow requirements for all diversions of surface water and groundwater as part of compliance with Attachment A (Section 3 – Numeric and Narrative Instream Flow Requirements) of SWRCB Order WQ 2023-0102-DWQ. These requirements include design requirements for fish screens, diversion structures, off-stream storage reservoirs, and storage bladders.

Diversion provisions of the standards are based on three types of requirements to ensure sufficient instream flows:

- ▶ dry season forbearance period and limitations on the wet season diversions,
- ▶ narrative instream flow requirements, and
- ▶ numeric instream flow requirements during the wet season.

Instream flow requirements during the wet season were established by SWRCB in consultation with CDFW for the protection of aquatic species life history needs, including those of endangered anadromous salmonids. Numeric instream flow requirements (minimum instream flows required to protect aquatic species) are established for each region in the state in Attachment A of SWRCB Order WQ 2023-0102-DWQ. Aquatic base flows have also been established to address instream flow impacts from groundwater diversions. The aquatic base flow is the set of chemical, physical, and biological conditions that represent limiting conditions for aquatic life in stream environments.

Surface water and groundwater diversions for commercial cannabis cultivation operations are limited in the following manner:

- ▶ Surface water diversions shall be prohibited from April 1 through October 31 each year (forbearance period).
- ▶ Surface water diversions may occur from November 1 through March 31 each year subject to the following requirements:
  - Surface water diversions shall not occur until the real-time daily average flow is greater than the minimum monthly instream flow requirement at a compliance gage for 7 consecutive days or after December 15 when flows are greater than the numeric flow requirement.
  - Surface water diversions must bypass a minimum of 50 percent of the streamflow past the point of diversion as estimated based on the commercial cannabis cultivator’s visual observation.
- ▶ SWRCB shall monitor instream flows during the dry season and evaluate the number or location of groundwater diversions to determine whether a groundwater forbearance period or other measures should be imposed. SWRCB shall notify commercial cannabis cultivators if a groundwater forbearance period or other measures may be imposed to address the low-flow condition.

- ▶ SWRCB flow standards and diversion requirements were developed to protect fish spawning, migration, and rearing for endangered anadromous salmonids, as well as flows needed to maintain natural flow variability in each watershed. The diversion requirements would ensure that the individual and cumulative effects of water diversions and discharges associated with commercial cannabis cultivation do not affect instream flows necessary for fish spawning, migration, and rearing for endangered anadromous salmonids, as well as flows needed to maintain natural flow variability (SWRCB 2017a). The policy was scientifically peer-reviewed by four experts. The peer review determined that water quality, instream flow, and diversion requirements of the policy were based on sound scientific knowledge, methods, and data (SWRCB 2017b).

Per Attachment A of SWRCB Order WQ 2023-0102-DWQ, for any water diversion or waste discharge related to commercial cannabis cultivation, Term 1 through 14 (Requirements Related to Water Diversions and Waste Discharge for Cannabis Cultivation) will apply which include best management practices including erosion control, commercial cannabis cultivation-related waste disposal, refuse and human waste disposal, and stream crossing installation and maintenance. It is acknowledged that SWRCB has identified the following Mendocino County watersheds as Cannabis Priority Watersheds because of water quality, low flow, and other related issues potentially associated with the operation of unlicensed commercial cannabis cultivation sites in these watersheds:

- ▶ headwaters of the Russian River,
- ▶ East Fork Russian River,
- ▶ Navarro River, and
- ▶ Dry Creek.

Additionally, commercial cannabis operations are required to comply with Term 3 (General Requirements and Prohibitions), which requires application for a LSA Agreement, and requirements therein, or consultation with CDFW for any activity that may substantially divert, obstruct, alter, or deposit into any river, stream, or lake. Furthermore, commercial cannabis operations are required to comply with Term 63 of Attachment A (Requirements Related to Water Diversions and Waste Discharge for Cannabis Cultivation) of SWRCB Order WQ 2023-0102-DWQ, which requires no disturbance of aquatic or riparian habitat, such as pools, spawning sites, large wood, or shading vegetation unless authorized under proper permits (e.g., CDFW LSA Agreement) as well as Term 64 of Attachment A (Requirements Related to Water Diversions and Waste Discharge for Cannabis Cultivation) which requires maintaining riparian habitat.

Pursuant to Business and Professions Code section 26060(a)(2), CCR, title 4, section 15011(a)(11), in issuing commercial cannabis cultivation licenses, DCC shall consider issues, including, but not limited to, water use and environmental impacts. If SWRCB or CDFW finds, based on substantial evidence, that commercial cannabis cultivation is causing significant adverse impacts on the environment in a watershed or other geographic area, DCC shall not issue new licenses or increase the total number of plant identifiers within that watershed area.

The reader is referred to Section 3.10, "Hydrology and Water Quality," for a further discussion of potential alteration in surface water flows and water quality from cannabis operations.

#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites, including associated processing and/or distribution transport-only operations, transitioning to

annual licensure would not result in additional impacts to surface water flow conditions as operations are not anticipated to be altered through the annual licensing process. Commercial cannabis cultivation activities associated with these sites would continue to be subject to Numeric instream flow requirements of SWRCB Order WQ 2023-0102-DWQ. Commercial cannabis cultivation operations are also subject to MCCR section 10A.17.080(C)(1)(b), which requires a water availability analysis for operations that use groundwater not influenced by surface water. Thus, when sites retain the extent of their existing licensed commercial cannabis cultivation, no impact would be associated with existing provisionally licensed commercial cannabis cultivation operations.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation operations features would continue to be subject to Term 1 through 14 of Attachment A (Section 2, Requirements Related to Water Diversions and Waste Discharge for Cannabis Cultivation) of SWRCB Order WQ 2023-0102-DWQ, which include requirements for best management practices including erosion control, commercial cannabis cultivation-related waste disposal, refuse and human waste disposal, and stream crossing installation and maintenance. Additionally, commercial cannabis operations are required to comply with Term 3 (Section 1, General Requirements and Prohibitions), which requires application for a LSA Agreement, and requirements therein, or consultation with CDFW, Term 63 of Attachment A (Section 2, Requirements Related to Water Diversions and Waste Discharge for Cannabis Cultivation) of SWRCB Order WQ 2023-0102-DWQ, which requires no disturbance of aquatic or riparian habitat, such as pools, spawning sites, large wood, or shading vegetation unless authorized under proper permits (e.g., CDFW LSA Agreement), and Term 64 of Attachment A (Requirements Related to Water Diversions and Waste Discharge for Cannabis Cultivation) which requires maintaining riparian habitat. Therefore, this impact would be less than significant.

#### Future Licensed Sites

New commercial cannabis cultivation and associated processing and/or distribution transport-only operations would also be subject to SWRCB numeric and narrative instream flow requirements. However, if the site is less than 2,000 square feet, the operation may be conditionally exempt from enrolling under the order and instead be required to obtain coverage under the waiver of WDRs. Furthermore, commercial cannabis cultivation operations would be subject to MCCR section 10A.17.080(C)(1)(a), which requires a watershed assessment for operations that use surface water (or groundwater influenced by surface water). The applicant must show that there is adequate water to serve the proposed commercial cannabis cultivation site and existing uses within the watershed. Commercial cannabis cultivation operations would also be subject to MCCR section 10A.17.080(C)(1)(b), which requires a water availability analysis for operations that use groundwater not influenced by surface water. The applicant must show the adequacy of the proposed water supply, direct effects on water users, and possible cumulative adverse impacts. Though MCCR section 10A.17.080(C)(1) does not apply to land zoned for agriculture, projects will be required to obtain coverage under the waiver of WDRs specific to agricultural lands. Lastly, commercial cannabis cultivation operations would be subject to CCR, title 4, section 15011(a)(11), which provides that applicants for annual licensure shall provide evidence that their proposed commercial cannabis cultivation sites is not located in whole or in part in a watershed or other geographic area that SWRCB or CDFW has determined to be significantly adversely impacted by cannabis cultivation pursuant to



section 26060(a)(2) of the Business and Professions Code. Thus, this impact would be less than significant.

### Summary

It was determined that no impact would occur on existing provisionally licensed sites. Potential expansion of existing provisionally licensed and future licensed commercial cannabis cultivation sites could result in impacts on biological resources but would be required to follow all local and state policies and ordinances, the impact related to disturbance to or loss of special-status fisheries would be **less than significant**.

### Mitigation Measures

No mitigation is required.

### Impact 3.5-4: Result in Disturbance to or Loss of Sensitive Natural Communities, Riparian Habitat, Old-Growth Habitat, or Other Sensitive Habitats

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Potential land use conversion and development that may occur from potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could adversely affect riparian habitat, old-growth habitat, and other sensitive natural communities if they are present on the site. Construction-related activities, including ground disturbance, old-growth habitat removal, removal of riparian vegetation, or disturbance of stream and river habitat, would be a **potentially significant** impact.

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Sixty-five sensitive natural communities are also potentially present in Mendocino County, of which 24 are known to occur, and 41 have potential to occur. Additionally, there are 15 legacy sensitive natural communities: fish stream habitat (north-central coast fall-run steelhead stream and north-central coast summer steelhead stream) and 13 terrestrial plant communities, including the old-growth forest community of upland Douglas fir. See “Sensitive Natural Communities and Other Sensitive Habitats” under Section 3.5.2, “Environmental Setting,” for more detail. Riparian habitat in the County can be found adjacent to aquatic habitat such as streams and rivers, including near the Eel River, Russian River, and Navarro River and their tributaries. Commercial cannabis operations are required to comply with Attachment A of SWRCB Order WQ 2023-0102-DWQ Term 37 (Section 1, General Requirements and Prohibitions), which requires setback areas from the edge of surface water of at least 50 feet of surface water, dependent upon the type of stream (e.g., ephemeral, perennial), and requires water quality control measures. Additionally, commercial cannabis operations are required to comply with Term 3 (Section 1, General Requirements and Prohibitions), which requires application for a LSA Agreement, and requirements therein, or consultation with CDFW for any activity that may substantially divert, obstruct, alter, or deposit into any river, stream, or lake. Furthermore, commercial cannabis operations are required to comply with Term 63 of Attachment A (Section 2, Requirements Related to Water Diversions and Waste Discharge for Cannabis Cultivation) of SWRCB Order WQ 2023-0102-DWQ, which requires no disturbance of aquatic or riparian habitat, such as pools, spawning sites, large wood, or shading vegetation unless authorized under proper permits (e.g., CDFW LSA Agreement) as well as Term 64 of Attachment A (Section 2, Requirements Related to Water Diversions and Waste Discharge for Cannabis Cultivation) which requires maintaining riparian habitat. Although, these setbacks may not always capture all riparian habitat present. Streams supporting riparian and wetland vegetation are regulated by CDFW under section 1600 et seq.

of the Fish and Game Code, which provides for the protection of fish, wildlife, and native plant resources.

Old-growth forest habitat occurs throughout the County (Figure 3.5-6). Old-growth and late-successional forests include features such as very large trees, large snags, complex canopy structure (i.e., understory, midstory, overstory), and coarse woody debris (e.g., large logs) on the forest floor—all features that provide unique habitat for many wildlife species. Many special-status wildlife species, including fisher, northern spotted owl, marbled murrelet, and Sonoma tree vole, use old-growth forest habitat for nesting and movement corridors.

Approximately 27,377 acres of blue oak, blue oak-foothill pine, coastal oak, and valley oak woodland occur in the County. Oak woodlands are considered under the state Oak Woodlands Conservation Act, which requires the County to determine whether proposed development would result in conversion of oak woodlands that would have a significant adverse effect on the environment. The project would need to comply with Term 10 of Attachment A (General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ, which requires that sensitive habitats be avoided and buffers be provided in consultation with CDFW and CAL FIRE. Additionally, Term 10 of Attachment A (General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ requires site evaluations by a qualified biologist to determine whether sensitive habitats occur on the site before development or site expansion.

#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites, including associated processing and/or distribution transport-only operations, transitioning to annual licensure would not result in additional impacts to sensitive habitats or communities as operations are not anticipated to be altered through the annual licensing process. Commercial cannabis cultivation activities associated with these sites would continue to be subject to Term 10 of Attachment A (General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ, which requires a site evaluation for any future site expansion activities. Thus, when sites retain the extent of their existing licensed commercial cannabis cultivation, no impact would be associated with existing provisionally licensed commercial cannabis cultivation operations.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation operations features would continue to be subject to Term 10 of Attachment A (General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ, which requires a site evaluation for any future site expansion activities. Although, the potential expansion of existing provisionally licensed commercial cannabis cultivation sites and uses could still result in direct loss of sensitive natural communities, riparian habitat, old-growth habitat, and other sensitive habitats if they are present. Therefore, this impact would be potentially significant.

#### Future Licensed Sites

New commercial cannabis cultivation and associated processing and/or distribution transport-operations uses may include ground disturbance, vegetation removal, and grading, which could result in the direct loss of sensitive natural communities, riparian habitat, old-growth habitat, and other sensitive habitats if they are present. If relocation of a commercial cannabis cultivation site occurs, MCCR section 10A.17.080(B)(3)(c) did require restoration of these sites, but this requirement applied only to Phase One of commercial cannabis cultivation operation

applications in Mendocino County, which ended October 4, 2019. Additionally, although Term 37 in Attachment A (Section 1, General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ requires setback areas from the edge of surface water up to 150 feet of surface water, dependent upon the type of stream (e.g., ephemeral, perennial) these setbacks may not always capture all riparian habitat present. Similarly, although Term 63 and 64 of Attachment A (Section 2, Requirements Related to Water Diversions and Waste Discharge for Cannabis Cultivation) of SWRCB Order WQ 2023-0102-DWQ requires no disturbance of riparian habitat and retention of riparian vegetation in aquatic habitat, without mapping the vegetation onsite, some riparian vegetation may still be impacted. Additionally, impacts would remain on sensitive communities including sensitive natural communities, old-growth habitat, and oak woodlands. Lastly, though projects are required to comply with Term 3 of Attachment A (General Requirements and Prohibitions) which requires and LSA Agreement and requirements therein, or consultation with CDFW, this is only required activities that may substantially divert, obstruct, alter, or deposit into any river, stream, or lake. Therefore, project-related loss of sensitive habitats would be a potentially significant impact.

### Summary

Although it was determined that no impact would occur on existing provisionally licensed sites, because potential expansion of existing provisionally licensed and future licensed commercial cannabis cultivation sites could result in direct loss of sensitive natural communities, riparian habitat, old-growth habitat, and other sensitive habitats, the impact related to disturbance or loss of these vegetation communities would be **potentially significant**.

### Mitigation Measures

Mitigation Measure 3.5-4: Identify, Avoid, and Protect Sensitive Natural Communities, Riparian Habitat, and Wetland Vegetation or Provide Compensation

As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions –Term 10 and 37), the DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of sensitive natural communities, riparian habitat, old-growth habitat, and other sensitive habitats from proposed commercial cannabis cultivation sites:

- ▶ For new commercial cannabis cultivation uses that could disturb sensitive natural communities or riparian habitat, the application shall include a report prepared by a qualified biologist that summarizes the potential presence of any of these sensitive resources as identified during the biological survey conducted under Mitigation Measure 3.5-1a, including riparian habitat associated with aquatic features, old-growth forests, oak woodlands, special-status fish stream habitats, and sensitive natural communities. Further, the qualified biologist shall perform a protocol-level survey following the CDFW *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (current version dated March 20, 2018) of the site before the start of new development related to cannabis activities. Sensitive natural communities shall be identified using the best means possible, including keying them out using the most current edition of A Manual of California Vegetation (including updated natural communities data at <http://vegetation.cnps.org/>) or referring to relevant reports (e.g., reports found on the VegCAMP website).

- ▶ The report shall include the requirements that all sensitive areas identified above shall be flagged or fenced with brightly visible construction flagging and/or fencing under the direction of the qualified biologist before development activities begin and that grading, excavation, other ground-disturbing activities, and vegetation removal shall not occur in these areas during development activities. Foot traffic by construction personnel shall also be limited in these areas to prevent the introduction of invasive or weedy species. Periodic inspections during construction shall be conducted by the monitoring biologist to maintain the integrity of exclusion fencing/flagging throughout the period of construction involving ground disturbance.
- ▶ If the report documents that site development would affect the bed, bank, channel, or associated riparian habitat subject to CDFW jurisdiction under Fish and Game Code section 1602, a Streambed Alteration Notification shall be submitted to CDFW, pursuant to section 1600 et seq. of the Fish and Game Code. If proposed activities are determined to be subject to CDFW jurisdiction, the applicant shall abide by the conditions of any executed agreement before any ground disturbance.
- ▶ Old-growth habitat identified shall be avoided. Applications proposing to alter old-growth habitat shall be denied.
- ▶ MCCR section 10A.17.040(K) prohibits the removal of any commercial tree species, as defined by CCR, title 14, section 895.1, for the purpose of developing a commercial cannabis cultivation site, which includes removal of species that make up sensitive natural communities found in Mendocino County, including redwood and California bay, and the removal of any true oak species (*Quercus* spp.) or tan oak. Compliance with this requirement will be provided to DCC.
- ▶ In consultation with DCC and CDFW, applicants shall compensate for permanent loss of riparian habitat at a minimum of a 2:1 ratio through contributions to a CDFW-approved wetland mitigation bank or through the development and implementation of a Compensatory Stream and Riparian Mitigation and Monitoring Plan for creating or restoring in-kind habitat in the surrounding area. If mitigation credits are not available, stream and riparian habitat compensation shall include establishment of riparian vegetation on currently unvegetated bank portions of streams affected by the project and enhancement of riparian habitat through removal of nonnative species, where appropriate, and planting of additional native riparian plants to increase the cover, continuity, and width of the riparian corridor along streams in the site and surrounding areas. Construction activities and compensatory mitigation shall be conducted in accordance with the terms of a streambed alteration agreement, as required under section 1602 of the Fish and Game Code, as well as SWRCB Order WQ 2023-0102-DWQ.

The Compensatory Stream and Riparian Mitigation and Monitoring Plan shall identify:

- compensatory mitigation sites and criteria for selecting these mitigation sites;
- in-kind reference habitats for comparison with compensatory riparian habitats (using performance and success criteria) to document success;
- monitoring protocol, including schedule and annual report requirements (compensatory habitat shall be monitored for a minimum of 5 years from completion of mitigation, or human intervention (including recontouring and grading), or until the success criteria identified in the approved mitigation plan have been met, whichever is longer);

- ecological performance standards, based on the best available science and including specifications for native riparian plant densities, species composition, amount of dead woody vegetation gaps and bare ground, and survivorship; at a minimum, compensatory mitigation planting sites must achieve 80-percent survival of planted riparian trees and shrubs by the end of the 5-year maintenance and monitoring period, or dead and dying trees shall be replaced and monitoring continued until 80-percent survivorship is achieved;
- corrective measures if performance standards are not met;
- responsible parties for monitoring and preparing reports; and
- responsible parties for receiving and reviewing reports and for verifying success or prescribing implementation or corrective actions.

### Significance after Mitigation

Implementation of Mitigation Measure 3.5-1a would apply to this impact and would determine whether there is potential for the sensitive natural communities to be present. Implementing Mitigation Measure 3.5-4 would reduce significant impacts on sensitive natural communities, riparian habitat, and other sensitive habitats to a **less-than-significant** level because it would require applicants to identify and avoid sensitive resources or provide compensation for the loss of riparian habitat through mitigation banks and a Compensatory Stream and Riparian Mitigation and Monitoring Plan which can include enhancement of existing populations, creation and management of off-site populations, conservation easements, or other appropriate measures. These mitigation measures would be consistent with the Mendocino County General Plan Conservation Element recommendations.

### Impact 3.5-5: Result in Disturbance to or Loss of State or Federally Protected Wetlands

Potential land use conversion and development from potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could adversely affect state or federally protected wetlands, such as streams, rivers, lakes, and wetlands. This impact would be **potentially significant**.

Mendocino County contains approximately 39,442 acres of aquatic habitat, including major rivers (e.g., Eel, Russian, Navarro) and their tributaries, lakes, and associated wetland habitat. Many of these features likely qualify as state or federally protected wetlands or both. All commercial cannabis cultivation would be required to meet the requirements of Attachment A (Section 1, General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ under Term 1, 10, and 37 regarding setbacks and other protection measures for all water features and a required site visit for any future site expansion activities. Additionally, commercial cannabis operations are required to comply with Term 3 (General Requirements and Prohibitions), which requires application for a LSA Agreement, and requirements therein, or consultation with CDFW for any activity that may substantially divert, obstruct, alter, or deposit into any river, stream, or lake (in compliance with Fish and Game Code section 1602). MCCR section 10A.17.040 (G) requires all commercial cultivation of cannabis to not utilize water that has been or is illegally diverted from any spring, wetland, stream, creek, or river.

### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites, including associated processing and/or distribution transport-only operations, transitioning to

annual licensure would not result in additional impacts to protected wetlands as operations are not anticipated to be altered through the annual licensing process. Commercial cannabis cultivation activities associated with these sites would continue to be subject to Term 1, 10, 37 of Attachment A (Section 1, General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ, regarding setbacks and other protection measures for all water features and a required site evaluation for any future site expansion activities. Thus, when sites retain the extent of their existing licensed commercial cannabis cultivation, no impact would be associated with existing Provisionally licensed commercial cannabis cultivation operations.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation operations features would continue to be subject to Term 1, 10, and 37 of Attachment A (Section 1, General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ, which require setbacks for water features and other protection measures and a site visit for any future site expansion activities. Although, the potential expansion of existing provisionally licensed commercial cannabis cultivation sites and uses could still result in direct loss of state or federally protected wetlands if they are present. Therefore, this impact would be potentially significant.

#### Future Licensed Sites

New commercial cannabis cultivation and associated processing and/or distribution transport-only operations may include ground disturbance, vegetation removal, and grading, which could result in the direct loss of state or federally protected wetlands if they are present. Term 10 of Attachment A (Section 1, General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ requires site evaluations by a qualified biologist to determine whether sensitive communities occur on the site before development or site expansion. Because the SWRCB Order WQ 2023-0102-DWQ is intended to apply statewide, project specifics (e.g., bloom dates for potential wetland plants, locations of wetlands, quality of wetlands) were not considered. Additionally, Term 37 of Attachment A (Section 1, General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102 requires delineation of wetlands using the US Army Corps of Engineers Wetlands Delineation Manual and 100-foot riparian setbacks for any wetlands delineated. There may be instances in which wetlands identified will not receive sufficient protection from the 100-foot setback due to conditions such as topography or quality of wetland (e.g., habitat suitable for endangered species). Therefore, project-related loss of state or federally protected wetlands would be a potentially significant impact.

#### Summary

Although it was determined that no impact would occur on existing provisionally licensed sites, because potential expansion of existing provisionally licensed and future licensed commercial cannabis cultivation sites could result in direct loss of state or federally protected wetlands, the impact related to the disturbance to or loss of state or federally protected wetlands would be **potentially significant**.

#### Mitigation Measures

##### Mitigation Measure 3.5-5: Identify State or Federally Protected Wetlands and Avoid These Features

As part of compliance with SWRCB Order WQ 2023-0102-DWQ (Attachment A, Section 1, General Requirements and Prohibitions – Term 1, 10, and 37), the DCC shall require

provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to demonstrate compliance with the following measures for the protection of state and federally protected wetlands from proposed commercial cannabis cultivation sites:

- ▶ The application shall include a report prepared by a qualified biologist that includes a summary of sensitive resources, including wetlands, streams, and rivers, that were identified during the biological survey conducted under Mitigation Measure 3.5-1a. State and federally protected wetlands are of special concern to resource agencies and are afforded specific consideration, based on section 404 and section 401 of the CWA, the Porter-Cologne Water Quality Control Act, and other applicable regulations.
- ▶ If the report documents that state or federally protected wetlands are present, a delineation of these resources, including wetlands that would be affected by the project, shall be prepared by a qualified biologist. The delineation shall be submitted to DCC and the North Coast RWQCB.
- ▶ If, based on the verified delineation, it is determined that fill of any state or federally protected wetlands would result from implementation of the project, then the applicant shall modify the proposed project to avoid these resources by providing a buffer of at least 100 feet around these features. Depending on site features, a buffer of greater than 100 feet may be required. Buffer size shall be determined in consultation with CDFW and the North Coast RWQCB.
- ▶ Commercial cannabis cultivation activities would be subject to Term 3 of Attachment A (Section 1, General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ, which requires operations to comply with Fish and Game Code section 1602. When commercial cannabis cultivation activities would affect the bed, bank, channel, or associated riparian habitat subject to CDFW jurisdiction under Fish and Game Code section 1602, a Streambed Alteration Notification shall be submitted to CDFW, pursuant to section 1600 et seq. of the Fish and Game Code. If proposed activities are determined to be subject to CDFW jurisdiction, the applicant shall abide by the conditions of any executed agreement before any ground disturbance in areas under section 1600 et seq. jurisdiction.

#### Significance after Mitigation

Implementation of Mitigation Measure 3.5-1a would apply to this impact and would determine whether there is potential for state or federally protected wetlands to be present. Implementing Mitigation Measure 3.5-5 would reduce impacts on state or federally protected wetlands to a **less-than-significant** level because it would require the proposed projects to avoid these features.

### Impact 3.5-6: Interfere with Resident or Migratory Wildlife Corridors or Native Wildlife Nursery Sites

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Potential land use conversion and development from the potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could adversely affect resident or migratory wildlife corridors, as well as nursery sites, through habitat fragmentation; degradation of aquatic habitat (e.g., streams and rivers); disturbance from increased noise and human presence, as well as increased trash, which may attract predators and discourage wildlife use of surrounding natural habitat; and blockage of important wildlife migration paths. The impact on movement corridors and habitat connectivity for these species would be **potentially significant**.

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As shown in Figures 3.5-9 and 3.5-10, Mendocino County contains several large areas of relatively undisturbed wildlife habitat, including protected forest in the Mendocino National Forest, which contains Snow Mountain Wilderness and Sanhedrin Wilderness, as well as Yuki Wilderness and Yolla Bolly-Middle Eel Wilderness, which are both only partially located in Mendocino National Forest. Additionally, major river systems throughout the County also contain undisturbed wildlife habitat. Although the Eel River is dammed in two locations in Mendocino County, these areas of the river still provide value as movement corridors for fish and wildlife species, although many areas of the river are unassessed.

#### Existing Provisionally Licensed Sites

Continued operation of existing provisional licensed commercial cannabis cultivation sites, including associated processing and/or distribution transport-only operations, transitioning to annual licensure would not result in additional impacts to wildlife movement as operations are not anticipated to be altered through the annual licensing process. Commercial cannabis cultivation activities associated with these sites would continue to be subject to Terms 1, 10, 37 of Attachment A (General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ, which requires a site evaluation for any future site expansion activities. Additionally, commercial cannabis operations are required to comply with Term 3 (Section 1, General Requirements and Prohibitions), which requires application for a LSA Agreement, and requirements therein, or consultation with CDFW for any activity that may substantially divert, obstruct, alter, or deposit into any river, stream, or lake. Thus, when sites retain the extent of their existing licensed commercial cannabis cultivation, no impact would be associated with existing provisionally licensed commercial cannabis cultivation operations.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation operations features would continue to be subject to Term 1, 10, and 37 of Attachment A (Section 1, General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ, which require setbacks for water features and other protection measures and a site visit for any future site expansion activities. and Term 3 (Section 1, General Requirements and Prohibitions), which requires application for a LSA Agreement, and requirements therein, or consultation with CDFW for any activity that may substantially divert, obstruct, alter, or deposit into any river, stream, or lake. Although, the potential expansion of existing provisionally licensed commercial cannabis cultivation sites and uses could still result in degradation to streams and rivers (e.g.,



inadvertent fill) or improper surface water diversion, which could create isolated pools and decreased survival of young salmonids. Additionally, resident or migratory wildlife corridors could be affected through habitat fragmentation, degradation of aquatic habitat (e.g., streams and rivers), or blockage of important wildlife migration paths. Furthermore, fisher could be excluded from previously occupied habitat, thus limiting the full range of the species or limiting access to nesting dens. Therefore, this impact would be potentially significant.

### Future Licensed Sites

#### Aquatic Corridors

Aquatic wildlife movement corridors in the County include all major rivers and their tributaries. Several anadromous fish species, including steelhead and coho salmon, have runs in Mendocino County rivers and streams from spring to winter. Adverse effects on these aquatic wildlife corridors could include degradation to streams and rivers (e.g., inadvertent fill) or improper surface water diversion, which could create isolated pools and decreased survival of young salmonids.

SWRCB Order WQ 2023-0102-DWQ establishes water resource protection requirements for commercial cannabis cultivation sites, including associated processing and/or distribution transport-only operations, such as the use of best management practices intended to protect aquatic habitat and water quality. These requirements include a setback for commercial cannabis cultivation activities of at least 50 feet from any surface water sources. Additionally, Attachment A (Section 3, Numeric and Narrative Instream Flow Requirements) of SWRCB Order WQ 2023-0102-DWQ restricts surface water diversions to allow for optimal flows for special-status fish species (see Impact 3.5-3).

Any future proposed construction of surface water diversion infrastructure or stream crossing could adversely affect resident or migratory wildlife corridors through habitat fragmentation, degradation of aquatic habitat (e.g., streams and rivers), or blockage of important wildlife migration paths. Impacts on movement corridors and habitat connectivity for these species would be potentially significant.

#### Summary

Although it was determined that no impact would occur on existing provisionally licensed sites, because potential expansion of existing provisionally licensed and future licensed commercial cannabis cultivation sites could result in adverse effects to resident or migratory wildlife corridors through habitat fragmentation, degradation of aquatic habitat, or blockage of important wildlife migration paths, the impact related to aquatic wildlife corridors and nursery sites would be **potentially significant**.

#### Mitigation Measures

Mitigation Measure 3.5-6a: Implement Mitigation Measure 3.5-5: Identify State or Federally Protected Wetlands and Avoid These Features

#### Significance after Mitigation

Implementation of Mitigation Measure 3.5-6a would reduce impacts on aquatic corridors to a **less-than-significant** level because it would identify other waters and require approval from CDFW and the RWQCB of avoidance buffers and result in no net loss of functions and acreage of wetlands and other waters, including aquatic corridors, through avoidance of these features.

## Terrestrial Corridors

Although complete migration data are not available for the County, mule deer winter range, migration stopovers, and moderate use corridors are mapped in the northeastern portion of the County. These areas are mainly located on public lands managed by the US Forest Service and the US Bureau of Land Management (Figure 3.5-9), where new commercial cannabis operations would be prohibited under the project. Additionally, critical mule deer winter range habitat is mapped directly north of the Mendocino County border in Trinity County, and fawning and winter areas are mapped west of Mendocino County (Figure 3.5-9). It is possible that these critical habitat areas extend into Mendocino County, where data are not as available. Additionally, the range for resident mountain lions includes most of the County. Mountain lions occupy a variety of habitats but are most abundant in riparian habitats. Habitat use is typically associated with prey availability. Mule deer make up a large percentage of mountain lion diet. Mountain lion home ranges can be greater than 200 square miles, although home ranges typically range from 5 to 100 square miles (Allen et al. 2015).

Existing provisionally licensed and new commercial cannabis cultivation license site locations overlap with migratory deer winter ranges and thus also overlap with mountain lion home ranges. Conditions in the County include barriers to movement for these species, including roads and highways (e.g., US 101, SR 1, SR 20, SR 128, SR 253), fencing, and urban development in unincorporated communities like Boonville. Potential expansion of provisionally licensed and new commercial cannabis cultivation site activities under the project, including cultivation, associated processing, and distribution transport-only uses, would likely not significantly alter the habitat quality and connectivity within the range of these species, because most development involves fencing in the immediate vicinity of the cannabis activity, leaving adjacent areas free from barriers. Additionally, SWRCB Order WQ 2023-0102-DWQ prohibits commercial cannabis cultivation within at least 50 feet of any surface water. Deer migration areas, and thus mountain lion occurrences, are largely associated with waterways and riparian areas in the County. By requiring compliance with the SWRCB Order WQ 2023-0102-DWQ Term 37 of Attachment A (Section 1, General Requirements and Prohibitions) through establishment of stream setbacks, development under the project would have a less-than-significant impact on migratory corridors for mule deer and mountain lion. No further mitigation is required.

Terrestrial wildlife movement corridors in the County, or essential connectivity areas, include much of the relatively intact natural landscape blocks partially on US Forest Service–owned Mendocino National Forest land (Figure 3.5-9). Forest-associated species, such as fisher, require large, contiguous blocks of forest habitat with a high degree of canopy cover, large structural features (e.g., logs, rock piles, snags), and a dense shrub layer (Sauder and Rachlow 2014; Zielinski et al. 2001). Home ranges can occupy up to 36 square miles for fisher. Future cannabis operations under the project could result in tree and understory vegetation removal, forest floor clearing, and overall fragmentation of habitat suitable for fisher. If the character of previously occupied forest habitat changes, it is likely that fisher would no longer use the habitat. Commercial cannabis cultivation construction activities could exclude fisher from previously occupied habitat, thus limiting the full range of the species or limiting access to nesting dens. Because habitat suitable for this species includes old-growth habitat and large structural features like snags, the habitat, if lost, would not be replaced. This would be a potentially significant impact.

## Summary

Although it was determined that no impact would occur on existing provisionally licensed sites, and a less-than-significant impact on migratory corridors for mule deer and mountain lion

would occur on existing provisionally licensed commercial cannabis cultivation sites that expand and future sites, because potential expansion of existing provisionally licensed and future licensed commercial cannabis cultivation sites could result in the exclusion of fisher from previously occupied habitat, the impact related to terrestrial wildlife corridors and nursery sites for fisher would be **potentially significant**.

### Mitigation Measures

Mitigation Measure 3.5-6b: Implement Mitigation Measure 3.5-2k: Conduct Preconstruction Fisher Survey and Preserve Active Den Sites and Associated Habitats and 3.5.4: Identify, Avoid, and Protect Sensitive Natural Communities, Riparian Habitat, and Wetland Vegetation or Provide Compensation

#### Significance after Mitigation

Implementation of Mitigation Measure 3.5-6b would reduce impacts on terrestrial wildlife movement corridors to a **less-than-significant** level because it would prohibit removal of old-growth habitat and would retain features important for habitat connectivity for the fisher.

#### Impact 3.5-7: Conflict with Any Local Policies or Ordinances Protecting Biological Resources

Several policies in the Mendocino County General Plan, Ukiah Valley Area Plan, Brooktrails Township Specific Plan, and Mendocino County Code protect biological resources. Mitigation measures identified Impacts 3.5-1, 3.5-2, 3.5-3, 3.5-4, 3.5-5, and 3.5-6 would be consistent and would assist in implementing Mendocino County policies and requirements that protect biological resources. This impact would be **less than significant**.

#### Existing Provisionally Licensed Sites

Existing licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations have been and are subject to the Mendocino County General Plan, Ukiah Valley Area Plan, Brooktrails Township Specific Plan, and Mendocino County Cannabis Regulation, all of which include policies protecting biological resources, such as rivers, streams, creeks, wetlands, riparian habitat, special-status plants, special-status wildlife, sensitive habitats, and migration corridors. Additionally, existing provisionally licensed commercial cannabis cultivation sites are part of the baseline condition. Therefore, when sites retain the extent of their existing licensed commercial cannabis cultivation, there is no impact associated with existing provisionally licensed sites.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation operations features would continue to be subject to the Mendocino County General Plan, Ukiah Valley Area Plan, Brooktrails Township Specific Plan, Mendocino County Cannabis Regulation, and Term 4 and 10 of Attachment A (General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ, which include policies protecting biological resources, such as rivers, streams, creeks, wetlands, riparian habitat, special-status plants, special-status wildlife, sensitive habitats, and migration corridors as well as a site visit for expanded activities. Therefore, this impact would be less than significant.

### Future Licensed Sites

The Mendocino County General Plan, Ukiah Valley Area Plan, Brooktrails Township Specific Plan, and Mendocino County Code include policies protecting biological resources, such as rivers, streams, creeks, wetlands, riparian habitat, special-status plants, special-status wildlife, sensitive habitats, and migration corridors. As described in the discussions of Impacts 3.5-1, 3.5-2, 3.5-3, 3.5-4, 3.5-5, and 3.5-6, although new commercial cannabis cultivation and associated processing and/or distribution transport-only uses under the project would affect these resources, mitigation measures would be implemented to reduce impacts to less than significant. These mitigation measures would be included as performance standards under the project. Further, all applicants are required to comply with SWRCB Order WQ 2023-0102-DWQ, which includes additional protective measures for biological resources. No conflict with the policies protecting biological resources would occur; therefore, this impact would be less than significant.

### Summary

It was determined that no impact would occur on existing provisionally licensed sites. Because potential expansion of existing provisionally licensed and future licensed commercial cannabis cultivation sites could result in impacts on biological resources but would be required to follow all local policies and ordinances, the impact related to local policies and ordinances would be **less than significant**.

### Mitigation Measures

No mitigation is required.

## 3.6 ENERGY

This section was prepared pursuant to State CEQA Guidelines, section 15126 and Appendix F of the State CEQA Guidelines, which require that EIRs include a discussion of the potential energy impacts of projects. The analysis considers whether implementing the project would result in inefficient, wasteful, and unnecessary consumption of energy.

Comments on the NOP included concerns regarding electrical and gas use and off-grid energy uses. All comments received in response to the NOP are presented in Appendix A of this EIR.

### 3.6.1 Regulatory Setting

Energy conservation is embodied in many federal, state, and local statutes and policies. At the federal level, energy standards apply to numerous products (e.g., the US Environmental Protection Agency's EnergyStar™ program) and transportation (e.g., fuel efficiency standards). At the state level, Title 24 of the CCR sets forth energy standards for buildings. Further, the state provides rebates/tax credits for the installation of renewable energy systems and offers the Flex Your Power program. Both the credits and the program promote energy conservation in multiple areas. At the local level, individual cities and counties establish policies in their general plans and climate action plans related to the energy efficiency of new development, land use planning, and the use of renewable energy sources.

## FEDERAL

### Energy Policy and Conservation Act

The Energy Policy and Conservation Act of 1975 established nationwide fuel economy standards to conserve oil. Pursuant to this act, the National Highway Traffic and Safety Administration, part of the US Department of Transportation (DOT), is responsible for revising fuel economy standards and establishing new vehicle economy standards.

The Corporate Average Fuel Economy (CAFE) program was established to determine vehicle manufacturers' compliance with the government's fuel economy standards. Compliance with the CAFE standards is determined based on each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the country. The US Environmental Protection Agency calculates a CAFE value for each manufacturer based on the city and highway fuel economy test results and vehicle sales. Based on information generated under the CAFE program, DOT is authorized to assess penalties for noncompliance.

### Energy Policy Act of 1992 and 2005

The Energy Policy Act (EPAct) of 1992 was passed to reduce the country's dependence on foreign petroleum and improve air quality. EPAct includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas<sup>1</sup>. EPAct requires certain federal, state, and local government and private fleets to purchase a percentage of light-duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are also included in EPAct. Federal tax deductions are allowed for businesses and individuals to cover the incremental cost of AFVs. States are also required by

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<sup>1</sup> The term "centrally fueled" means that a vehicle is fueled at least 75 percent of the time at a location that is owned, operated, or controlled by the fleet or covered person or is under contract with the fleet or covered person for refueling purposes.

the act to consider a variety of incentive programs to help promote AFVs. The EPA Act of 2005 provides renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

## STATE

### Warren-Alquist Act

The 1975 Warren-Alquist Act (Public Resources Code (PRC) section 25000 et seq.), established the California Energy Resources Conservation and Development Commission, now known as the California Energy Commission (CEC). The act established state policy to reduce wasteful, uneconomical, and unnecessary uses of energy by employing a range of measures. The California Public Utilities Commission regulates privately owned utilities in the energy, rail, telecommunications, and water fields.

### State of California Energy Action Plan

CEC is responsible for preparing the state energy plan, which identifies emerging trends related to energy supply, demand, and conservation; public health and safety; and the maintenance of a healthy economy. The current plan is the 2003 California Energy Action Plan (2008 update). The plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies several strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission vehicles and addressing their infrastructure needs, as well as the encouragement of urban design that reduces vehicle miles traveled (VMT) and accommodates pedestrian and bicycle access.

### Assembly Bill 2076: Reducing Dependence on Petroleum

Pursuant to Assembly Bill (AB) 2076 (Chapter 936, Statutes of 2000), CEC and the California Air Resources Board (CARB) prepared and adopted a joint agency report in 2003, Reducing California's Petroleum Dependence. Included in this report are recommendations to increase the use of alternative fuels to 20 percent of on-road transportation fuel use by 2020 and 30 percent by 2030, significantly increase the efficiency of motor vehicles, and reduce per capita VMT (CEC and CARB 2003). A performance-based goal of AB 2076 was to reduce petroleum demand to 15 percent below 2003 demand by 2030.

### Integrated Energy Policy Report

Senate Bill (SB) 1389 (Chapter 568, Statutes of 2002) required CEC to "conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices. The Energy Commission shall use these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the state's economy, and protect public health and safety" (PRC section 25301(a)). This work culminated in the Integrated Energy Policy Report (IEPR).

CEC adopts an IEPR every 2 years and an update every other year. The 2021 IEPR is the most recent IEPR. The 2021 IEPR provides a summary of priority energy issues currently facing the state, outlining strategies and recommendations to further the state's goal of ensuring reliable, affordable, and environmentally responsible energy sources. The report contains an assessment of major energy trends and issues in California's electricity, natural

gas, and transportation fuel sectors. The report provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety. Topics covered in the 2021 IEPR include building decarbonization, coordination between state energy agencies, decarbonizing the state's natural gas system, increasing transportation efficiencies, and improving energy reliability. The IEPR also presents an assessment of the California Energy Demand Forecast (CEC 2022a). The 2023 IEPR is in process.

### Renewables Portfolio Standard

The state passed legislation referred to as the Renewables Portfolio Standard (RPS), which requires increasing the use of renewable energy to produce electricity for consumers. California utilities are required to generate 33 percent of their electricity from renewables by 2020 (SB X1-2, Chapter 1, Statutes of 2011), 52 percent by 2027 (SB 100, Chapter 312, Statutes of 2018), 60 percent by 2030 (also SB 100, Chapter 312, Statutes of 2018), and 100 percent by 2045 (also SB 100, Chapter 312, Statutes of 2018). On September 16, 2022, SB 1020 (Chapter 361, Statutes of 2022) was signed into law. This bill supersedes the goals of SB 100 by requiring that eligible renewable energy resources and zero-carbon resources supply 90 percent of all retail sales of electricity to California end-use customers by December 31, 2035; 95 percent by December 31, 2040; and 100 percent by December 31, 2045, and supply 100 percent of electricity procured to serve all state agencies by December 31, 2035.

### Senate Bill 350: Clean Energy and Pollution Reduction Act of 2015

The Clean Energy and Pollution Reduction Act of 2015 (SB 350, Chapter 547, Statutes of 2015)) requires that the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources be increased to 50 percent by December 31, 2030. It also establishes energy efficiency targets that achieve statewide, cumulative doubling of the energy efficiency savings in electricity and natural gas end uses by the end of 2030.

### Assembly Bill 1007: State Alternative Fuels Plan

AB 1007 (Chapter 371, Statutes of 2005) required CEC to prepare a state plan to increase the use of alternative fuels in California. CEC prepared the State Alternative Fuels Plan in partnership with CARB and in consultation with other state, federal, and local agencies. The plan presents strategies and actions California must take to increase the use of alternative nonpetroleum fuels in a manner that minimizes the costs to California and maximizes the economic benefits of in-state production. The plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuel use, reduce greenhouse gas (GHG) emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

### California Building Energy Efficiency Standards (Title 24, Part 6 and Part 11)

The energy consumption of new residential and nonresidential buildings in California is regulated by the state's Title 24, Part 6, Building Energy Efficiency Standards (California Energy Code). CEC updates the California Energy Code every 3 years with more stringent design requirements for reduced energy consumption, which results in the generation of fewer GHG emissions. The current California Energy Code will require builders to use more energy-efficient building technologies for compliance with increased restrictions on allowable energy use. The core focus of the building standards has been efficiency, but the 2019 Energy Code ventured into on-site generation by requiring solar photovoltaic (PV) systems on new homes, providing significant GHG savings. The 2022 California Energy Code, the most recent version,

advances the on-site energy generation progress started in the 2019 California Energy Code by encouraging electric heat pump technology and use, establishing electric-ready requirements when natural gas is installed, expanding solar PV system and battery storage standards, and strengthening ventilation standards to improve indoor air quality. CEC estimates that the 2022 California Energy Code will save consumers \$1.5 billion and reduce GHG emissions by 10 million metric tons of carbon dioxide-equivalent emissions over the next 30 years (CEC 2022b).

The California Green Building Standards Code, known as CALGreen, was added to Title 24 as Part 11, first in 2009 as a voluntary code. It became mandatory effective January 1, 2011 (as part of the 2010 California Building Standards Code). The current version is the 2022 CALGreen Code, which took effect on January 1, 2023. As compared to the 2019 CALGreen Code, the 2022 CALGreen Code strengthened sections pertaining to electric vehicle and bicycle parking, water efficiency and conservation, and material conservation and resource efficiency, among other sections of the CALGreen Code. The CALGreen Code sets design requirements equivalent to or more stringent than those of the California Energy Code for energy efficiency, water efficiency, waste diversion, and indoor air quality. These codes are adopted by local agencies that enforce building codes and used as guidelines by state agencies for meeting the requirements of Executive Order B-18-12.

#### AB 1279 and 2022: Scoping Plan for Achieving Carbon Neutrality

On September 16, 2022, the state legislature passed AB 1279 (Chapter 337, Statutes of 2022), which codified the stringent emission targets for the state of achieving carbon neutrality and an 85-percent reduction in 1990 emissions level by 2045. CARB released the Final 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) on November 16, 2022, as also directed by AB 1279 (CARB 2022). The 2022 Scoping Plan traces the pathway for the state to achieve its carbon neutrality goal and an 85-percent reduction in 1990 emissions goal by 2045. CARB adopted the 2022 Scoping Plan on December 16, 2022.

#### California Energy Efficiency Action Plan

The 2019 California Energy Efficiency Action Plan has three primary goals for the state: double energy efficiency savings by 2030 relative to a 2015 base year (per SB 350, Chapter 547, Statutes of 2015), expand energy efficiency in low-income and disadvantaged communities, and reduce GHG emissions from buildings. This plan provides guiding principles and recommendations related to how the state would achieve those goals. These recommendations include:

- ▶ Identifying funding sources that support energy efficiency programs,
- ▶ Identifying opportunities to improve energy efficiency through data analysis,
- ▶ Using program designs to encourage increased energy efficiency on the consumer end,
- ▶ Improving energy efficiency through workforce education and training, and
- ▶ Supporting rulemaking and programs that incorporate energy demand flexibility and building decarbonization.

#### Department of Cannabis Control

CCR, title 4, division 19 includes the following requirements regarding energy use for commercial cannabis uses.



### Section 16305: Renewable Energy Requirements

- (a) Beginning January 1, 2023, all holders of indoor, tier 2 mixed-light license types of any size, and all holders of nursery licenses using indoor or tier 2 mixed-light techniques shall ensure that electrical power used for commercial cannabis activity meets the average electricity greenhouse gas emissions intensity required by their local utility provider pursuant to the California Renewables Portfolio Standard Program in division 1, part 1, chapter 2.3, article 16 (commencing with section 399.11) of the Public Utilities Code.
- (b) If a licensed cultivator's average weighted greenhouse gas emission intensity, as calculated and reported upon license renewal pursuant to section 15020, is greater than the local utility provider's greenhouse gas emission intensity, the licensee shall obtain carbon offsets to cover the excess in carbon emissions from the previous annual licensed period. The carbon offsets shall be purchased from one or more of the following recognized voluntary carbon registries:
- (1) American Carbon Registry;
  - (2) Climate Action Reserve; or
  - (3) Verified Carbon Standard.

## LOCAL

### Mendocino County General Plan

The following energy-related policies of the Mendocino County General Plan (General Plan), which was adopted in 2009 and has received updates to various sections of the General Plan as recently as 2021, would apply to the project:

- ▶ **Policy DE-68:** Require that new applications for discretionary projects state their energy, water, and waste stream requirements at the time of application. As part of the development application review, distribute this information to the service providers, and compare the capacity of existing and planned systems with the demand created by the proposed project.
- ▶ **Policy DE-78:** Site planning and design shall adhere to resource protection standards to integrate and complement the natural ecology and environmental setting. The emphasis shall be on creating livable communities, function of scale, and land use pattern and intensity.
  - **Action Item DE-78.2:** Review and revise the County's Zoning Ordinance to incorporate standards and planning incentives for development projects that adhere to the US Green Building Council's LEED (or similar) standards or Build It Green's GreenPoint rated standard (or similar standard) for commercial and residential development.
  - **Action Item DE-78.3:** Work with the incorporated cities to develop coordinated, green building policies and programs to encourage development that complies with LEED and GreenPoint or similar programs.
- ▶ **Policy DE-84:** Incorporate green building principles and materials into site designs and facility planning, construction, and operations.
  - **Action Item DE-84.1:** Revise County codes to incorporate green building principles and raise energy efficiency standards.

- **Action Item DE-84.2:** Streamline permitting for projects that meet LEED or similar environmental standards.

Mendocino County Code of Ordinances - Mendocino Cannabis Cultivation Regulation  
The Mendocino Cannabis Cultivation Regulation (MCCR) includes the following requirements regarding energy:

Section 10A.17.040: General Limitations on Cultivation of Cannabis

(D) The indoor or mixed-light cultivation of cannabis shall rely on the electrical grid or some form of alternative energy source. The indoor or mixed-light cultivation cannabis shall not rely on a generator as a primary source of power.

Section 10A.17.070: Requirements for all Cannabis Cultivation Business Licenses (CCBLs)

(F) Generators. The indoor or mixed-light cultivation of cannabis shall not rely on a generator as a primary source of power.

(1) If no grid power source is available and there is not an alternative power source supporting both any required legal dwelling unit and the indoor or mixed-light CCBL operations, a generator may be used only under the following conditions: (1) the CCBL Holder shall install an alternative power source that will meet at least one-half ( $\frac{1}{2}$ ) of the combined power requirements by the expiration of four (4) years from the date of initial application for a CCBL pursuant to this Chapter and (2) it will be a condition of the renewal of a CCBL at the end of such four (4) year period that the cultivator commit, in writing, to expand their alternative power source to fully meet the combined needs of the cultivation operations and any required legal dwelling unit within two years. If a generator is being used pursuant to the conditions set forth in this paragraph, CCBL Holder shall have conducted an analysis of the noise levels produced by the generator at full operational speed, showing compliance with Mendocino County General Plan Policies DE100, 101 and 103. This analysis shall be performed by an accredited acoustical engineer or using some other mechanism or device as provided for on a list to be prepared and published by the Department. All generators shall be, at a minimum, equipped with the manufacturer's specified muffler; if compliance with Policies DE100, 101 and 103 requires additional measures, the generator shall be equipped with such measures, which may include a hospital-grade muffler and/or a structure to enclose the generator designed for sound suppression.

(2) If a generator is used to support any aspect of a cultivation operation with a CCBL, (excluding the conditions set forth in paragraph (1) above), it shall be as a secondary or back-up power source. The use of the generator shall only be allowed when the primary alternative power source is unable to provide its normal output and generate sufficient power to meet the needs of the cultivation operation and the legal dwelling unit. The Owner's Manual and/or Operation Manual (or operational fact sheet) providing the operational characteristics and maintenance schedule for the generator shall be on-site and available for review.

(3) Any electrical wiring associated with the generator shall be of sufficient capacity and installed in such a way as to provide for the minimum installation and safety standards for the electrical service provided by that generator.

## 3.6.2 Environmental Setting

### PHYSICAL SETTING

#### Energy Facilities and Services in the County

Most residents and businesses in Mendocino County, except those in Ukiah, receive electric service from Pacific Gas and Electric Company (PG&E). PG&E also provides natural gas in southeast Mendocino County, served by its pipeline along the US 101 corridor from the Sonoma County line to Willits. Throughout the County, several private businesses maintain large-volume propane gas containers to supply households and businesses. In addition to these sources, some homes and businesses in Mendocino County are self-powered through solar electricity or other means. Some of these generate enough electricity to return power to the utility system grid.

#### Energy Types and Sources

California relies on a regional power system composed of a diverse mix of natural gas, renewable resources, hydroelectric resources, and nuclear generation resources. One-third of the energy commodities consumed in California is natural gas. In 2022, the energy PG&E supplied to its customers was 38 percent from eligible renewable energy, 8 percent from large hydroelectric, 5 percent from natural gas, and 49 percent from nuclear energy.

#### Alternative Fuels

A variety of alternative fuels are used to reduce demand for petroleum-based fuel. The use of these fuels is encouraged through various statewide regulations and plans (e.g., Low Carbon Fuel Standard, AB 32 Scoping Plan). Conventional gasoline and diesel fuel may be replaced (depending on the capability of the vehicle) with many transportation fuels, including:

- ▶ Biodiesel,
- ▶ Electricity,
- ▶ Ethanol (E-10 and E-85),
- ▶ Hydrogen,
- ▶ Natural gas (methane in the form of compressed and liquefied natural gas),
- ▶ Propane,
- ▶ Renewable diesel fuel (including biomass-to-liquid),
- ▶ Synthetic fuels, and
- ▶ Gas-to-liquid and coal-to-liquid fuels.

California has a growing number of alternative fuel vehicles through the joint efforts of CEC, CARB, local air districts, the federal government, transit agencies, utility companies, and other public and private entities. As of December 2023, California contained more than 50,335 alternative fueling stations (AFDC 2023).

### ENERGY USE FOR TRANSPORTATION

In 2021, the transportation sector was the largest end-use sector of energy in the state, totaling 37.8 percent, followed by the industrial sector at 23.2 percent, the residential sector at 20.0

percent, and the commercial sector at 19.0 percent (EIA 2023). On-road vehicles use approximately 90 percent of the petroleum consumed in California. CEC reported retail sales of 31 million and 7 million gallons of gasoline and diesel fuel, respectively, in Mendocino County in 2022 (the most recent data available) (CEC 2023).

## ENERGY USE AND CLIMATE CHANGE

Scientists and climatologists have produced evidence that the burning of fossil fuels by vehicles, power plants, industrial facilities, residences, and commercial facilities has led to an increase in the earth's temperature. For an analysis of greenhouse gas production and the project's impacts on climate change, refer to Section 3.8, "Greenhouse Gas Emissions and Climate Change."

### 3.6.3 Impacts and Mitigation Measures

#### METHODOLOGY

As further discussed below, transitioning existing provisional commercial cannabis cultivation licensed sites and associated processing and distribution transport-only operations to annual licensure would not create new energy impacts unless the approval includes an expansion of use. New commercial cannabis cultivation licenses and associated processing or distribution transport-only uses would result in energy use during construction and operation. Energy consumption estimates were calculated using the California Emissions Estimator Model (CalEEMod) Version 2022.1.1.17 computer program. Because on-site processing or distribution transport-only uses are incorporated into the construction and operation of cultivation sites, no separate modeling was conducted. The modeling provided below is based on estimated energy use associated with typical outdoor, mixed-light, indoor, and commercial nursery cannabis cultivation uses. The reader is referred to Chapter 4, "Cumulative Impacts," for a cumulative energy use factoring the estimated extent of future commercial cannabis cultivation licensing described in "Approach to the Environmental Analysis" in the introduction to this chapter.

#### THRESHOLDS OF SIGNIFICANCE

An impact related to energy would be significant if the implementation of the project would:

- ▶ Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation; or
- ▶ Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

#### ISSUES NOT DISCUSSED FURTHER

All issues pertaining to energy are discussed in this analysis.

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Impact 3.6-1: Result in Wasteful, Inefficient, or Unnecessary Consumption of Energy during Project Construction or Operation

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Operation of expanded provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and distribution transport-only operations would result in the consumption of fuel (gasoline and diesel) and electricity. The energy needs for construction of expanded existing provisionally licensed and new commercial cannabis cultivation sites would be temporary and would not require additional capacity or increase peak or base period demand for electricity or other forms of energy. Notably, the project does not involve changing the existing regulations that allow for commercial cannabis use or cultivation; therefore, the projected energy use for each commercial cannabis cultivation type would be similar to that associated with existing provisionally licensed commercial cannabis sites currently operating in Mendocino County. Potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites would be more energy efficient than existing provisionally licensed cultivation sites because of increasing requirements related to energy efficiency in the building code and in on-road and off-road fuel efficiency. Thus, the impact would be **less than significant**.

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#### Existing Provisionally Licensed Sites

Existing provisional commercial cannabis cultivation license sites and associated processing and distribution transport-only operations are not anticipated to be altered when they transition to annual licensure. No additional or new energy use impacts would occur through the license transition process. Additionally, existing licensed sites would continue to be required to meet the standards established in CCR, title 4, section 16305 regarding energy sources that reduce greenhouse gas emissions and section 10A.17.040(D) and 10A.17.070(F) of the MCCR that limits the use of generators. Therefore, this impact would be less than significant for existing provisionally licensed sites.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation operations features would be required to meet the standards established in CCR, title 4, section 16305 regarding energy sources that reduce greenhouse gas emissions and section 10A.17.040(D) and 10A.17.070(F) of the MCCR that limits the use of generators. For these reasons, this impact would be less than significant.

#### Future Licensed Sites

CEQA requires an analysis of the potential for a project to result in “wasteful, inefficient, and unnecessary energy usage” (PRC section 21100(b)(3)). Appendix G of the State CEQA Guidelines requires the consideration of the energy implications of a project. Neither the law nor the State CEQA Guidelines establish criteria that define “wasteful, inefficient, or unnecessary” use. As described below, project design features that would increase energy efficiency and renewable energy consumption and decrease reliance on fossil fuel energy sources are generally assumed to comply with the State CEQA Guidelines.

For example, all new buildings constructed at future new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would

be required to meet the California Energy Code in effect at the time of construction. Although compliance with the California Energy Code would result in energy-efficient buildings, such compliance does not address all potential energy impacts during new licensed commercial cannabis site construction and operation. For example, energy would be required to transport people and materials to and from each site.

Energy would be required for the construction of new licensed commercial cannabis cultivation and associated processing and/or distribution transport-only uses. This temporary energy expenditure would be nonrecoverable. Most energy consumption would result from the use of construction equipment and vehicle trips associated with commutes by construction workers and haul trucks supplying materials. Operation of new licensed commercial cannabis cultivation sites would consume electricity and natural gas or propane for lighting, space heating, and water heating. Diesel fuel may be used for temporary generators and on-site auxiliary equipment, such as a utility vehicle. Energy would be used indirectly for such activities as water pumping and solid waste removal. Gasoline and diesel fuel would also be consumed by worker commute trips and haul trucks transporting materials and products.

Energy consumption associated with construction was estimated for each commercial cannabis cultivation type using the range of assumed future licensed commercial cannabis cultivation sites identified in Table 3.0-1 and based on anticipated daily construction activities and is provided in Table 3.6-1. Refer to Appendix C for construction assumptions and detailed modeling input parameters and results.

**Table 3.6-1 Construction Energy Consumption Associated with Construction of New Commercial Cannabis Cultivation Sites**

Cannabis Use Type	Diesel Fuel (gallons)	Gasoline (gallons)
Outdoor	3,398	450
Mixed-light	4,520	950
Indoor	3,111	450
Nursery	3,092	410

Notes: Gasoline gallons include on-road gallons from worker trips. Diesel fuel gallons include off-road equipment and on-road gallons from worker and vendor trips.

Source: Calculations by Ascent in 2024.

Energy consumption associated with the operation for each commercial cannabis cultivation type is presented in Table 3.6-2. Refer to Appendix C for operation assumptions and detailed modeling input parameters and results.

**Table 3.6-2 Operational Energy Consumption Associated with Operation of New Individual Commercial Cannabis Cultivation Sites**

Land Use/Energy Type	Energy Consumption	Units
Outdoor	495	MWh/year
Mixed-light	1,092	MWh/year
Indoor	670	MWh/year
Nursery	220	MWh/year

Note: MWh/year = megawatt-hours per year.

Source: Calculations by Ascent in 2024.

The energy needs for commercial cannabis cultivation site construction would be temporary and would not require additional capacity or increased peak or base period demands for electricity or other forms of energy. All buildings constructed would be built to the California Energy Code in effect at the time of construction, as well as CCR, title 4, section 16305 regarding energy sources that reduce greenhouse gas emissions and section 10A.17.040(D) and 10A.17.070(F) of the MCCR that limits the use of generators. Future cultivation and associated energy expenditure under the project would be similar to those currently in the County. For this reason, energy consumption associated with the construction and operation of commercial cannabis cultivation sites that would be licensed under the project would not be considered wasteful, inefficient, or unnecessary. This impact would be less than significant.

### Summary

Based on the analysis above, energy use associated with the project would not be considered wasteful, inefficient, or unnecessary. Thus, this impact would be **less than significant**.

### Mitigation Measures

No mitigation is required for this impact.

### Impact 3.6-2: Conflict with Plans for Renewable Energy and Energy Efficiency

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Mendocino County does not have an adopted climate action plan or a plan to promote renewable energy. Therefore, the state's 2008 Update Energy Action Plan and the 2019 California Energy Efficiency Action Plan serve as the appropriate plans for comparison. Operation of existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations energy use would be primarily electric, with such electricity provided by PG&E. As required by SB 100, PG&E's electricity would be generated by increasingly more renewable sources to meet the state's progressive renewable energy targets. Additionally, section 10A.17.040(D) of the MCCR would require that indoor and mixed-use cultivation sites use alternative forms of electricity and not rely on generators as their primary source of energy. Therefore, the construction and operation of licensed commercial cannabis cultivation sites would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. This impact would be **less than significant**.

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### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual licensure are not anticipated to be altered through the annual licensing process and thus would not change the energy use or conflict with associated state provisions. Additionally, existing provisionally licensed commercial cannabis cultivation sites would continue to be required to meet the standards established in CCR, title 4, section 16305 regarding energy sources that reduce greenhouse gas emissions and section 10A.17.040(D) and 10A.17.070(F) of the MCCR that limits the use of generators. Therefore, this impact would be less than significant for existing provisionally licensed commercial cannabis cultivation sites.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation operations features would be required to meet the standards established in CCR, title 4, section 16305 regarding energy

sources that reduce greenhouse gas emissions and section 10A.17.040(D) and 10A.17.070(F) of the MCCR that limits the use of generators. For these reasons, this impact would be less than significant.

#### Future Licensed Sites

As discussed for Impact 3.6-1, although future new licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations would result in the consumption of energy resources during construction and operation, future new licensed commercial cannabis cultivation sites would be required to comply with the most recent version of the California Energy Code. Moreover, section 10A.17.040(D) of the MCCR would require that indoor and mixed-use cultivation sites use alternative forms of electricity and not rely on generators as their primary source of energy. New commercial cannabis cultivation sites would also be required to comply with CCR, title 4, section 16305 regarding energy sources that reduce greenhouse gas emissions. Compliance with the building code and its increasing requirements related to energy efficiency and prohibition of generators as a regular energy source would align with the 2008 Update Energy Action Plan and the intent of the 2019 California Energy Efficiency Action Plan. Therefore, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. This impact would be less than significant.

#### Summary

As described above, compliance with the local and state requirements regarding energy use for licensed commercial cannabis cultivation sites would align with the 2008 Update Energy Action Plan and the intent of the 2019 California Energy Efficiency Action Plan. Therefore, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. This impact would be **less than significant**.

#### Mitigation Measures

No mitigation is required for this impact.



## 3.7 GEOLOGY, SOILS, AND MINERAL RESOURCES

This section describes current conditions relative to geology and soils, mineral resources, and paleontological resources at the project site; includes an analysis of environmental impacts that could result from project implementation; and presents recommendations for mitigation measures for any significant or potentially significant impacts.

Comment letters submitted in response to the notice of preparation (NOP) for this EIR identified issues pertaining to adverse effects associated with erosion, slope stability, soil loss, and soil contamination. Geologic and soil stability issues associated with implementation of the project are addressed below. The potential for soil contamination is discussed in Section 3.9, "Hazards and Hazardous Materials." All comments received in response to the NOP are presented in Appendix A of this EIR.

### 3.7.1 Regulatory Setting

#### FEDERAL

##### National Earthquake Hazards Reduction Act

In October 1977, the US Congress passed the Earthquake Hazards Reduction Act to reduce the risks to life and property from future earthquakes in the United States. To accomplish this, the act established the National Earthquake Hazards Reduction Program (NEHRP). The mission of the NEHRP includes improved understanding, characterization, and prediction of hazards and vulnerabilities; improved building codes and land use practices; risk reduction through post-earthquake investigations and education; development and improvement of design and construction techniques; improved mitigation capacity; and accelerated application of research results. The NEHRP designates the Federal Emergency Management Agency (FEMA) as the lead agency of the program and assigns several planning, coordinating, and reporting responsibilities.

##### Clean Water Act

The US Environmental Protection Agency (EPA) is the lead federal agency responsible for water quality management. The Clean Water Act (CWA) (33 U.S.C. section 1251 et seq.) is the primary federal law that governs and authorizes water quality control activities by EPA as well as the states. Various elements of the CWA address water quality. These are discussed below.

##### CWA Water Quality Criteria/Standards

Pursuant to federal law, EPA has published water quality regulations under Title 40 of the Code of Federal Regulations (CFR). Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. As defined by the act, water quality standards consist of designated beneficial uses of the water body in question and criteria that protect the designated uses. Section 304(a) of the CWA requires EPA to publish advisory water quality criteria that accurately reflect the latest scientific knowledge on the kind and extent of all effects on health and welfare that may be expected from the presence of pollutants in water. Where multiple uses exist, water quality standards must protect the most sensitive use. As described in the discussion of state regulations below, the State Water Resources Control Board (SWRCB) and its nine regional water quality control boards

(RWQCBs) have designated authority in California to identify beneficial uses and adopt applicable water quality objectives.

### National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program was established in the CWA to regulate municipal and industrial discharges to surface waters of the United States. NPDES permit regulations have been established for broad categories of discharges, including point source waste discharges and nonpoint source stormwater runoff. Each NPDES permit identifies limits on allowable concentrations and mass emissions of pollutants contained in the discharge. Sections 401 and 402 of the CWA contain general requirements regarding NPDES permits.

“Nonpoint source” pollution originates over a wide area rather than from a definable point. Nonpoint source pollution often enters receiving water in the form of surface runoff and is not conveyed by way of pipelines or discrete conveyances. Two types of nonpoint source discharges are controlled by the NPDES program: discharges caused by general construction activities and the general quality of stormwater in municipal stormwater systems. The goal of the NPDES nonpoint source regulations is to improve the quality of stormwater discharged to receiving waters to the maximum extent practicable. The RWQCBs in California are responsible for implementing the NPDES permit system.

## STATE

### Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 (Alquist-Priolo Act) (PRC sections 2621–2630) intends to reduce the risk to life and property from surface fault rupture during earthquakes by regulating construction in active fault corridors and by prohibiting the location of most types of structures intended for human occupancy across the traces of active faults. The act defines criteria for identifying active faults, giving legal support to terms such as “active” and “inactive,” and establishes a process for reviewing building proposals in earthquake fault zones. Under the Alquist-Priolo Act, faults are zoned, and construction along or across these zones is strictly regulated if they are “sufficiently active” and “well-defined.” A fault is considered sufficiently active if one or more of its segments or strands shows evidence of surface displacement during Holocene time (defined for purposes of the act as within the last 11,000 years). A fault is considered well defined if its trace can be clearly identified by a trained geologist at the ground surface or in the shallow subsurface, using standard professional techniques, criteria, and judgment. Before a project can be permitted in a designated Alquist-Priolo Earthquake Fault Zone, cities and counties must require a geologic investigation to demonstrate that proposed buildings would not be constructed across active faults. The law addresses only the hazard of surface fault rupture and is not directed toward other earthquake hazards.

### Seismic Hazards Mapping Act

The intention of the Seismic Hazards Mapping Act of 1990 (PRC sections 2690–2699.6) is to reduce damage resulting from earthquakes. Whereas the Alquist-Priolo Act addresses surface fault rupture, the Seismic Hazards Mapping Act addresses other earthquake-related hazards, including ground shaking, liquefaction, and seismically induced landslides. The act’s provisions are similar in concept to those of the Alquist-Priolo Act: The state is charged with identifying and mapping areas at risk of strong ground shaking, liquefaction, landslides, and other

corollary hazards, and cities and counties are required to regulate development in mapped seismic hazard zones. Under the Seismic Hazards Mapping Act, permit review is the primary mechanism for local regulation of development.

### California Building Code

The California Building Code (CBC) (CCR, title 24) is based on the International Building Code. The CBC was prepared for California conditions, with regulations that are more detailed or more stringent than those in the International Building Code. Specific minimum seismic safety and structural design requirements are set forth in Chapter 16 of the CBC. The CBC identifies seismic factors that must be considered in structural design. Chapter 18 of the CBC regulates the excavation of foundations and retaining walls, and Chapter 18A regulates construction on unstable soils, such as expansive soils and areas subject to liquefaction. Appendix J of the CBC regulates grading activities, including drainage and erosion control. The CBC contains a provision that provides for a preliminary soil report to be prepared to identify “the presence of critically expansive soils or other soil problems which, if not corrected, would lead to structural defects” (CBC section 1803.1.1.1).

### State Water Resources Control Board Regulations for Cannabis Cultivation

Permitting of waste discharges to surface waters from commercial cannabis cultivation is regulated under the State Water Resources Control Board (SWRCB) Cannabis Policy under Order WQ 2023-0102-DWQ, General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities. A summary of erosion and sediment control requirements is provided below. The reader is referred to Section 3.10, “Hydrology and Water Quality,” for additional details on this order.

The Cannabis General Order provides a statewide tiered approach for permitting discharges and threatened discharges of waste from commercial cannabis cultivation and associated activities. The two tiers are as follows:

- ▶ Tier 1 outdoor commercial cultivation activities disturb an area equal to or greater than 2,000 square feet and less than 1 acre (43,560 square feet).
- ▶ Tier 2 outdoor commercial cultivation activities disturb an area equal to or greater than 1 acre.

For the purposes of this regulation, land disturbances are areas where natural conditions have been modified in a way that may result in an increase in turbidity in water discharged from the site. Land disturbance includes all activities associated with developing or modifying land for commercial cannabis cultivation–related activities or access. Land disturbance activities include construction of roads, buildings, and water storage areas, as well as excavation, grading, and site clearing.

Tier 1 and Tier 2 enrollees must characterize the risk designation based on the slope of disturbed areas and the proximity to a water body. Enrollees must comply with the riparian setback and slope limits associated with the following low, moderate, and high risk classifications:

- ▶ **Low Risk:** A commercial cannabis cultivation site is classified as low risk if no part of the disturbed area is located on a slope of 30 percent or greater. Commercial cannabis cultivators associated with low-risk sites shall register as low risk and submit a site management plan.

- ▶ **Moderate Risk:** A commercial cannabis cultivation site is classified as moderate risk if any part of the disturbed area is located on a slope greater than 30 percent and less than 50 percent. Commercial cannabis cultivators associated with moderate-risk sites shall register as moderate risk and submit a site erosion and sediment control plan.
- ▶ **High Risk:** A commercial cannabis cultivation site is classified as high risk if any part of the disturbed area exists within the riparian setback limits. Commercial cannabis cultivators associated with high-risk sites shall register as high risk, submit a disturbed area stabilization plan, and address the compliance issue as described below. Because such commercial cannabis cultivators pose a higher risk to water quality and will require a higher level of regional water quality control board (RWQCB) oversight, they are subject to a higher application and annual fee. When the commercial cannabis cultivation site is reconfigured to comply with the riparian setbacks, the commercial cannabis cultivator can request that the RWQCB reclassify the site to a lower risk level and allow a lower annual fee to be assessed.

To obtain coverage under the waiver or enroll under the general order, the discharger is required to submit an online application and application fee and relevant technical reports. Technical report requirements are based on tier and risk level. Pursuant to SWRCB Order WQ 2023-0102-DWQ, moderate- and high-risk sites are required to provide the following plans to address soil erosion (SWRCB 2023).

#### Site Erosion and Sediment Control Plan

A site erosion and sediment control plan describes how the commercial cannabis cultivator will implement the site erosion and sediment control requirements listed in Attachment A of the SWRCB Order WQ 2023-0102-DWQ. The report must include an analysis of slope stability and is subject to approval by the RWQCB. When required, the site erosion and sediment control plan is to be prepared by a qualified individual (i.e., a registered professional per the cannabis policy requirements).

#### Disturbed Area Stabilization Plan

A disturbed area stabilization plan describes how best practical treatment or control measures will be implemented to achieve the goals of stabilizing the disturbed area to minimize the discharge of sediment off-site and complying with the riparian setback requirements. The report must be approved by the RWQCB executive officer before implementation. When required, the disturbed area stabilization plan shall be prepared by a qualified individual (i.e., a registered professional per the cannabis policy requirements).

#### Wastewater Disposal Associated with Industrial Waste or Indoor Commercial Cannabis Cultivation

Term 27 of Attachment A of the SWRCB Order WQ 2023-0102-DWQ prohibits discharges of wastewater from commercial cannabis manufacturing activities defined in Business and Professions Code section 26100, indoor grow operations, or other industrial wastewater to an onsite wastewater treatment system (e.g., septic tank and associated disposal facilities), to surface water, or to land.

#### SWRCB Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems

On-site wastewater treatment systems (OWTS), commonly known as septic systems, primarily treat domestic wastewater and employ subsurface disposal. On June 19, 2012, SWRCB adopted Resolution No. 2012-0032, adopting the Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems (OWTS

Policy). The OWTS Policy uses a risk-based, tiered approach for the regulation and management of OWTS installations and replacements and sets the level of performance and protection expected from OWTS. Most notably, the policy establishes a framework that promotes local agency management plans developed for local governments to implement.

#### Surface Mining and Reclamation Act of 1975

The Surface Mining and Reclamation Act of 1975 (SMARA, Public Resources Code, sections 2710–2796) provides a comprehensive surface mining and reclamation policy for the regulation of surface mining operations to assure that adverse environmental impacts are minimized and mined lands are reclaimed to a usable condition. SMARA also encourages the production, conservation, and protection of the state’s mineral resources.

#### Paleontological Resources

Paleontological resources are classified as nonrenewable scientific resources and are protected by state statute (PRC section 5097.5; State CEQA Guidelines, Appendix G). No state or local agencies have specific jurisdiction over paleontological resources. No state or local agency requires a paleontological collecting permit to allow for the recovery of fossil remains discovered as a result of construction-related earthmoving on state or private land on a project site.

## LOCAL

#### Mendocino County General Plan

The Mendocino County General Plan contains policies associated with geologic hazards, soils, mineral resources, and paleontological resources. The following policies are potentially relevant to the project (Mendocino County 2021a):

- ▶ **Policy DE-116:** Paleontological resources studies shall be conducted at the County’s discretion for all project applications. The studies should identify paleontological resources in a project area and provide mitigation measures for any resources in a project area that cannot be avoided.
  - If, during the course of implementing County-approved projects any paleontological resources (fossils) are discovered, all work shall be halted immediately within 50 feet of the discovery, the County Planning and Building Services Department shall be immediately notified, and a qualified paleontologist shall be retained to determine the significance of the discovery.
  - The County and project applicant shall consider the mitigation recommendations of the qualified paleontologist for any unanticipated discoveries. The County and project applicant shall consult and agree upon implementation of a measure or measures that they deem feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. The project applicant will implement the agreed upon mitigation measures necessary for the protection of paleontological resources.
- ▶ **Policy DE-252:** All new buildings and structures shall comply with the uniform construction codes and other regulations adopted by the County and State to minimize geologic hazards.
- ▶ **Policy DE-253:** New developments, redevelopments, and major renovations on properties with significant geologic hazards should be evaluated for density transfer potential and/or cluster development to minimize the hazard mitigation footprint and development requirements.

- ▶ **Policy RM-26:** Protect, use, and manage the County’s farmlands, forests, water, air, soils, energy, and other natural resources in an environmentally sound and sustainable manner.
- ▶ **Policy RM-62:** Promote soil conservation practices by public and private landowners and managers.
- ▶ **Policy RM-63:** Improve the understanding and use of soil conservation tools, including soil models and Natural Resource Conservation Service (NRCS) soils surveys, during the development process.
- ▶ **Policy RM-64:** Development shall be located, designed, constructed, and managed as follows to protect soil resources and minimize soil loss and erosion:
  - Slopes over 15 percent: Limit land uses, densities, intensities and disturbances, vegetation removal, and hydrologic modifications on slopes exceeding 15 percent.
  - Slopes 20 percent or more: In addition to standards for slopes over 15%, establish slope stability requirements for areas with, or directly adjacent to, slopes of 20 percent or greater within geologic units susceptible to slope failure and areas of mapped landslides.
  - Slopes 30 percent or more: In addition to standards for slopes over 20%, discourage road and building site construction in areas that exceed 30 percent slopes or cross slopes.
- ▶ **Policy RM-65:** Discourage development and conversion from rangeland to intensive agriculture in areas of known landslides or slopes where weak geologic materials are susceptible to failure.
- ▶ **Policy RM-66:** Promote clustering and density transfers where appropriate to reduce soil loss and impacts on watersheds and fisheries.
- ▶ **Policy RM-67:** Continue identifying and reducing soil erosion and sedimentation associated with lands, facilities, and operations owned or operated by the County.
- ▶ **Policy RM-81:** Conserve native vegetation, critical habitats, and soil resources through education, technical and financial assistance, cooperative endeavors, best management practices, and soils and vegetation management plans for development and resource uses.
- ▶ **Policy RM-83:** Vegetation removal should be reviewed when involving five (5) or more acres, assessing the following impacts:
  - Grading and landform modifications including effects on site stability, soil erosion and hydrology.
  - Effects on the natural vegetative cover and ecology in the project area.
  - Degradation to sensitive resources, habitat and fisheries resources.
  - Compatibility with surrounding uses.
  - Visual impacts from public vantage points.
  - Cumulative and growth-inducing impacts. For the purposes of implementing this policy, “vegetation removal” does not include state-regulated timber harvest.
- ▶ **Policy RM-92:** Conserve and enhance watercourses to protect habitat, fisheries, soils, and water quality.

## Mendocino County Code of Ordinances

### Grading Ordinance

Mendocino County's Grading Ordinance is ministerial (applied to a building permit) and is found in Chapter 18.70 of the Mendocino County Code of Ordinances. This chapter sets forth rules and regulations to control excavation, grading, and earthwork construction, including fills and embankments; establishes the administrative procedures for issuance of permits; and provides for approval of the plans and inspection of grading construction. In accordance with the Mendocino County Code, grading in excess of 5,000 cubic yards must be performed in accordance with an approved grading plan prepared by a civil engineer and must be designated as "engineered grading." Grading involving less than 5,000 cubic yards is designated "regular grading" and does not need an engineered plan unless the permittee chooses to have the grading performed as engineered grading, or the building official determines that special conditions or unusual hazards exist, in which case grading shall conform to the requirements for engineered grading.

### Sewage Systems

Chapter 16.08 of the Mendocino County Code of Ordinances states that it is unlawful and prohibited and a public offense for any person, firm, corporation, partnership, or co-partnership to construct or maintain any sewage system in a manner where inadequately treated effluent is likely to discharge on the surface of the ground; is likely to become injurious or dangerous to health; would violate any requirement of the North Coast Regional Water Control Board's (NCRWQCB) basin plan; or would empty, flow, seep, or drain into or affect any spring, stream, river, lake, groundwater or other waters in Mendocino County. Chapter 16.08 provides criteria for the construction, maintenance, and requirements for on-site sewage systems.

### Mendocino County Cannabis Regulation

The Mendocino County Cannabis Regulation (MCCR) contains the following requirements related to geologic hazards, soils, mineral resources, and paleontological resources.

#### Section 10A.17.070: Requirements for All Cannabis Cultivation Business Licenses

Unless specifically exempted, in additions to compliance with all other requirements of this chapter, all Cannabis Cultivation Business Licenses Holder's shall comply with the requirements of this section.

- (I) North Coast Regional Water Control Board (NCRWQCB).
  - (1) CCBL Holders shall establish and maintain enrollment in Tier 1, 2 or 3 with NCRWQCB Order No. 2015-0023, if applicable, or any superseding or substantially equivalent rule that may be subsequently adopted by the NCRWQCB, the County of Mendocino or other responsible agency, or shall obtain proof of exemption from said Order.
  - (2) For cultivation areas for which no enrollment pursuant to NCRWQB Order No. 2015-0023 is required, the site shall comply with the standard conditions set forth in that Order, as well as the applicable "Best Management Practices for Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effects" as presented in Appendix B of the Order, or any superseding or substantially equivalent rule that may be subsequently adopted by the NCRWQCB, the County of Mendocino or other responsible agency.
- (L) For projects that disturb one (1) or more acres of soil or projects that disturb less than one (1) acre but that are part of a larger common plan of development that in total disturbs one

or more acres, CCBL Holders shall obtain coverage as required under the State Water Resources Control Board (SWRCB) General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009-0009-DWQ, or any superseding, substantially equivalent or additional rule applicable to such activities that may be subsequently adopted by the SWRCB or other responsible agency. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility.

### 3.7.2 Environmental Setting

#### REGIONAL GEOLOGY

The County is entirely within the Coast Ranges Geomorphic Province of California with a western limit marked by the Pacific Ocean. The Coast Ranges are northwest-trending mountain ranges and valleys. The ranges and valleys trend northwest, subparallel to the San Andreas Fault. Summit elevations are typically within the range of 2,000–4,000 feet, with the highest peaks along the northeastern margin of the County. The Coast Ranges are predominantly composed of thick late Mesozoic and Cenozoic sedimentary rocks. The northern and southern portions of the province are separated by a depression containing the San Francisco Bay. The coastline is divided into two sections: The northern section runs the length of the Coast Ranges province, and the southern runs along the western edge of the provinces of the Transverse Ranges and the Peninsular Ranges. The northern section runs north by northwest from Point Conception, in Santa Barbara County, north to Oregon (CGS and California State Parks 2015).

#### LOCAL GEOLOGY

Mendocino County consists of four major geologic units paralleling the coast from the west to the east, including the Gualala Formation, a coastal terrace made of Miocene, Eocene, and Cretaceous marine shelf deposits consisting mainly of sandstone, shale, and conglomerate; the Franciscan, a coastal belt consisting of Tertiary and Cretaceous bedded marine sedimentary rocks east of the San Andreas Fault Zone; the Franciscan Complex, a large area of Jurassic and Cretaceous sedimentary, metamorphic, and igneous rocks (this unit has been intermingled on varying scales by pervasive shearing and the formation of mélanges (a mixture of rock fragments, blocks, or slabs of various ages and origins)); and the South Fork Mountain Schist, a member of the Franciscan Complex, consisting of metamorphosed Franciscan rocks.

The vast majority of the County is underlain by the bedrock of the Franciscan Complex. Thick soil development and landslides commonly cover the underlying bedrock throughout the County. Because of the weak and deformed nature of the Franciscan rocks, they are prone to deep weathering and the development of thick overlying soils. Soil deposits in swales and on the flanks of slopes commonly contain substantial amounts of clay and weathered rock fragments up to boulder size. These soils can be unstable when wet and are prone to slides. Land sliding of such soils is widespread in Mendocino County, particularly in the eastern belt of the Franciscan Complex beneath the County's eastern portion. Human activities that affect vegetation, slope gradients, and drainage processes can also contribute to landslides and erosion (Mendocino County 2008).



## TOPOGRAPHY AND DRAINAGE

Within 20 miles of the Pacific Ocean, the Mendocino County landscape rises to 3,000 feet in a series of northwest- to southeast-trending ridges paralleling the coast and irregularly alternating with narrow valleys. These ridges and valleys reflect the geologic structures of the region, such as the San Andreas Fault in the southwest corner of the County near Point Arena and the Maacama Fault in the central portion of the County, extending from the Sanel Valley to Long Valley. The alluvial valleys are between 1,000 and 1,500 feet in elevation in the central part of the County and drop to 500 feet at the points where the Eel and Russian Rivers leave the County.

Mendocino County contains multiple watersheds, described in Chapter 3.10, “Hydrology and Water Quality,” such as the Coastal, Eel, and Russian River basins. The coastal system consists of numerous relatively short streams flowing west to the Pacific Ocean, as well as major stream systems in the coastal watershed, including the Ten Mile, Noyo, Big, Albion, Navarro, Garcia, and Gualala Rivers. The interior County is drained by the two larger drainage systems: the Eel River and Russian River systems. The Eel River system drains the northern interior, whereas the Russian River system drains the southern interior. Only portions of these interior watersheds lie within the County. The Eel River watershed is shared with Humboldt, Lake, and Trinity Counties, whereas the Russian River watershed includes significant portions of Sonoma County (Mendocino County 2016).

## SOILS

The Soil Surveys of Mendocino County, Eastern Part and Western Part, prepared by the US Department of Agriculture, describe soil characteristics, including suitability for agriculture. The following soil series are found in areas of Mendocino County used for nongrazing agriculture (Mendocino County 2008):

- ▶ **Feliz-Russian soil series.** Very deep, nearly level to moderate sloping, well drained loam. Most areas of this soil series in the Ukiah Valley are used for irrigated crops. Areas of this unit that are protected from flooding have few limitations for crops. These areas are also suitable to use as homesites.
- ▶ **Cole soil series.** Very deep, nearly level and gently sloping, somewhat poorly drained clay loam. This soil is found on alluvial plains and alluvial fans and in basins in Hopland, Covelo, and Potter Valley. It is used mainly for irrigated crops. The area near Covelo is used for hay and pasture. The areas near Hopland and Potter Valley are used mostly for vineyards and orchards and as homesites. This unit is limited for crops mainly by slow soil permeability (the ability of water to flow through a soil) and for buildings mainly by the low soil strength.
- ▶ **Pinole-Yokayo-Redvine soil series.** Very deep, nearly level to moderately steep, well-drained gravelly loam, sandy loam, and sandy clay loam. This soil type is found on terraces of the Ukiah, Redwood, Willits, and Laytonville Valleys. Most areas of this unit in the Ukiah and Redwood Valleys are used for irrigated crops. Areas in the Willits and Laytonville Valleys are used for livestock grazing. The Redvine and Yokayo soils are limited for crops by slow and very slow permeability. The Pinole soils have few limitations for crops.
- ▶ **Boontling-Pinole-Cole soil series.** Very deep, nearly level to moderately steep, somewhat poorly drained and well-drained soils that formed in alluvium on river terraces. This soil type is found on river terraces and floodplains in the Laytonville and Anderson Valleys. This unit's areas are used mainly to produce wine grapes and apples in the

Anderson Valley and for livestock grazing in the Laytonville Valley. In areas of Boontling and Cole soils that are used to produce wine grapes and apples, the major limitation is the seasonal saturation of the soils. No significant limitations affect the use of the Pinole soils to produce wine grapes and apples.

The County seeks to preserve agricultural soils through the use of more compact development patterns, including the use of multistory buildings to accommodate needed housing and commercial uses on less land.

### Soil Erosion

Areas susceptible to erosion occur throughout the County where surface soils possess low-density and/or low-strength properties. Slopes are another factor in soil erosion: the greater the slope, the greater the erosion hazard, especially if the soil is bare. Erosion is generally located along coastal beaches, areas along surface waters, and areas that have recently experienced wildfires. It is also associated with landslides, which occur in areas of the County with steep inclines, generally more inland. Most of the County has only a slight erosion hazard (slopes less than 9 percent). Only Redvine soils have a moderate hazard. Soils on slopes of 9 percent or greater have a moderate erosion hazard, and soils on slopes greater than 15 percent have a high erosion hazard (Mendocino County 2008).

## SUBSIDENCE

Land subsidence is the gradual settling or sinking of an area with little horizontal motion. Subsidence can be induced by both natural and human phenomena. Natural phenomena include shifting of tectonic plates and dissolution of limestone that results in sinkholes. Human activity that can result in subsidence includes pumping of water, oil, and gas from underground reservoirs; collapse of underground mines; drainage of wetlands; and soil compaction. Currently subsidence is not a known issue within the County.

## EXPANSIVE SOILS

Expansive soils (also known as shrink-swell soils) are soils that contain expansive clay minerals that can absorb significant amounts of water. The presence of these clay minerals makes the soil prone to large changes in volume in response to changes in water content. When an expansive soil becomes wet, water is absorbed, and it increases in volume, and as the soil dries, it contracts and decreases in volume. This repeated change in volume over time can produce enough force and stress on buildings, underground utilities, and other structures to damage foundations, pipes, and walls. The quantity and type of expansive clay minerals affect the potential for the soil to expand or contract. Where native soils still exist, soil types may be expected to be similar to those of the nearby areas. Expansive soils are common throughout the County, particularly where clay-rich Franciscan rocks are present or in seasonally wet basin areas (Mendocino County 2008).

## MASS WASTING AND LANDSLIDES

Mass wasting is the collective group of processes that characterize the downslope movement of rock and unconsolidated sediment overlying bedrock. These processes include landslides, slumps, rockfalls, flows, and creeps. Many factors contribute to the potential for mass wasting, including geologic conditions, as well as the drainage, slope, and vegetation of the site. Land sliding in Mendocino County has been a major part of the natural erosion process for tens of

thousands of years. The County's climate, mountainous terrain, weak bedrock conditions, and thin colluvial mantle all contribute to landslides and erosion in the County. A landslide risk exposure map, shown in Figure 3.7-1 from the Mendocino County Multi-Hazard Mitigation Plan and developed by the California Geological Survey, indicates that the County contains high landslide risk exposure because of the dramatic topography and climate (Mendocino County 2021b). Most rock formations in Mendocino County are associated with the Franciscan Formation, which is known to have poor slope stability characteristics, making it unstable for most development. Slope stability characteristics in the Maacama Fault Zone, described below, are typically poor as well (Mendocino County 2016).

## SEISMICITY

Most earthquakes originate along fault lines. A fault is a fracture in the earth's crust along which rocks on one side are displaced relative to those on the other side because of shear and compressive crustal stresses. Most faults are the result of repeated displacement that has taken place suddenly or by slow creep. The state of California has a classification system that designates faults as active, potentially active, or inactive, depending on how recently displacement has occurred along them. Faults that show evidence of movement within the last 11,000 years (the Holocene geologic period) are considered active, and faults that have moved between 11,000 and 1.6 million years ago (the later Pleistocene geologic period) are considered potentially active.

Mendocino County is located just south of the southern end of the Cascadia Subduction Zone (CSZ), a thrust fault zone that delineates the convergent margins of several major tectonic plates. The Gorda Plate, located west of the CSZ, is being subducted beneath the westward overthrusting continental North American Plate. A third plate, the Pacific Plate, moves laterally relative to the other two plates. The offshore margin between the Gorda and Pacific Plates, known as the Mendocino Fault, marks the southern boundary of the CSZ. As a result of ongoing tectonic activity associated with the CSZ and the San Andreas and Mendocino Faults, the North Coast region of California is a dynamic region subject to high levels of seismicity.

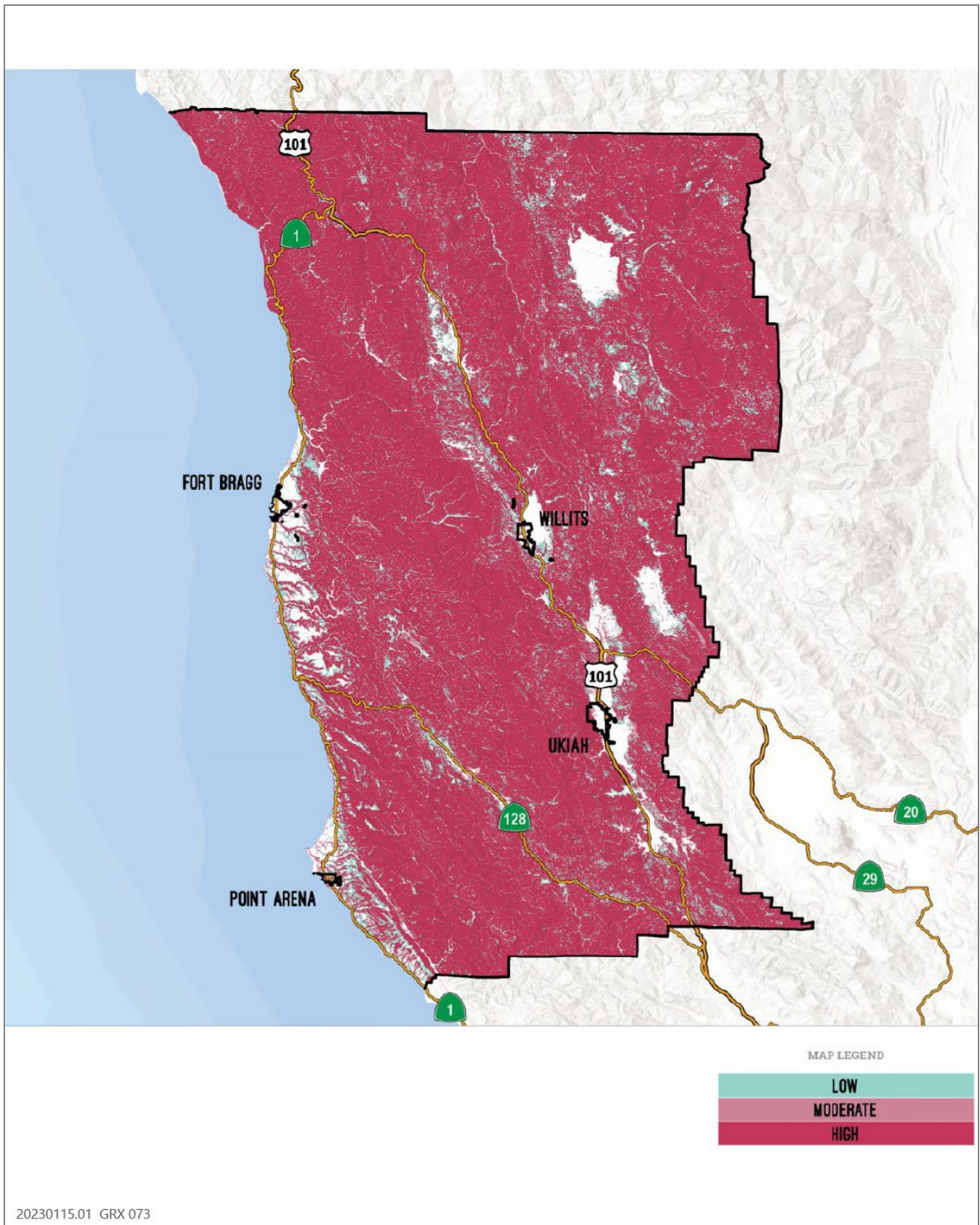
A review of available published geologic and seismic hazards maps indicates that five faults or fault zones traverse Mendocino County and are considered potentially active or active, as shown in Figure 3.7-2.

### San Andreas Fault

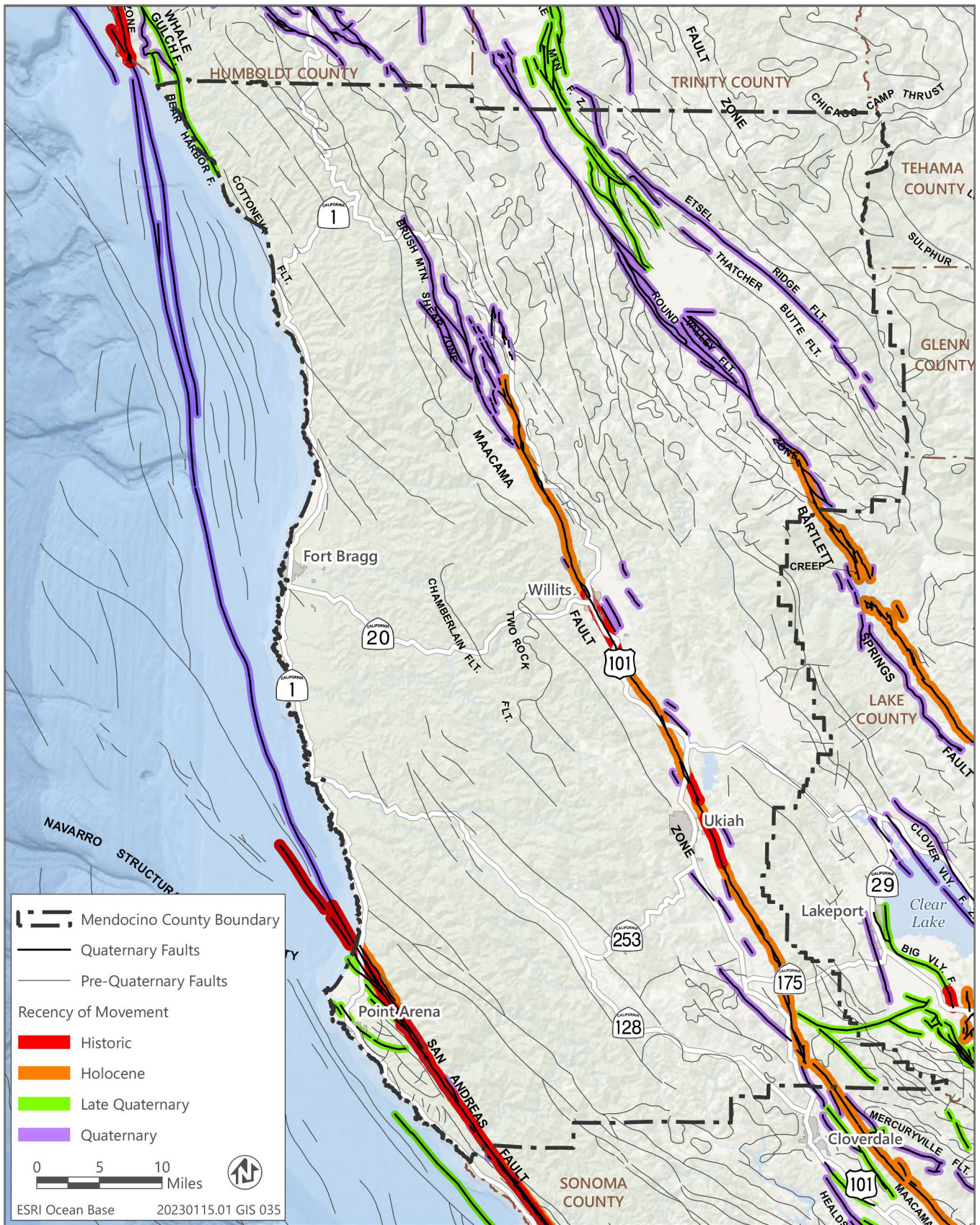
The San Andreas Fault traverses the southwest corner of the County, just east of the coastal zone, and continues offshore north of Manchester, a census-designated place in the County. The San Andreas Fault is able to generate strong earthquakes, with the US Geological Survey estimating that the North Coast segment of the San Andreas Fault has a 10-percent probability of generating a magnitude (M) of 6.7 or greater earthquake during the period of 2000–2030.

### Whale Gulch Fault

Associated with the San Andreas Fault at Shelter Cove in southern Humboldt County is the Whale Gulch Fault. The Whale Gulch Fault extends from Shelter Cove in Humboldt County southward into the northwesternmost corner of Mendocino County. In Mendocino County, the fault is located a few miles west of the offshore San Andreas Fault and is considered to be potentially active.



**Figure 3.7-1**      **Landslide Risk Exposure**



Source: Data downloaded from CA Department of Conservation in 2010; adapted by Ascent in 2023.

**Figure 3.7-2 Mendocino County Faults**

### Maacama Fault

The Maacama Fault extends from northern Sonoma County to north of Laytonville in Mendocino County. The Maacama Fault is the northernmost segment of a series of closely related faults in the San Andreas Fault system that includes the Hayward, Rodgers Creek, and Healdsburg Faults to the south. Historically, the Maacama Fault has generated only a few moderate earthquakes; however, an abundance of micro-earthquakes (less than M3) is associated with the fault. The maximum credible earthquake magnitude for the Maacama Fault is estimated to be M7.3.

### Round Valley Fault

The Round Valley Fault traverses the northeastern corner of the County. The fault is a northern extension of the Bartlett Springs Fault, which traverses northern Lake County to approximately the Mendocino County line. A few micro-earthquakes have been recorded in the vicinity of the fault, particularly at the southern end; however, because of its association with the Bartlett Springs Fault, possibly associated micro-seismic activity, and evidence of early Quaternary activity, the Round Valley Fault is considered potentially active.

### Etsel Ridge Fault

Located in the remote northeastern corner of Mendocino County, the Etsel Ridge Fault has been the subject of little study but is believed to have experienced early Quaternary movement. Micro-seismicity in the vicinity is scattered and limited. The Etsel Ridge Fault has been classified as potentially active, based primarily on lack of data to prove otherwise.

Seismic hazards resulting from earthquakes include surface fault rupture, ground shaking, and liquefaction. Each of these potential hazards is discussed below.

Table 3.7-1 summarizes the known seismic parameters for the seismic sources discussed above. Relative to seismic generation, the Whale Gulch Fault is considered part of the San Andreas Fault. The Round Valley and Etsel Ridge Faults are a part of the Bartlett Springs fault system.

**Table 3.7-1 Significant Seismic Sources in Mendocino County**

Fault Name	Length (km)	MCE	Slip Rate (mm/yr)
San Andreas Fault	470	7.9	24
Maacama Fault	81	7.3	9
Bartlett Springs Fault System	160	7.5	1-5

Notes: km = kilometers; MCE = maximum credible earthquake (2% probability of exceedance in 50 years (moment magnitude); mm/yr = millimeters per year.

Sources: Mendocino County 2008, UGSG 2017, Stein 2016.

### Surface Fault Rupture

Surface fault rupture is the surface expression of movement along a fault. Structures built over an active fault can be torn apart if the ground ruptures. The potential for surface rupture is based on the concepts of recency and recurrence. Surface rupture along faults is generally limited to a linear zone a few meters wide. The Alquist-Priolo Act (see Section 3.7.1, “Regulatory Setting”) was created to prohibit the location of structures designed for human occupancy across, or within 50 feet of, an active fault, thereby reducing the loss of life and property from an earthquake. The project area contains several Alquist-Priolo active fault zones associated with the San Andreas and Maacama Faults (CGS 2023).

## Ground Shaking

The intensity of seismic shaking, or strong ground motion, during an earthquake depends on the distance and direction from the epicenter of the earthquake, the magnitude of the earthquake, and the geologic conditions of the surrounding area. Ground shaking could potentially result in damage to or collapse of buildings and other structures. Earthquake intensities generally associated with this amount of ground shaking are typically between VI and VII on the Modified Mercalli intensity scale (Table 3.7-2). Ground shaking is responsible for most loss of life and property damage during an earthquake; therefore, it is important to accurately evaluate shaking hazards as a basis for improving building designs and standards. The extent of structural damage from ground shaking depends on several factors, including geology of the area, duration and intensity of the fault movement, and structure design and construction characteristics. Buildings most vulnerable to ground shaking damage are older, unreinforced masonry buildings. Reinforced concrete structures constructed under less stringent building codes (before 1965) have a much higher chance of fracturing. Single-family homes constructed of wood frames are one of the safest building types. Their ability to withstand large earthquakes can be further improved with foundation bolts, shear walls, and other strengthening devices. The CSZ is the most significant seismic source in the region. Within recent years, movement along the CSZ's margins in northern California have generated earthquakes with magnitudes ranging from 6.0 to 7.2, including a 7.2 earthquake on June 15, 2005, and a magnitude 6.6 earthquake on June 17, 2005. As discussed above, it is not located in the County, but about 30 miles northwest and offshore. The CSZ is considered capable of generating more intense earthquakes than any other seismic source in the western United States (Mendocino County 2008).

**Table 3.7-2 The Modified Mercalli Intensity Scale**

Description/Damage	Shaking	Intensity
Not felt except by a very few under especially favorable conditions.	Not felt	I (1.0–3.0 magnitude)
Felt only by a few people at rest, especially on upper floors of buildings.	Weak	II (3.0–3.9 magnitude)
Felt quite noticeable by people indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck.	Weak	III (3.0–3.9 magnitude)
Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sounds. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.	Light	IV (4.0–4.9 magnitude)
Felt by nearly everyone; many awakened. Some dishes and windows broken. Unstable objects overturned. Pendulum clocks may stop.	Moderate	V (4.0–4.9 magnitude)
Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.	Strong	VI (5.0–5.9 magnitude)
Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.	Very Strong	VII (5.0–5.9 magnitude)
Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.	Severe	VIII (7.0 and higher magnitude)
Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.	Violent	IX (6.0–6.9 magnitude)
Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.	Extreme	X (7.0 and higher magnitude)

Source: USGS 1993.

## Liquefaction and Lateral Spreading

Liquefaction is a phenomenon in which loose, saturated, granular soil deposits lose a significant portion of their shear strength because of excess pore water pressure buildup. An earthquake typically causes the increase in pore water pressure and subsequent liquefaction. These soils behave like a liquid during seismic shaking and resolidify when shaking stops. The potential for liquefaction is highest in areas with high groundwater and loose, fine, sandy soils at depths of less than 50 feet. Based on mapping conducted pursuant to the Alquist-Priolo Act, the project area is not located in an area of potential liquefaction (CGS 2022). However, there are several alluvial basins in Mendocino County where conditions can lead to potential liquefaction. Most notably, these areas include the alluvial basins in the Willits, Ukiah, and Covelo areas. Also, as discussed above, several significant seismic sources in the area are capable of generating the ground shaking necessary to trigger liquefaction. Fine-grained alluvial deposits along river systems are also susceptible to liquefaction.

Liquefaction may also lead to lateral spreading. Lateral spreading (also known as expansion) is the horizontal movement or spreading of soil toward an “open face,” such as a streambank, the open side of fill embankments, or the sides of levees. It often occurs in response to liquefaction of soils in an adjacent area. The potential for failure from lateral spreading is highest in areas where there is a high groundwater table, where there are relatively soft and recent alluvial deposits, and where creek banks are relatively high.

## MINERAL RESOURCES

The California Division of Mines and Geology has developed guidelines for the classification and designation of mineral lands, known as Mineral Resource Zones (MRZs), and retains publications of the Surface Mining and Reclamation Act Mineral Land Classification Project dealing with mineral resources in California. The establishment of MRZs is based on a geologic appraisal of the mineral resource potential of the land. The following MRZ categories are used by the state geologist in classifying the state’s lands:

- ▶ MRZ-1: Areas where adequate geologic information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence. This zone is applied where well-developed lines of reasoning, based on economic-geologic principles and adequate data, indicate that the likelihood for occurrence of significant mineral deposits is nil or slight.
- ▶ MRZ-2a: Areas underlain by mineral deposits where geologic data show that significant measured or indicated resources are present. MRZ-2 is divided on the basis of both degree of knowledge and economic factors. Areas classified MRZ-2a contain discovered mineral deposits that are either measured or indicated reserves as determined by such evidence as drilling records, sample analysis, surface exposure, and mine information. Land included in the MRZ-2a category is of prime importance because it contains known economic mineral deposits. A typical MRZ-2a area would include an operating mine, or an area where extensive sampling indicates the presence of a significant mineral deposit.
- ▶ MRZ-2b: Areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present. Areas classified MRZ-2b contain discovered deposits that are either inferred reserves or deposits that are presently sub-economic as determined by limited sample analysis, exposure, and past mining history. Further exploration work or changes in technology or economics could result in upgrading areas classified MRZ-2b to MRZ-2a. A typical MRZ-2b area would include sites where there are



good geologic reasons to believe that an extension of an operating mine exists or where there is an exposure of mineralization of economic importance.

- ▶ MRZ-3a: Areas containing known mineral deposits that may qualify as mineral resources. Further exploration work within these areas could result in the reclassification of specific localities into the MRZ-2a or MRZ-2b categories. MRZ-3a areas are considered to have a moderate potential for the discovery of economic mineral deposits. MRZ-3 is divided on the basis of knowledge of economic characteristics of the resources. An example of a MRZ-3a area would be where there is direct evidence of a surface exposure of a geologic unit, such as a limestone body, known to be or to contain a mineral resource elsewhere but has not been sampled or tested at the current location.
- ▶ MRZ-3b: Areas containing inferred mineral deposits that may qualify as mineral resources. Land classified MRZ-3b represents areas in geologic settings that appear to be favorable environments for the occurrence of specific mineral deposits. Further exploration work could result in the reclassification of all or part of these areas into the MRZ-3a category or specific localities into the MRZ-2a or MRZ-2b categories. MRZ-3b is applied to land where geologic evidence leads to the conclusion that it is plausible that economic mineral deposits are present. An example of a MRZ-3b area would be where there is indirect evidence such as a geophysical or geochemical anomaly along a permissible structure, which indicates the possible presence of a mineral deposit or that an ore-forming process was operative.
- ▶ MRZ-4: Areas where geologic information does not rule out either the presence or absence of mineral resources. The distinction between the MRZ-1 and MRZ-4 categories is important for land-use considerations. It must be emphasized that MRZ-4 classification does not imply that there is little likelihood for the presence of mineral resources, but rather there is a lack of knowledge regarding mineral occurrence. Further exploration work could well result in the reclassification of land in MRZ-4 areas to MRZ-3 or MRZ-2 categories (DOC n.d.).

Minerals have played an important role in the economy of Mendocino County throughout the County's history. However, the County's job base has become increasingly diversified over the last several years, with retail trade, service, government, and manufacturing sectors increasing. The most predominant of the minerals found in the County are aggregate resource minerals, primarily sand and gravel, found along many rivers and streams. Aggregate hard rock quarries operate in the County (Mendocino County 2008).

## PALEONTOLOGICAL RESOURCES

Paleontological resources consist of vertebrate, invertebrate, and plant fossils. These resources are usually found in sedimentary and metasedimentary deposits. A search of the University of California Museum of Paleontology collections database identified 182 paleontological resources in Mendocino County. These resources primarily consist of vertebrates and invertebrates. Most of the resources are invertebrates found in the coastal zone (Mendocino County 2008). Geologic formations in the County also could contain paleontological resources.

### 3.7.3 Environmental Impacts and Mitigation Measures

#### METHODOLOGY

The following program-level analysis is based on generalized geology, soils, mineral resource, and paleontological resource mapping and data available. The footprint and design details of any site-specific commercial cannabis projects are not known at this time. Specific requirements of existing laws and regulations described in the regulatory setting are assessed for their ability to avoid or reduce the exposure of people or structures to substantial adverse effects.

#### THRESHOLDS OF SIGNIFICANCE

A geology and soils, mineral resources, or paleontological resources impact would be significant if implementation of the project would:

- ▶ Directly or indirectly expose people or structures to potential substantial adverse impacts, including the risk of loss, injury, or death through the rupture of a known earthquake fault, strong seismic shaking, seismic-related ground failure, soil liquefaction, or landslides;
- ▶ Result in substantial soil erosion or the loss of topsoil;
- ▶ Locate project features on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;
- ▶ Locate project features on expansive soil, creating substantial direct or indirect risks to property;
- ▶ Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater;
- ▶ Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;
- ▶ Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state; or
- ▶ Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

#### ISSUES NOT DISCUSSED FURTHER

##### Mineral Resources

Mendocino County contains a variety of mineral resources, with minerals playing an important role in the County's economy. However, commercial cannabis cultivation operations are similar to agricultural activities that would not render the locations on which it occurs unavailable for future mineral extraction (i.e., conversion of land area with paved roadways, residences, and other structures that commit the land to a developed condition). Mining extraction and new licensed commercial cannabis cultivation could occur on the same or contiguous parcels, assuming the setback requirements stated in the MCCR and other operational standards are not impacting by comingling activities. Implementation of the project would not result in the loss

of availability of a known mineral resource that would be a value to the region and the residents of that state and would not result in the loss of availability of a local important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Therefore, no impacts associated with mineral resources would occur.

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Impact 3.7-1: Directly or Indirectly Cause Potential Substantial Adverse Effects, Including the Risk of Loss, Injury, or Death from Seismic Hazards

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Potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations associated with the implementation of the project could expose additional people and structures in a region susceptible to strong seismic shaking. Existing provisionally licensed, expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation operations would not exacerbate existing seismic hazards and would be required to comply with existing state and local regulatory requirements related to seismic hazards (e.g., building codes and other laws and regulations), such that the exposure of people or structures to risk of loss, injury, or death resulting from rupture of a known earthquake fault or strong seismic shaking would be avoided or reduced. This impact would be **less than significant**.

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New licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations may be located in areas subject to strong seismic shaking. Operations could include structures such as nurseries, hoop houses, storage sheds, and water tanks.

It is important to note that environmental impact analyses under CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future users or residents unless the proposed project might cause or risk exacerbating environmental hazards or conditions that already exist (State CEQA Guidelines, section 15126.2(a)). In those specific instances, it is the project's impact on the environment and not the environment's impact on the project that compels an evaluation of how future residents or users may be affected by exacerbated conditions (*California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369).

#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual licensure would not result in new impacts associated with seismic hazards as operations are not anticipated to be altered through the annual licensing process. Continued operations would not create new seismic events or exacerbate existing seismic hazards, because limited ground disturbance associated with commercial cannabis cultivation would not alter seismic and fault conditions in the region. Therefore, there would be no impact for existing provisionally licensed sites because they would retain the extent of their existing licensed commercial cannabis cultivation.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation operations features would be constructed in accordance with the seismic design requirements of the 2022 CBC, Alquist-

Priolo Fault Hazard Regulation, and County standards. The CBC standards require the design of structures to consider seismic hazards present at the site and the intended use, or nature of occupancy, of the structure. Alquist-Priolo requires that no buildings intended for human occupancy would be allowed on or within 50 feet of an active fault trace. Requirements associated with the 2022 CBC, Alquist-Priolo Fault Hazard Regulation, and County standards contain building specification and siting requirements that avoid the risks of loss, injury, or death resulting from seismic hazard. For these reasons, this impact would be less than significant.

#### Future Licensed Sites

Future new licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations may include new structures and additional people in a region of existing seismic hazards. New buildings would be constructed in accordance with the seismic design requirements of the 2022 CBC, Alquist-Priolo Fault Hazard Regulation, and County standards. The CBC standards require the design of structures to consider seismic hazards present at the site and the intended use, or nature of occupancy, of the structure. Alquist-Priolo requires that no buildings intended for human occupancy would be allowed on or within 50 feet of an active fault trace. Requirements associated with the 2022 CBC, Alquist-Priolo Fault Hazard Regulation, and County standards contain building specification and siting requirements that avoid the risks of loss, injury, or death resulting from seismic hazard. New licensed commercial cannabis cultivation site construction and operations would not create new seismic events or exacerbate existing seismic hazards, because limited ground disturbance associated with commercial cannabis cultivation would not alter seismic and fault conditions in the region. Thus, this impact would be less than significant.

#### Summary

As described above, existing, potential expansion of existing provisionally licensed, and future licensed commercial cannabis cultivation sites would be required to comply with the 2022 CBC, Alquist-Priolo Fault Hazard Regulation, and County building standards in order to reduce the potential for adverse impacts related to seismic hazards, avoiding the risk of loss, injury, or death. Commercial cannabis cultivation sites would not create new seismic events or exacerbate existing seismic hazards. For these reasons, the impacts associated with seismic hazards would be **less than significant**.

#### Mitigation Measures

No mitigation is required for this impact.

#### Impact 3.7-2: Result in Substantial Soil Erosion of the Loss of Topsoil or Be Located on Expansive Soils, Creating Substantial Direct or Indirect Risks to Life or Property

Potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could result in development of new facilities which could include clearing, grading, excavation, and other earth-moving activities. The potential for commercial cannabis cultivation sites being located on expansive soils, substantial soil erosion, or loss of topsoil from implementation of the project would be addressed through compliance with SWRCB Order WQ 2023-0102-DWQ, Mendocino County Code's Grading Ordinance, and the CBC. Impacts related to soil erosion, loss of topsoil, or expansive soils would be **less than significant**.

As noted above in Section 3.7.2, “Environmental Setting,” the County contains rock formations associated with the Franciscan Formation that are prone to soil expansion and poor slope stability; however, site-specific conditions related to topography, slope, and soil conditions could result in geologic instability and soil erosion issues should grading and development not be conducted with proper engineering and design. Licensed commercial cannabis sites and associated processing and/or distribution transport-only operations are assumed to be located on topography throughout the County consisting primarily of gentle slopes and valley floor but could result in slope stability issues. Expanded and new licensed commercial cultivation sites are anticipated to require soil disturbance, such as clearing and grading, through the construction of supporting uses (i.e., roads, water storage, barns/sheds) and of greenhouses and hoop houses. Additionally, licensed commercial cannabis cultivation sites located in areas with steep slopes and soils susceptible to erosion contribute to ongoing erosion due to operational activities, such as road maintenance, soil tiling, weeding, and watering. As discussed in Section 3.7.1, “Regulatory Setting” and in Section 3.10, “Hydrology and Water Quality,” the SWRCB Order WQ 2023-0102-DWQ contains a number of requirements. These requirements include plans that address site erosion and sediment control, disturbed areas stabilization, site closure procedures, and monitoring and reporting requirements. In addition, the Order contains requirements for land development maintenance, erosion control, drainage features, stream crossing installation and maintenance, soil disposal and spoils management, and roadway design and maintenance. Additionally, the Order requires the use of soil stability controls for soil stability and the implementation of a Site Erosion and Sediment Control Plan and Disturbed Area Stabilization Plan for higher risk sites.

County Code of Ordinances Chapter 18.70 established grading requirements within the County. This chapter states that grading in excess of 5,000 cubic yards must be performed in accordance with an approved grading plan prepared by a civic engineer and must be designated as “engineered grading.” Grading involving less than 5,000 cubic yards is designated “regular grading” and does not need an engineered plan unless the permittee chooses to have the grading performed as engineered grading, or the building official determines that special conditions or unusual hazards exist, in which case grading shall conform to the requirements for engineered grading.

#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites obtaining annual licenses would not result in new impacts associated with soil and geologic stability as operations are not anticipated to be altered through the annual licensing process. Continued operations would be required to comply with SWRCB Order WQ 2023-0102-DWQ and MCCR sections 10A.17.070(I) and 10A.17.070(L) requirements for soil stability and erosion control features described in Section 3.7.1, “Regulatory Setting.” Therefore, there would be no impact from existing provisionally licensed sites because they would retain the extent of their existing licensed commercial cannabis cultivation.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation operations features would still be required to comply with the SWRCB Order WQ 2023-0102-DWQ that would involve the implementation of soil stability and erosion control features for sites and related improvements. As described in Section 3.7.1, “Regulatory Setting,” the SWRCB Order WQ 2023-0102-DWQ and MCCR sections 10A.17.070(I) and 10A.17.070(L) contain requirements for commercial

cannabis cultivation uses that require the use of soil erosion and sedimentation controls (best management practices (BMPs)) for soil stability and the implementation of a Site Erosion and Sediment Control Plan and Disturbed Area Stabilization Plan for higher risk sites. Examples of BMPs for soil erosion control that may be used include the use of ground cover vegetation (grasses), detention/water quality control basins, drainage control features that are rock lined and that reduce stormwater flow velocities, and other similar features. For these reasons, this impact would be less than significant.

### Future Licensed Sites

Future new licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations could involve preparation of level surfaces such as terraces, construction of water detention features for water storage, and other site improvements. Site preparation and construction of these features would require activities such as grading, placement of fill, and excavation. Additionally, as stated above, operational activities associated with future commercial cannabis cultivation would result in soil erosion impacts. These types of land disturbance activities could lead to geologic and soil stability issues that create accelerated erosion and sedimentation contributing to further degraded conditions in county impaired waterways, including from decomposed granite that has high potential for erosion and stability issues.

Topography in much of the County consists of steep slopes. Portions of the unincorporated areas of the County could contain layers of highly expansive soils, which could lead to an enhancement of risk of erosion associated with new commercial cannabis cultivation site preparation and construction, especially during storm and high-flow events. Poorly constructed unpaved roads are prone to accelerated wear and erosion that can lead to catastrophic failure. Road failure, especially at culverts or other types of watercourse crossings, can degrade water quality and destroy riparian habitats. Terraces or water storage ponds that do not consider local topography and soil conditions might also be subject to failures that degrade local waterways. In some cases, these issues could be addressed through compliance with the SWRCB Order WQ 2023-0102-DWQ that would involve the implementation of soil stability and erosion control features for sites and related improvements. As described in Section 3.7.1, "Regulatory Setting," the SWRCB Order WQ 2023-0102-DWQ and MCCR sections 10A.17.070(I) and 10A.17.070(L) contain requirements for commercial cannabis cultivation uses that require the use of soil erosion and sedimentation controls (best management practices (BMPs)) for soil stability and the implementation of a Site Erosion and Sediment Control Plan and Disturbed Area Stabilization Plan for higher risk sites. Examples of BMPs for soil erosion control that may be used include the use of ground cover vegetation (grasses), detention/water quality control basins, drainage control features that are rock lined and that reduce stormwater flow velocities, and other similar features. New licensed commercial cannabis cultivation sites could also include construction of new facilities for the cultivation of commercial cannabis. Construction activities would include clearing, grading, and excavation for new facilities. Excavations might relate to the construction of foundations, roads and driveways, and utility trenches. These developments would be restricted to zoning districts that allow for cultivation uses. Per the Mendocino County Grading Ordinance, if grading activities occur over 5,000 cubic yards, grading must be performed in accordance with an approved grading plan prepared by a civil engineer and must be designated as "engineered grading." In addition, the Mendocino County Code, CBC, and other related construction standards address certain grading activities related to potential erosion. The CBC includes common engineering practices requiring special design and construction methods that reduce or eliminate potential expansive soil-related impacts. Compliance with CBC regulations ensures the adequate

design and construction of building foundations to resist soil movement. Compliance with these standards is consistent with Mendocino County General Plan policies DE-252 and RM-64, which require all new buildings and structures to comply with the uniform construction codes and shall be located, designed, constructed, and managed to protect soil resources and minimize soil loss and erosion. Where appropriate, geologic and soil engineering information would be required to evaluate, locate, and design development to minimize geologic hazards. Because future licensed commercial cannabis cultivation sites would be subject to the requirements of SWRCB Order WQ 2023-0102-DWQ, the Mendocino County Code's Grading Ordinance, and the CBC, impacts associated with soil stability, erosion control, and expansive soils would be less than significant.

### Summary

As described above, existing provisionally licensed, potential expansion of existing provisionally licensed, and future licensed commercial cannabis cultivation sites have the potential to be located on soils prone to expansion or poor slope stability, potentially resulting in geologic instability and soil erosion. However, with compliance of SWRCB Order WQ 2023-0102-DWQ, Site Erosion and Sediment Control Plan, Disturbed Area Stabilization Plan, MCCR sections 10A.17.070(I) and 10A.17.070(L), Mendocino County Code's Grading Ordinance, and the CBC, impacts associated with erosion, soil instability, loss of topsoil, and expansive soils would be reduced or otherwise avoid substantial impacts. For these reasons, impacts associated with soil erosion, loss of topsoil, or expansive soils would be **less than significant**.

### Mitigation Measures

No mitigation is required for this impact.

### Impact 3.7-3: Be Located on a Geologic Unit or Soil That is Unstable, or That Would Become Unstable as a Result of the Project, and Potentially Result in On- or Off-site Landslide, Lateral Spreading, Subsidence, Liquefaction or Collapse

Potential expansion of existing provisionally licensed, new licensed commercial cannabis cultivation sites, and associated processing and/or distribution transport-only operations could result in the exposure of people and property to risks associated with unstable or expansive soils. However, licensed commercial cannabis cultivation sites would be required to comply with state and local regulatory requirements (e.g., building codes and other laws and regulations) related to geologic hazards, such that the risk to life or property through exposure to expansive or unstable soils because of the project would be reduced. This impact would be **less than significant**.

As noted in Section 3.7.2, "Environmental Setting," parts of Mendocino County are characterized by steep slopes, landslides, expansive soils, and areas subject to risk of subsidence and liquefaction. Clay-rich Franciscan rocks, particularly found in the eastern belt of the Franciscan Complex beneath the County's eastern portion, are prone to land sliding.

### Existing Provisionally Licensed Sites

As described in Impact 3.7-2, continued operation of existing provisionally licensed commercial cannabis cultivation sites transitioning to annual licensure would not result in new impacts associated with soil and geologic stability as operations are not anticipated to be altered through the annual licensing process. Continued operations would be required to comply with SWRCB Order WQ 2023-0102-DWQ requirements for soil stability and erosion control features described in Section 3.7.1, "Regulatory Setting." Therefore, there would be no impact

from existing provisionally licensed sites because they would retain the extent of their existing licensed commercial cannabis cultivation.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation operations features would be required to comply with SWRCB Order WQ 2023-0102-DWQ; MCCR sections 10A.17.070(I) and 10A.17.070(L); Mendocino County Code's Grading Ordinance; and the CBC that address soil and geologic stability consistent with Mendocino County General Plan policies DE-252 and RM-64. Proper siting and design, in compliance with state and local building regulations, would minimize the potential impacts related to siting of structures on unstable soils because of the proposed program. For these reasons, this impact would be less than significant.

### Future Licensed Sites

Future new licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations could construct new structures such as hoop houses, employee housing, and facilities to support licensed commercial cannabis cultivation. In addition, forbearance requirements for water supply may result in the construction of small reservoirs to provide water supplies during the months of May through October. Development of these types of features would require earth-moving activities that may be located within areas subject to landslide, lateral spreading, subsidence, liquefaction, or collapse. While the County and surrounding area is not identified as an area of potential liquefaction, there are several alluvial basins within Mendocino County where conditions can lead to potential liquefaction.

As described in Impact 3.7-2, new licensed commercial cannabis cultivation sites would be required to comply with SWRCB Order WQ 2023-0102-DWQ; MCCR sections 10A.17.070(I) and 10A.17.070(L); Mendocino County Code's Grading Ordinance; and the CBC that address soil and geologic stability consistent with Mendocino County General Plan policies DE-252 and RM-64. Proper siting and design, in compliance with state and local building regulations, would minimize the potential impacts related to siting of structures on unstable soils because of the proposed program. This impact would be less than significant.

### Summary

As described above, existing provisionally licensed, potential expansion of existing provisionally licensed, and future licensed commercial cannabis cultivation sites have the potential to be located on soils prone to expansion or poor slope stability subject to risk of subsidence or liquefaction. However, compliance with SWRCB Order WQ 2023-0102-DWQ; MCCR sections 10A.17.070(I) and 10A.17.070(L); Mendocino County Code's Grading Ordinance; and the CBC would ensure proper siting and design, minimizing the potential impacts related to siting of structures on unstable soils. For these reasons, impacts associated with geologic hazards would be **less than significant**.

### Mitigation Measures

No mitigation is required for this impact.



### Impact 3.7-4: Have Soils Incapable of Adequately Supporting the Use of Septic Tanks or Alternative Wastewater Disposal Systems Where Sewers Are Not Available for the Disposal of Wastewater

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Potential expansion of existing provisionally licensed, new licensed commercial cannabis cultivation sites, and associated processing and/or distribution transport-only operations associated with the implementation of the project could lead to the installation of septic tanks and onsite sewage disposal systems. Portions of the County may contain areas with soils not suitable for wastewater treatment. Such systems must be sited, designed, and constructed in accordance with applicable state and local requirements. Because the siting and design of wastewater disposal systems is governed by existing requirements, there would be a **less-than-significant** impact.

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As noted in Section 3.7.1, “Regulatory Setting,” the County Code of Ordinances includes regulations of onsite sewage systems to ensure proper design and protection of public health.

#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual licensure would not result in new impacts associated onsite sewage disposal systems as operations are not anticipated to be altered through the annual licensing process. Any modifications or new onsite disposal systems would be required to comply with section 16.08.020 of the County Code of Ordinances and the SWCRB OWTS Policy for domestic sewage. Pursuant to Term 27 of Attachment A of the SWRCB Order WQ 2023-0102-DWQ, cannabis waste cannot be discharged to onsite sewage disposal systems. Therefore, there would be no impact from existing provisionally licensed sites because they would retain the extent of their existing licensed commercial cannabis cultivation.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation site onsite sewage disposal systems would be subject to regulations under section 16.08.020 of the County Code of Ordinances and the SWCRB OWTS Policy for domestic sewage. Pursuant to Term 27 of Attachment A (Section 1, General Requirements and Prohibitions) of the SWRCB Order WQ 2023-0102-DWQ, commercial cannabis waste cannot be discharged to onsite sewage disposal systems. For these reasons, this impact would be less than significant.

#### Future Provisionally Licensed Sites

Depending on location and whether or not connections to existing wastewater infrastructure and service are available, new licensed commercial cannabis cultivation and associated processing or distribution transport-only uses may require onsite septic disposal systems for domestic wastewater. The design and installation of these systems are regulated under section 16.08.020 of the County Code of Ordinances and the SWCRB OWTS Policy for domestic sewage. Pursuant to Term 27 of Attachment A (Section 1, General Requirements and Prohibitions) of the SWRCB Order WQ 2023-0102-DWQ, commercial cannabis waste cannot be discharged to onsite sewage disposal systems. Compliance with these requirements would ensure that impacts associated with wastewater disposal systems for new licensed commercial cannabis cultivation sites would be less than significant.

### Summary

As described above, existing provisionally licensed, potential expansion of existing provisionally licensed, and future licensed commercial cannabis cultivation sites have the potential to require the use of onsite septic disposal systems. Through compliance with design and installation requirements regulated under section 16.08.020 of the County Code of Ordinances and the SWRCB's OWTS Policy, impacts associated with the use of septic or other wastewater disposal systems for domestic uses would be reduced to **less than significant**.

### Mitigation Measures

No mitigation is required for this impact.

### Impact 3.7-5: Directly or Indirectly Destroy a Unique Paleontological Resource or Site or Unique Geologic Feature

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Potential expansion of existing provisionally licensed, new licensed commercial cannabis cultivation sites, and associated processing and/or distribution transport-only operations could result in the accidental damage of previously undiscovered paleontological resources. However, with compliance of Mendocino County General Plan policy DE-116, paleontological resources analyses would be conducted for each new site to avoid damage to resources. This impact would be **less than significant**.

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As noted in Section 3.7.2, "Environmental Setting," there are geological features in the County that have the potential to contain paleontological resources. Paleontological resources are classified as nonrenewable scientific resources and are protected by state statute.

### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and distribution transport-only operations transitioning to annual licensure would not result in new impacts associated with paleontological resources as operations are not anticipated to be altered through the annual licensing process. Therefore, there would be no impact from existing provisionally licensed sites because they would retain the extent of their existing licensed commercial cannabis cultivation.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation operations features could result in damage to or destruction of previously undiscovered and important paleontological resources. However, these licensed commercial cannabis cultivation sites would be required to comply with Mendocino County General Plan Policy DE-116, which states that paleontological resources studies would be conducted at the County's discretion for all project applications for expansion of cultivation activities and would provide mitigation measures for any resources in a project area that cannot be avoided. If paleontological resources are discovered, all work shall be halted immediately within 50 feet of the resource, the County Planning and Building Services Department shall be notified, and a qualified paleontologist shall be retained to determine the significance of the discovery. Mitigation recommendations shall be considered by the County and project applicant, which may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. The project applicant would be required to implement the agreed upon mitigation measure necessary for protection of paleontological resources. Therefore, compliance with the General

Plan policy DE-116, would ensure that ground-moving activities associated with future licensed sites would not result in the destruction of a unique paleontological resource. For these reasons, this impact would be less than significant.

#### New Licensed Sites

Future new licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations could include vegetation removal, grading, and cut and fill for roads, water storage ponds, and building pads. This could result in damage to or destruction of previously undiscovered and important paleontological resources. However, new licensed commercial cannabis cultivation sites would be required to comply with Mendocino County General Plan Policy DE-116, which states that paleontological resources studies would be conducted at the County's discretion for all project applications and would provide mitigation measures for any resources in a project area that cannot be avoided. If paleontological resources are discovered, all work shall be halted immediately within 50 feet of the resource, the County Planning and Building Services Department shall be notified, and a qualified paleontologist shall be retained to determine the significance of the discovery. Mitigation recommendations shall be considered by the County and project applicant, which may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. The project applicant would be required to implement the agreed upon mitigation measure necessary for protection of paleontological resources. Therefore, compliance with the General Plan policy DE-116, would ensure that ground-moving activities associated with future licensed sites would not result in the destruction of a unique paleontological resource. This impact would be less than significant.

#### Summary

As described above, existing provisionally licensed commercial cannabis cultivation sites would have no impact associated with paleontological resources. However, potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations have the potential to disturb previously undiscovered and important paleontological resources during development activities. Compliance with General Plan policy DE-116 would ensure that ground-moving activities associated with commercial cannabis cultivation sites would not result in the destruction of a unique paleontological resource. For these reasons, the impact on paleontological resources would be **less than significant**.

#### Mitigation Measures

No mitigation is required for this impact.

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## 3.8 GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

This section presents a summary of regulations applicable to greenhouse gas (GHG) emissions, a summary of climate change science and GHG sources in California, quantification of project-generated GHG emissions and discussion about their contribution to global climate change, and analysis of the project's resiliency to climate change-related risks. In addition, mitigation measures are recommended to reduce the project's contribution to climate change.

No comments that pertain to climate change were provided during the notice of preparation (NOP) scoping period. All comments received in response to the NOP are presented in Appendix A of this EIR.

### 3.8.1 Regulatory Setting

#### FEDERAL

Supreme Court Ruling: *Massachusetts et al. v. Environmental Protection Agency et al.* (2007) 549 US 497

In *Massachusetts et al. v. Environmental Protection Agency et al.* (2007) 549 US 497, the Supreme Court of the United States ruled that carbon dioxide (CO<sub>2</sub>) is an air pollutant as defined under the federal Clean Air Act (CAA) and that the US Environmental Protection Agency (EPA) has the authority to regulate GHG emissions. In 2010, EPA started to address GHG emissions from stationary sources through its New Source Review permitting program, including operating permits for "major sources" issued under Title V of the CAA.

The National Highway Traffic Safety Administration regulates vehicle emissions through the Corporate Average Fuel Economy (CAFE) Standards. On April 1, 2022, the Secretary of Transportation unveiled new CAFE standards for 2024–2026 model year passenger cars and light-duty trucks. These new standards require new vehicles sold in the United States to average at least 40 miles per gallon and apply to all states except those that enforce stricter standards.

#### STATE

Plans, policies, regulations, and laws established by the state agencies are generally presented in the order in which they were established.

#### Statewide GHG Emission Targets and Climate Change Scoping Plan

Reducing GHG emissions in California has been the focus of the state government for approximately two decades. GHG emission targets established by the state legislature include reducing statewide GHG emissions to 1990 levels by 2020 (Assembly Bill (AB) 32, Chapter 488, Statutes of 2006) and reducing emissions to 40 percent below 1990 levels by 2030 (Senate Bill (SB) 32, Chapter 249, Statutes of 2016). Executive Order S-3-05 calls for statewide GHG emissions to be reduced to 80 percent below 1990 levels by 2050. This target was superseded by AB 1279 (Chapter 337, Statutes of 2022), which codifies a goal for carbon neutrality and to reduce emissions by 85 percent below 1990 levels by 2045. These targets are in line with the scientifically established levels needed in the United States to limit the rise in

global temperature to no more than 2 degrees Celsius (°C), the warming threshold at which major climate disruptions, such as super droughts and rising sea levels, are projected; these targets also pursue efforts to limit the temperature increase even further to 1.5°C (United Nations 2015).

On December 16, 2022, the California Air Resources Board (CARB) adopted the Final 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan), which traces the state's pathway to achieve carbon neutrality and the goal to achieve an 85-percent reduction in 1990 emissions by 2045. It identifies the reductions needed by each GHG emission sector (e.g., transportation (including off-road mobile source emissions), industry, electricity generation, agriculture, commercial and residential, pollutants with high global warming potential, and recycling and waste) to achieve these goals.

The state has also passed more detailed legislation addressing GHG emissions associated with transportation, electricity generation, and energy consumption, as summarized below.

#### Transportation-Related Standards and Regulations

As part of its Advanced Clean Cars program, CARB established GHG emission standards and fuel efficiency standards for fossil fuel-powered on-road vehicles, which are more stringent than those of EPA. The program's initial goal of requiring zero-emission vehicle (ZEV) regulation (i.e., battery, fuel cell, and plug-in hybrid electric vehicles (EVs)) to account for up to 15 percent of California's new vehicle sales by 2025 was superseded by Executive Order N-79-20, which directed the state to scale down the sale of internal combustion engines and achieve 100-percent ZEV sales by 2035. The Advanced Clean Cars II program, which was adopted by CARB in August 2022, provides the regulatory framework for ensuring the sales requirement of Executive Order N-79-20 to ultimately reach 100-percent ZEV sales in the state by 2035.

In addition, Executive Order B-48-18, signed into law in January 2018, requires all state entities to work with the private sector to have at least 5 million ZEVs on the road by 2030, as well as 200 hydrogen-fueling stations and 250,000 EV-charging stations installed by 2025. It specifies that 10,000 of these charging stations must be direct-current fast chargers.

CARB adopted the Low Carbon Fuel Standard (LCFS) in 2007 to reduce the carbon intensity (CI) of California's transportation fuels. Low-CI fuels emit less CO<sub>2</sub> than other fossil fuel-based fuels, such as gasoline and fossil diesel. The LCFS applies to fuels used by on-road motor vehicles and off-road vehicles, including construction equipment (Wade, pers. comm., 2017).

Every county in California is served by a Regional Transportation Planning Agency, responsible for developing a regional transportation plan (RTP). The Mendocino Council of Governments (MCOG) serves as the Regional Transportation Planning Agency for Mendocino County. MCOG completed and adopted its most recent RTP, the Mendocino Council of Governments RTP and Active Transportation Plan (ATP) (2022 RTP/ATP) on February 25, 2022. The 2022 RTP/ATP contains goals and policies to reduce the County's transportation-related GHG emissions through actions such as increasing EV use, increasing the use of alternative fuels, and promoting development density and alternative transportation (e.g., walking, biking, public transportation) to reduce vehicle miles traveled (VMT).

#### Legislation Associated with Electricity Generation

SB 100 (Chapter 312, Statutes of 2018) sets a three-stage compliance period requiring all California utilities, including independently owned utilities, energy service providers, and community choice aggregators, to generate 52 percent of their electricity from renewables by

December 31, 2027; 60 percent by December 31, 2030; and 100 percent carbon-free electricity by December 31, 2045. SB 1020 (Chapter 361, Statutes of 2022) supersedes the goals of SB 100 by requiring that eligible renewable energy resources and zero-carbon resources supply 90 percent of all retail sales of electricity to California end-use customers by December 31, 2035; 95 percent of all retail sales of electricity to California end-use customers by December 31, 2040; and 100 percent of all retail sales of electricity to California end-use customers by December 31, 2045; and supply 100 percent of electricity procured to serve all state agencies by December 31, 2035.

## Building Energy Efficiency Standards

### CCR, Title 24, Part 6

The energy consumption of new residential and nonresidential buildings in California is regulated by the state's Building Efficiency Standards (California Energy Code, CCR, title 24, Part 6). The California Energy Commission (CEC) updates the California Energy Code every 3 years with more stringent design requirements for reduced energy consumption, which results in the generation of fewer GHG emissions. The current California Energy Code will require builders to use more energy-efficient building technologies for compliance with increased restrictions on allowable energy use. The core focus of the Building Efficiency Standards has been efficiency, but the 2019 California Energy Code ventured into on-site electricity generation by requiring solar photovoltaic (PV) systems on new homes, resulting in significant GHG savings. The 2022 California Energy Code, the most recent version of the Building Efficiency Standards, advances the on-site energy generation progress started in the 2019 California Energy Code by encouraging electric heat pump technology and use, establishing electric-ready requirements when natural gas is installed, expanding solar PV system and battery storage standards, and strengthening ventilation standards to improve indoor air quality. The CEC estimates that the 2022 California Energy Code will save consumers \$1.5 billion and reduce GHG emissions by 10 million metric tons of CO<sub>2</sub> equivalent (MMTCO<sub>2e</sub>) over the next 30 years (CEC 2021).

### CCR, Title 24, Part 11

The California Green Building Standards Code, referred to as CALGreen, was added to CCR, title 24 as Part 11, initially in 2009 as a voluntary code. It became mandatory on January 1, 2011 (as part of the 2010 California Building Standards Code). The current version is the 2022 CALGreen Code, which took effect on January 1, 2023. As compared to the 2019 CALGreen Code, the 2022 CALGreen Code strengthened sections pertaining to EV and bicycle parking, water efficiency and conservation, and material conservation and resource efficiency, among other sections of the CALGreen Code. The CALGreen Code sets design requirements equivalent to or more stringent than those of the California Energy Code for energy efficiency, water efficiency, waste diversion, and indoor air quality. These codes are adopted by local agencies that enforce building codes and used as guidelines by state agencies for meeting the requirements of Executive Order B-18-12.

CALGreen establishes two tiers of standards to provide designers and jurisdictions the opportunity to go beyond the minimum mandatory requirements to promote the use of design and construction concepts that minimize the building's impact on the environment and promote a more sustainable design. Tier 1 requirements are more stringent than the base mandatory CALGreen provisions, and Tier 2 achieves an even higher standard. Local governments may adopt ordinances that make tier options mandatory to meet their community's sustainability goals.

## Department of Cannabis Control

CCR, title 4, division 19 includes the following requirements regarding energy use and greenhouse gases for cannabis uses.

### Section 16305: Renewable Energy Requirements

- (a) Beginning January 1, 2023, all holders of indoor, tier 2 mixed-light license types of any size, and all holders of nursery licenses using indoor or tier 2 mixed-light techniques shall ensure that electrical power used for commercial cannabis activity meets the average electricity greenhouse gas emissions intensity required by their local utility provider pursuant to the California Renewables Portfolio Standard Program in division 1, part 1, chapter 2.3, article 16 (commencing with section 399.11) of the Public Utilities Code.
- (b) If a licensed cultivator's average weighted greenhouse gas emission intensity, as calculated and reported upon license renewal pursuant to section 15020, is greater than the local utility provider's greenhouse gas emission intensity, the licensee shall obtain carbon offsets to cover the excess in carbon emissions from the previous annual licensed period. The carbon offsets shall be purchased from one or more of the following recognized voluntary carbon registries:
  - (1) American Carbon Registry,
  - (2) Climate Action Reserve, or
  - (3) Verified Carbon Standard.

## LOCAL

### Mendocino County Air Quality Management District

The Mendocino County Air Quality Management District (MCAQMD) has GHG regulatory jurisdiction in Mendocino County.

### Mendocino County Air Quality Management District Rules

All projects in Mendocino County are subject to adopted MCAQMD rules and regulations in effect at the time of construction. The following specific rules may be applicable to the construction and operation of the project:

#### **RULE 221.4: EMISSION LIMITATIONS**

- a. New Sources: A new stationary source subject to this rule shall comply with the requirements of Rule 1-220, including implementation of Best Available Control Technology for GHG emissions, if either of the following thresholds is met:
  - i. On or after January 2, 2011, the new stationary source is significant and the new stationary source has the potential to emit greater than or equal to 75,000 tons per year of CO<sub>2</sub>e, and the potential emissions of all GHGs emitted, without consideration of GWP, will be greater than or equal to 100 tons per year on a mass basis for a source in any category listed in Appendix B, or 250 tons per year on a mass basis for any other source; or
  - ii. On or after July 1, 2011, either the provisions of Rule 1-221.4 (a)(1) apply or the new stationary source has the potential to emit GHGs greater than or equal to 100,000 tons per year of CO<sub>2</sub>e and the potential emissions of all GHGs emitted, without consideration of GWP, will be greater than or equal to 100 tons per year on a mass basis for a source in any category listed in Appendix B, or 250 tons per year on a mass basis for any other source.



- b. Existing Sources: A stationary source subject to this rule shall comply with the provisions of either section (1) or (2), below.
- i. A stationary source shall comply with the requirements of Regulation 5, and shall include in its operating permit emissions of GHGs and all applicable GHG requirements, if either of the following thresholds is met:
    - a. On or after January 2, 2011, the stationary source is otherwise required to obtain a Part 70 permit pursuant to the requirements of Regulation 5; or
    - b. On or after July 1, 2011, either the provisions of Rule 1-221.4 (b)(1)(A) apply, or it has the potential to emit GHGs greater than or equal to 100,000 tons per year of CO<sub>2</sub>e, and the potential emissions of all GHGs emitted, without consideration of GWP, will be greater than or equal to 100 tons per year on a mass basis.
  - ii. Unless the stationary source complies with the provisions of Rule 1-221.4 (b)(1) above or the owner or operator has chosen to operate the stationary source under an alternative operational limit specified in Rule 1-221.7 (a) below, no stationary source subject to this rule shall emit more than 50,000 tons of CO<sub>2</sub>e, in any 12-month period.

Calculations and other methods to determine applicability of, and compliance with the provisions of Rule 1-221.4 (b) shall be as specified in Regulation 5.

- a. Modifications to Existing Sources: Any modification to an existing stationary source subject to this rule shall comply with the requirements of Rule 1-220 and shall implement Best Available Control Technology for GHG emissions, if either of the following thresholds is met:
- i. On or after January 2, 2011, the existing stationary source is significant and all of the following apply:
    - a. The emissions increase from the modification and the net emissions increase from the facility are greater than or equal to 75,000 tons per year of CO<sub>2</sub>e; and
    - b. The emissions increase from the modification and the net emissions increase from the facility of all GHGs emitted, without consideration of GWP, will be greater than zero.
  - ii. On or after July 1, 2011, either the conditions in Rule 1-221.4 (c)(1) apply or all of the following apply:
    - a. The existing stationary source before modification is a “major source of GHG emissions;” and
    - b. The emissions increase from the modification and the net emissions increase from the facility is greater than or equal to 75,000 tons per year of CO<sub>2</sub>e; and
    - c. The emissions increase from the modification and the net emissions increase from the facility of all GHGs emitted, without consideration of GWP, will be greater than zero.
  - iii. On or after July 1, 2011, either the conditions in Rule 1-221.4 (c)(1) or (2) apply or all of the following apply:
    - a. The emissions increase from the modification and the net emissions increase from the facility are greater than or equal to 100,000 tons per year of CO<sub>2</sub>e; and
    - b. The emissions increase from the modification and the net emissions increase from the facility of all GHGs emitted, without consideration of GWP, will be greater than or equal to 100 tons per year on a mass basis for a source in any category listed in Appendix B, or 250 tons per year on a mass basis for any other source.

## Mendocino County General Plan

The following policies of the Mendocino County General Plan (General Plan), which was adopted in 2009 and has received updates to various sections of the General Plan as recently as 2021, would apply to the project related to greenhouse gases:

- ▶ **Policy RM-51:** Mendocino County acknowledges the real challenge of climate change and will implement existing strategies to reduce greenhouse gas emissions and incorporate future measures that the State adopts in the coming years.
  - **Action Item RM-51.1:** Mendocino County acknowledges the real challenge of climate change and will implement existing strategies to reduce greenhouse gas emissions and incorporate future measures that the State adopts in the coming years.
  - **Action Item RM-51.2:** Create a greenhouse gas reduction plan for the county's unincorporated areas that sets specific reduction strategies and targets to meet.
  - **Action Item RM-51.3:** Reduce Mendocino County's greenhouse gas emissions by adopting measures that reduce fossil fuel energy resources consumption.

## 3.8.2 Environmental Setting

### GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the atmosphere from space. A portion of the radiation is absorbed by the earth's surface, and a smaller portion of this radiation is reflected toward space. The absorbed radiation is then emitted from the earth as low-frequency infrared radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

Prominent GHGs contributing to the greenhouse effect are CO<sub>2</sub>, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Human-caused emissions of these GHGs in excess of natural ambient concentrations are found to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is "extremely likely" that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in GHG concentrations and other anthropogenic forcing (IPCC 2014).

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas most pollutants with localized air quality effects have relatively short atmospheric lifetimes (approximately 1 day), GHGs have long atmospheric lifetimes (1 year to several thousand years). GHGs persist in the atmosphere long enough to be dispersed around the globe. Although the lifetime of any GHG molecule depends on multiple variables and cannot be determined with any certainty, it is understood that more CO<sub>2</sub> is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, and other forms of sequestration. Of the total annual human-caused CO<sub>2</sub> emissions, approximately 55 percent is estimated to be sequestered through ocean and land uptake every year, averaged over the last 50 years,

whereas the remaining 45 percent of human-caused CO<sub>2</sub> emissions remains stored in the atmosphere (IPCC 2013).

The quantity of GHGs in the atmosphere responsible for climate change is not precisely known, but it is considered to be enormous. No single project alone would measurably contribute to an incremental change in the global average temperature or to global or local climates or microclimates. From the standpoint of CEQA, GHG impacts relative to global climate change are inherently cumulative.

## GREENHOUSE GAS EMISSION SOURCES

As discussed previously, GHG emissions are attributable in large part to human activities. The total GHG inventory for California in 2020 was 370 MMTCO<sub>2e</sub> (CARB 2022). This is less than the 2020 target of 431 MMTCO<sub>2e</sub> (CARB 2022).

Table 3.8-1 summarizes the statewide GHG inventory for California.

**Table 3.8-1 Statewide GHG Emissions by Economic Sector (2020)**

Sector	Emissions (MMTCO <sub>2e</sub> )	Percent
Transportation	141	38%
Industrial	85	23%
Electricity generation (in state)	41	11%
Agriculture and forestry	33	9%
Residential	30	8%
Commercial	22	6%
Electricity generation (imports)	19	5%
Total	370	100%

Source: CARB 2022.

As shown in Table 3.8-1, transportation, industry, and electricity generation are the largest GHG emission sectors.

Emissions of CO<sub>2</sub> are byproducts of fossil fuel combustion. Methane, a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. Nitrous oxide is also largely attributable to agricultural practices and soil management. Two of the most common processes for removing CO<sub>2</sub> from the atmosphere involve sequestration (the capture and storage of CO<sub>2</sub>) and dissolution (CO<sub>2</sub> dissolving within water). CO<sub>2</sub> sinks and reservoirs absorb CO<sub>2</sub> through these methods utilizing vegetation and ocean water.

## EFFECTS OF CLIMATE CHANGE ON THE ENVIRONMENT

According to the Intergovernmental Panel on Climate Change, which was established in 1988 by the World Meteorological Organization and the United Nations Environment Programme, the global average temperature will increase by 3.7°C to 4.8°C (6.7 degrees Fahrenheit (°F) to 8.6°F) by the end of the century unless additional efforts to reduce GHG emissions are made (IPCC 2014: 10). According to California's Fourth Climate Change Assessment, if global GHG emissions reduce at a moderate rate, California will experience average daily high temperatures that are warmer than the historic average by 2.5°F from 2006 to 2039, by 4.4°F

from 2040 to 2069, and by 5.6°F from 2070 to 2100. However, if GHG emissions continue at current rates, then California will experience average daily high temperatures that are warmer than the historic average by 2.7°F from 2006 to 2039, by 5.8°F from 2040 to 2069, and by 8.8°F from 2070 to 2100 (OPR et al. 2018).

Since its previous climate change assessment in 2012, California has experienced several of the most extreme natural events in its recorded history: a severe drought from 2012 through 2016; an almost nonexistent Sierra Nevada winter snowpack in 2014-2015; increasingly large and severe wildfires; and back-to-back years of the warmest average temperatures (OPR et al. 2018). According to the California Natural Resource Agency's Safeguarding California Plan: 2018 Update, California experienced the driest 4-year statewide precipitation on record from 2012 through 2015; the warmest years on average in 2014, 2015, and 2016; and the smallest and second smallest Sierra snowpack on record in 2015 and 2014 (CNRA 2018). According to the National Oceanic and Atmospheric Administration and the National Aeronautics and Space Administration, 2016, 2017, and 2018 were the hottest recorded years in history (NOAA 2019). In contrast, the northern Sierra Nevada experienced one of its wettest years on record during the 2016-2017 water year (CNRA 2018). The changes in precipitation exacerbate wildfires throughout California through a cycle of high vegetative growth coupled with dry, hot periods which lowers the moisture content of fuel loads. As a result, the frequency, size, and devastation of forest fires have increased. In November 2018, the Camp Fire completely destroyed the town of Paradise in Butte County and caused 85 fatalities, becoming the state's deadliest fire in recorded history, and the largest fires in the state's history have occurred between 2018 and 2020. Moreover, changes in the intensity of precipitation events following wildfires can also result in devastating mudslides and landslides. In January 2018, following the Thomas Fire, the city of Santa Barbara received 0.5 inches of rain in just 5 minutes, causing destructive mudslides formed from the debris and loose soil left behind by the fire. These mudslides resulted in 21 deaths.

As temperatures increase, the amount of precipitation falling as rain rather than snow also increases, which could lead to increased flooding because water that would normally be held in the snowpack of the Sierra Nevada and Cascade Range until spring would flow into the Central Valley during winter rainstorm events. This scenario would place more pressure on California's levee/flood control system (CNRA 2018). Furthermore, in the extreme scenario involving the rapid loss of the Antarctic ice sheet and the glaciers atop Greenland, the sea level along California's coastline is expected to rise 54 inches by 2100 if GHG emissions continue at current rates (OPR et al. 2018).

Temperature increases and changes to historical precipitation patterns will likely affect ecological productivity and stability. Existing habitats may migrate from climatic changes where possible, and those habitats and species that lack the ability to retreat will be severely threatened. Altered climate conditions will also facilitate the movement of invasive species to new habitats, where they would outcompete native species. Altered climatic conditions dramatically endanger the survival of arthropods (e.g., insects, spiders), which could have cascading effects throughout ecosystems (Lister and Garcia 2018). Conversely, a warming climate may support the populations of other insects, such as ticks and mosquitos, which transmit diseases harmful to human health, such as the Zika virus, West Nile virus, and Lyme disease (European Commission Joint Research Centre 2018).

Changes in temperature, precipitation patterns, extreme weather events, wildfires, and sea-level rise have the potential to threaten transportation and energy infrastructure, crop production, forests and rangelands, and public health (CNRA 2018; OPR et al. 2018). The

effects of climate change will also have an indirect adverse impact on the economy as more severe natural disasters cause expensive physical damage to communities and the state.

Additionally, adjusting to the physical changes associated with climate change can produce mental health impacts, such as depression and anxiety.

### 3.8.3 Environmental Impacts and Mitigation Measures

#### METHODOLOGY

As further discussed below, existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual licensure are not anticipated to be altered through the annual licensing process, so no new GHG-related impacts would be expected. Potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations could result in an increase in GHG emissions from short-term construction-related activities and their long-term operation. As recommended by MCAQMD, both construction and operation-related emissions of GHGs were calculated using the California Emissions Estimator Model (CalEEMod) Version 2022.1.1.17 computer program for the types and sizes of commercial cannabis cultivation indoor, outdoor, mixed-light, and nursery sites that could be licensed in the future. Because on-site processing uses are incorporated into the construction and operation of commercial cannabis cultivation sites, no separate modeling was conducted. The modeling results described are based on emissions associated with typical outdoor, mixed-light, indoor, and commercial nursery commercial cannabis cultivation. The reader is referred to Chapter 4, “Cumulative Impacts,” for a cumulative GHG analysis of construction and operation that reflects the estimated extent of future commercial cannabis cultivation licensing described in “Approach to the Environmental Analysis,” in the introduction to this chapter.

Emissions were estimated for the construction of each commercial cannabis cultivation type using the acreage provided in the introduction to this chapter. Operational emissions were also estimated. CalEEMod was used to estimate on-site operational emissions, including emissions generated by off-road equipment, maintenance activity, energy use, and water and solid waste generation. CalEEMod energy consumption rates were adjusted to account for energy efficiency improvements from the 2019 California Energy Code as a conservative assumption. Default energy consumption for electricity was used based on CalEEMod data for PG&E. Off-road equipment assumed includes a utility vehicle (e.g., John Deere Gator) for commercial cannabis cultivation operations. Mobile source emissions were estimated using the daily trip rate (3,726 trips per day) expressed in Section 3.15, “Transportation,” combined with default trip length assumed in CalEEMod. Emissions from wastewater and solid waste generation were estimated using default values in CalEEMod.

Detailed model assumptions and inputs for these calculations are presented in Appendix C.

#### THRESHOLDS OF SIGNIFICANCE

The issue of global climate change is inherently a cumulative issue because the GHG emissions of individual projects cannot be shown to have any material effect on global climate. Thus, the project’s impact on climate change is addressed only as a cumulative impact.

State CEQA Guidelines, section 15064 and relevant portions of Appendix G recommend that a lead agency consider a project's consistency with relevant, adopted plans and discuss any inconsistencies with applicable regional plans, including plans to reduce GHG emissions. Under Appendix G of the State CEQA Guidelines, implementing a project would result in a cumulatively considerable contribution to climate change if it would:

- ▶ Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment or
- ▶ Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

With respect to GHG emissions, State CEQA Guidelines, section 15064.4(a) states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions resulting from a project. The CEQA Guidelines note that an agency has the discretion to either quantify a project's GHG emissions or rely on a "qualitative analysis or performance-based standards" (State CEQA Guidelines, section 15064.4(a)). A lead agency may use a "model or methodology" to estimate GHG emissions and has the discretion to select the model or methodology it considers "most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change" (State CEQA Guidelines, section 15064.4(c)). The State CEQA Guidelines provide that the lead agency should consider the following when determining the significance of impacts from GHG emissions on the environment (State CEQA Guidelines, section 15064.4(b)):

1. The extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting.
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

State CEQA Guidelines, Appendix G is a sample initial study checklist that includes a number of factual inquiries related to the subject of climate change, as it does on a whole series of environmental topics. Notably, lead agencies are under no obligation to use these inquiries in fashioning thresholds of significance on these subjects or indeed on any subject addressed in the checklist (*Save Cuyama Valley v. County of Santa Barbara* (2013) 213 Cal.App.4th 1059, 1068). Rather, with few exceptions, "CEQA grants agencies discretion to develop their own thresholds of significance" (*ibid.*). Even so, it is a common practice for lead agencies to take the language from the inquiries set forth in Appendix G and to use that language in fashioning thresholds. Mendocino County has done so here.

MCAQMD does provide a recommendation for evaluating a project's cumulative contribution to climate change. MCAQMD recommends that nonstationary source projects measure emissions against a 1,100 MTCO<sub>2</sub> per year or 4.6 MTCO<sub>2</sub> per service population per year; however, these metrics were developed prior to the adoption of AB 1279 and are not tied to the state's most recent GHG reduction targets (i.e., carbon neutrality and an 85 percent reduction from 1990 GHG inventory level by 2045). With respect to regional air pollution, MCAQMD defers to the recommendations made by the Bay Area Air Quality Management District (BAAQMD), which also has a substantiated GHG threshold for determining significance in alignment with the state's goal of achieving carbon neutrality by 2045. Because BAAQMD's thresholds are substantiated by evidence, they have been applied in this analysis.

Unlike air pollution, which are pollutants of regional and local concern, GHGs are global pollutants; therefore, the location of where they are emitted is irrelevant. Because MCAQMD does not provide a recommended threshold for evaluating a project's cumulative contribution to climate change, the DCC has instead applied guidance published by BAAQMD in 2022. BAAQMD's qualitative guidelines are intended to ensure that projects constructed and operated within its jurisdiction contribute to the state's long-term GHG reduction target of carbon neutrality by 2045, as mandated by Executive Order B-55-18. When BAAQMD's thresholds were developed, Executive Order B-55-18 was the most ambitious regulatory requirement (i.e., carbon neutrality). As discussed in Section 3.8.1, "Regulatory Setting," the state adopted AB 1279 in 2022, codifying the goal of achieving carbon neutrality by 2045. Therefore, compliance with BAAQMD's guidance would be indicative of compliance with state requirements (Executive Order B-55-18 and AB 1279) to achieve carbon neutrality by 2045 (BAAQMD 2022).

BAAQMD's thresholds are structured to provide projects with two options to demonstrate consistency with the goal of carbon neutrality by 2045: (a) incorporation of certain project design elements and (b) incorporation of relevant GHG reduction measures from a qualified climate action plan. Mendocino County does not have a qualified climate action plan. Accordingly, option (a) of BAAQMD's guidance will be applied, which includes the elimination of on-site natural gas, a reduction in VMT aligning with the Governor's Office of Planning and Research's (OPR's) SB 743 VMT targets, and compliance with off-street EV charging requirements in the most recently adopted CALGreen Code (BAAQMD 2022). These project design elements are similar to typical measures that would be found in a GHG reduction plan.

Although these project design elements were developed by BAAQMD for projects within its jurisdiction, they are considered appropriate thresholds that may be applied to other projects in the state. As described above, GHGs are global pollutants that can affect the climate regardless of the location where they are emitted. The aforementioned project design features included in BAAQMD's guidance are intended to be used by local governments to provide the infrastructure to assist CARB and other agencies in implementing statewide policies and programs to support the state's long-term GHG emission reduction goals of carbon neutrality and an 85-percent reduction in 1990 levels of emissions by 2045 as mandated by AB 1279.

These project design features also align with 2022 Scoping Plan, Appendix D (Local Actions), which directs municipalities to promote fully decarbonized development, reduce VMT, and provide EV charging infrastructure that, at a minimum, meets the most ambitious voluntary standard of the CALGreen Code at the time of project approval. Projects that implement these measures would not conflict with the 2022 Scoping Plan.

BAAQMD's thresholds are intended to be used to satisfy both questions of Appendix G: (a) generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment or (b) conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Implementation of BAAQMD's project design features would demonstrate that a project would not either directly or indirectly emit a significant amount of GHG emissions and would show compliance with the most recent version of CARB's Scoping Plan (i.e., 2022 Scoping Plan), which provides the framework to meeting the state's long-term goal of achieving carbon neutrality by 2045. Therefore, by using BAAQMD's threshold of significance, this analysis satisfies the two questions of Appendix G and distills the project's contribution into one impact. Notably, BAAQMD does not recommend a significance determination for construction-generated GHG emissions in recognition that construction-related GHG emissions make up a small fraction of a project's overall emissions.

Therefore, construction-related GHG emissions are disclosed for informational purposes but are not compared to a threshold of significance.

Therefore, BAAQMD's guidance is applied to the project. The project would not result in a significant climate change impact if it would meet the following criteria:

- ▶ The project would not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).
- ▶ Implementing the project would not result in any wasteful, inefficient, or unnecessary energy use as determined by the analysis required under PRC section 21100(b)(3) and section 15126.2(b) of the State CEQA Guidelines.
- ▶ The project would achieve a reduction in project-generated VMT below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted SB 743 VMT target, reflecting the recommendations provided in OPR's Technical Advisory on Evaluating Transportation Impacts in CEQA:
  - Residential projects: 15 percent below the existing VMT per capita
  - Office projects: 15 percent below the existing VMT per employee
  - Retail projects: no net increase in existing VMT
- ▶ The project would achieve compliance with off-street EV requirements in the most recently adopted version of CALGreen Tier 2.

## ISSUES NOT DISCUSSED FURTHER

All issues pertaining to climate change are discussed in this analysis.

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Impact 3.8-1: Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases

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Operation of expanded of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would result in GHG emissions that could conflict with state GHG reduction targets and decarbonization efforts. Therefore, future operation of commercial cannabis cultivation sites would have a **significant** climate change impact.

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#### Existing Provisionally Licensed Sites

Existing provisionally licensed commercial cannabis cultivation sites transitioning to annual licensure would not be altered through the annual licensing process, so no new construction- or operation-related climate change impacts are expected. Therefore, no impact from construction- or operation-related GHG emissions are associated with existing provisionally licensed sites.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. The extent of expanded licensed commercial cannabis cultivation operations



features are not known, but are expected to result in increases in GHG emissions as part of construction and operation. CCR, title 4, section 16305 requires that indoor, Tier 2 mixed-light, and nursery sites using Tier 2 lighting commercial cannabis cultivation license holders ensure that electrical power used for cannabis activity meets the average electricity GHG emissions intensity required by their local utility provider pursuant to the California Renewables Portfolio Standard Program in division 1, part 1, chapter 2.3, article 16 (commencing with section 399.11) of the Public Utilities Code. CCR, title 4, section 16305 also requires that licensed cultivator's average weighted GHG emission intensity, as calculated and reported upon license renewal pursuant to CCR, title 4, section 15020, is greater than the local utility provider's GHG emission intensity, the licensee shall obtain carbon offsets to cover the excess in carbon emissions from the previous annual licensed period. While these requirements provide mitigation from on-site energy use, an increase in GHG emissions would occur. This impact would be significant.

### Future Licensed Sites

Construction and operation of new commercial cannabis cultivation operations would generate GHG emissions. During construction of new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations, GHGs would be emitted by construction equipment, haul trips transporting equipment and materials, and commute trips by construction workers. The total amount of emissions generated by the construction of one outdoor, one mixed-use, one indoor, and one nursery commercial cannabis cultivation sites would total 208 MTCO<sub>2e</sub> (see Appendix C for additional details). As noted in the discussion under "Thresholds of Significance," BAAMQD does not recommend a numerical threshold for evaluating the significance of construction-generated GHG emissions. Therefore, these emissions are disclosed for informational purposes.

Operation of commercial cannabis cultivation sites licensed under the project would generate GHG emissions associated with worker commute trips, haul truck trips transporting cannabis and cannabis products, landscaping and fertilizer use, water consumption, waste and wastewater generation, waste generation, and electricity use. Electricity would be consumed to power well pumps that supply irrigation water to outdoor, indoor, and mixed-light commercial cannabis cultivation operations, as well as grow lights and other equipment at indoor and mixed-light commercial cannabis cultivation sites. Use of on-site off-road equipment, such as a utility vehicle (e.g., John Deere Gator) would also generate GHG emissions. Table 3.8-2 summarizes the emissions associated with operation of individual outdoor, indoor, mixed-light, and nursery commercial cannabis cultivation sites (see Appendix C for additional details).

**Table 3.8-2 Greenhouse Gas Emissions Associated with Operation of New Commercial Cannabis Cultivation Sites**

License Type	MTCO <sub>2e</sub> /year
<b>Commercial Cannabis Cultivation Operations</b>	
Outdoor	97
Mixed light	179
Indoor	101
Nursery	40
<b>Total</b>	<b>417</b>

Note: MTCO<sub>2e</sub>/year = metric tons of carbon dioxide equivalent per year.

Source: Modeling conducted by Ascent in 2024.

BAAQMD recommends that land use development projects implement certain project design features to reduce their contribution to global climate change. These features include excluding natural gas infrastructure, including EV charging stations that meet the Tier 2 requirements of the most recent CALGreen Code, and meeting the reduction targets under SB 743 as mandated by OPR. At this programmatic stage, the DCC cannot ensure that future commercial cannabis cultivation sites would be constructed to be fully electric or meet the Tier 2 EV charging requirements given that the rural land use characteristics of the unincorporated area identified in Section 3.11, “Land Use and Planning,” may not be able feasibly support the infrastructure that would be required in all areas of the County. As discussed in Section 3.15, “Transportation,” it is too speculative to determine to what degree VMT would change as a result of implementing the project; therefore, no significance conclusion for VMT can be provided at this time.

CCR, title 4, section 16305 requires that indoor, Tier 2 mixed-light, and nurseries using Tier 2 lighting commercial cannabis cultivation license holders ensure that electrical power used for cannabis activity meets the average electricity GHG emissions intensity required by their local utility provider pursuant to the California Renewables Portfolio Standard Program in division 1, part 1, chapter 2.3, article 16 (commencing with section 399.11) of the Public Utilities Code. CCR, title 4, section 16305 also requires that licensed cultivator's average weighted GHG emission intensity, as calculated and reported upon license renewal pursuant to CCR, title 4, section 15020, is greater than the local utility provider's GHG emission intensity, the licensee shall obtain carbon offsets to cover the excess in carbon emissions from the previous annual licensed period. While these requirements provide mitigation from on-site energy use, it does not include provisions that align with the design recommendations of BAAQMD. It is foreseeable that these design requirements could be sufficient to reduce emissions to the degree the additional emissions from not adhering to BAAQMD's design features could be offset; however, at this programmatic stage this cannot be assured at the project level. Additionally, if updates are made to the CCR that align with BAAQMD's project design features (i.e., all electric development, mandatory EV charging requirements similar to the current CalGreen Code's voluntary Tier 2 requirements), future impacts would be minimized. Nevertheless, because it cannot be assured that future sites would be fully electric or meet the Tier 2 requirements of the CALGreen Code, implementation of the project would result in a significant climate change impact. Moreover, BAAQMD requests that projects achieve VMT reductions meeting OPR's reduction targets codified in SB 743, which cannot be assured through regulatory requirements or at this programmatic stage. Therefore, the project would result in a cumulatively considerable climate change impact.

### Summary

As identified above, future new licensed commercial cannabis cultivation uses would result in GHG emission increases in the County. This impact would be **significant**.

### Mitigation Measures

Mitigation Measure 3.8-1: Implement On-Site Project Design Features to Demonstrate the Fair Share in Meeting the State's Long-Term GHG Reduction Targets

DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to apply these requirements:

- ▶ Prohibit on-site natural gas or propane use.
- ▶ Implement Tier 2 requirements of the CALGreen Code's EV charging standards.
- ▶ If the aforementioned project design features cannot be feasibly incorporated into the project's design, include other relevant project design characteristics. Examples of measures that could be applied to individual commercial cannabis cultivation sites include, but are not limited to the following:
  - exceeding the requirements of the most recent version of Part 6 of the Title 24 California Building Code (California Energy Code),
  - using low-flow appliances,
  - using Energy Star appliances, and
  - implementing zero net energy buildings.

#### Significance after Mitigation

Implementation of Mitigation Measure 3.8-1 would help ensure that the construction and operation of licensed commercial cannabis cultivation sites under the project would provide the necessary infrastructure so that the sites do their fair share in assisting the state in meeting its long-term GHG reduction goal of achieving carbon neutrality by 2045. However, the effectiveness and feasibility of this mitigation could not be assured when this Draft EIR was prepared. Although it is foreseeable that application of Mitigation Measure 3.8-1 would be sufficient to reduce the impact to a less-than-significant level, the specific project design features recommended above may be deemed infeasible in the future due to economic constraints or the rural nature of future cannabis cultivation sites. Because of these uncertainties, the impact of the project would be cumulatively considerable and **significant and unavoidable**.

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## 3.9 HAZARDS AND HAZARDOUS MATERIALS

This section describes the potential impacts of the project related to hazards and hazardous materials. The analysis includes a description of the existing environmental conditions, the methods used for assessment, and the potential direct and indirect impacts of project implementation. Hazards associated with air pollutants are addressed in Section 3.3, “Air Quality and Odors;” traffic hazards are addressed in Section 3.15, “Transportation;” and wildfire hazards are addressed in Section 3.17, “Wildfire.”

Comments regarding the use and storage of pesticides and the disposal of debris from abandoned sites were received in response to the notice of preparation (NOP). These issues are addressed in the impact analysis below, as well as in Section 3.2, “Agriculture and Forestry Resources,” Section 3.5, “Biological Resources,” and Section 3.10, “Hydrology and Water Quality.” All comments received in response to the NOP are presented in Appendix A of this EIR.

### 3.9.1 Regulatory Setting

#### FEDERAL

##### Management of Hazardous Materials

Various federal laws address the proper handling, use, storage, and disposal of hazardous materials, as well as require measures to prevent or mitigate injury to health or the environment if such materials are accidentally released. The US Environmental Protection Agency (EPA) is the agency primarily responsible for enforcement and implementation of federal laws and regulations pertaining to hazardous materials. Applicable federal regulations pertaining to hazardous materials are primarily contained in Code of Federal Regulations (CFR), titles 29, 40, and 49. Hazardous materials, as defined in the code, are listed in 49 CFR 172.101. Management of hazardous materials is governed by the following laws:

- ▶ The Toxic Substances Control Act of 1976 (15 US Code (USC) section 2601 et seq.) regulates the manufacturing, inventory, and disposition of industrial chemicals, including hazardous materials. Section 403 of the Toxic Substances Control Act establishes standards for lead-based paint hazards in paint, dust, and soil.
- ▶ The Resource Conservation and Recovery Act of 1976 (RCRA) (42 USC 6901 et seq.) is the law under which EPA regulates hazardous waste from the time the waste is generated until its final disposal (“cradle to grave”).
- ▶ The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (also called the Superfund Act or CERCLA) (42 USC 9601 et seq.) gives EPA authority to seek out parties responsible for releases of hazardous substances and ensure their cooperation in site remediation.
- ▶ The Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499; USC, title 42, chapter 116), also known as SARA Title III or the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), imposes hazardous materials planning requirements to help protect local communities in the event of accidental release.
- ▶ The Spill Prevention, Control, and Countermeasure (SPCC) rule includes requirements regarding oil spill prevention, preparedness, and response to prevent oil discharges to

navigable waters and adjoining shorelines. The rule requires specific facilities to prepare, amend, and implement SPCC plans. The SPCC rule is part of the Oil Pollution Prevention regulation, which also includes the Facility Response Plan rule.

### Transport of Hazardous Materials

The US Department of Transportation (DOT) regulates transport of hazardous materials between states and is responsible for protecting the public from dangers associated with such transport. The federal hazardous materials transportation law, 49 USC 5101 et seq. (formerly the Hazardous Materials Transportation Act, 49 USC 1801 et seq.) is the basic statute regulating transport of hazardous materials in the United States. Hazardous materials transport regulations are enforced by the Federal Highway Administration, the US Coast Guard, the Federal Railroad Administration, and the Federal Aviation Administration.

### Worker Safety

The federal Occupational Safety and Health Administration (OSHA) is the agency responsible for ensuring worker safety in the handling and use of chemicals identified in the Occupational Safety and Health Act of 1970 (Public Law 91-596, 9 USC 651 et seq.). OSHA has adopted numerous regulations pertaining to worker safety, contained in CFR title 29. These regulations set standards for safe workplaces and work practices, including standards relating to the handling of hazardous materials and those required for excavation and trenching.

### Comprehensive Environmental Response, Compensation, and Liability Act

CERCLA was established to protect the public and the environment from the effects of past hazardous waste disposal activities and new hazardous material spills. It created a tax on the chemical petroleum industries to generate funds to clean up abandoned or uncontrolled hazardous waste sites for which no responsible party could be identified. CERCLA also granted authority to EPA to respond directly to hazardous waste spills and required those responsible for a spill or accidental release of hazardous materials to report the release to EPA.

SARA (Public Law 99-499) amended some provisions of CERCLA. It increased the focus on human health problems posed by hazardous waste releases, stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites, and encouraged greater citizen participation in making decisions on how sites should be cleaned up.

### Resource Conservation and Recovery Act

RCRA sets national goals for protecting human health and the environment from the potential hazards of waste disposal, conserving energy and natural resources, reducing the amount of waste generated, and ensuring that wastes are managed in an environmentally sound manner. To achieve these goals, RCRA established three interrelated programs: the solid waste program, the hazardous waste program, and the underground storage tank (UST) program.

The hazardous waste program established a system for controlling hazardous wastes from the time they are generated to the time they are disposed of (“cradle-to-grave” management). Under RCRA, owners and operators of hazardous waste treatment, storage, and disposal facilities must follow a set of standards (e.g., facility design and operations, contingency planning and emergency preparedness, and recordkeeping) to minimize risk and impacts on human health and the environment, codified in 40 CFR Part 264. Commercial cannabis cultivators would be subject to RCRA to the extent that they generate hazardous waste or store hazardous materials in USTs (California Department of Food and Agriculture 2017).

**Emergency Planning and Community Right-to-Know Act: Toxic Release Inventory**  
Section 313 of EPCRA established the Toxic Release Inventory (TRI). TRI is a publicly available database containing information on disposal and other releases of toxic chemicals from industrial facilities. As stipulated in 40 CFR Part 372, owners or operators of facilities that release toxic chemicals above a certain threshold (25,000 pounds or more per year) are required to submit information about (1) on-site releases and other disposals of toxic chemicals; (2) on-site recycling, treatment, and energy recovery associated with TRI chemicals; (3) off-site transfers of toxic chemicals from TRI facilities to other locations; and (4) pollution prevention activities at facilities. It is unlikely that commercial cannabis cultivators could release toxic chemicals above the threshold requiring reporting under TRI (California Department of Food and Agriculture 2017).

#### **Federal Insecticide, Fungicide, and Rodenticide Act**

Pesticides are regulated under the Federal Insecticide, Fungicide, and Rodenticide Act by EPA. This includes labeling and registration of pesticides as to how they may be used. EPA delegates pesticide enforcement activities in California to the California Department of Pesticide Regulation (CDPR), under title 3 of the CCR and the California Food and Agricultural Code. CDPR registers pesticides for use in California, and licenses pesticide applicators and pilots, advisors, dealers, brokers, and businesses.

Currently, no pesticides are registered for use on commercial cannabis. Therefore, commercial cultivators are limited to using only those pesticides that are exempt from residue-tolerance requirements and that are either (1) registered and labeled for a use that is broad enough to include use on commercial cannabis (e.g., unspecified green plants) or (2) exempt from registration requirements as a minimum-risk pesticide under section 25(b) of the Federal Insecticide, Fungicide, and Rodenticide Act.

#### **Hazardous Materials Transportation Act**

DOT has developed regulations in CFR, titles 10 and 49 pertaining to the transport of hazardous substances and hazardous wastes. The Hazardous Materials Transportation Act is administered by the Research and Special Programs Administration of DOT. The act provides DOT with a broad mandate to regulate the transport of hazardous materials, with the purpose of adequately protecting the nation against risk to life and property that is inherent in the commercial transportation of hazardous materials. DOT regulations that govern the transportation of hazardous materials are applicable to any person who transports, ships, or causes to be transported or shipped or who is involved in any way with the manufacture or testing of hazardous materials packaging or containers.

#### **Occupational Safety and Health Administration Worker Safety Requirements**

OSHA is responsible for ensuring worker safety. OSHA sets federal standards for implementation of workplace training, exposure limits, and safety procedures for handling hazardous substances and addressing other potential industrial hazards. OSHA also establishes criteria by which each state can implement its own health and safety program. The Hazard Communication Standard (CFR, title 29, part 1910) requires that workers be informed of the hazards associated with the materials they handle. These standards include exposure limits for a wide range of specific hazardous materials, including pesticides, as well as requirements that employers provide personal protective equipment (i.e., protective equipment for eyes, face, or extremities; protective clothing; respiratory devices) to their employees wherever it is necessary (i.e., when required by the label instructions) (29 CFR section 1910.132). Workers must be trained in safe handling of hazardous materials, use of

emergency response equipment, and building emergency response plans and procedures. Containers must be labeled appropriately, and material safety data sheets must be available in the workplace. Commercial cannabis operations would be required to comply with OSHA regulations and standards, including worker personal protective equipment requirements (California Department of Food and Agriculture 2017).

## STATE

### Management of Hazardous Materials

In California, both federal and state community right-to-know laws are coordinated through the Governor's Office of Emergency Services. The federal law, SARA Title III or EPCRA, described above, encourages and supports emergency planning efforts at the state and local levels to provide local governments and the public with information about potential chemical hazards in their communities. Because of the community right-to-know laws, information is collected from facilities that handle (e.g., produce, use, store) hazardous materials above certain quantities. The provisions of EPCRA apply to four major categories:

- ▶ Emergency planning,
- ▶ Emergency release notification,
- ▶ Reporting of hazardous chemical storage, and
- ▶ Inventory of toxic chemical releases.

The corresponding state law is Chapter 6.95 of the California Health and Safety Code (Hazardous Materials Release Response Plans and Inventory). Under this law, qualifying businesses are required to prepare a hazardous materials business plan, which would include hazardous materials and hazardous waste management procedures and emergency response procedures, including emergency spill cleanup supplies and equipment. When the applicant begins to use hazardous materials at levels that reach applicable state and/or federal thresholds, the plan is submitted to the administering agency.

The California Department of Toxic Substances Control (DTSC), a division of the California Environmental Protection Agency, has primary regulatory responsibility over hazardous materials in California, working in conjunction with EPA to enforce and implement hazardous materials laws and regulations. As required by section 65962.5 of the California Government Code, DTSC maintains a hazardous waste and substances site list for the state, known as the Cortese List. Individual regional water quality control boards (RWQCBs) are the lead agencies responsible for identifying, monitoring, and cleaning up leaking USTs.

### California Environmental Protection Agency

The California Environmental Protection Agency (CalEPA) implements and enforces environmental laws that regulate air, water and soil quality, pesticide use and waste recycling and reduction. CalEPA consists of the California Air Resources Board (CARB), CDPR, the California Department of Resources Recycling and Recovery (CalRecycle), the California Department of Toxic Substances Control (DTSC), the Office of Environmental Health Hazard Assessment (OEHHA), and the State Water Resources Control Board (SWRCB).

### Transport of Hazardous Materials and Hazardous Materials Emergency Response Plan

The State of California has adopted DOT regulations for the movement of hazardous materials originating within the state and passing through the state; the state regulations are contained in



title 26 of the CCR. State agencies with primary responsibility for enforcing state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol and the California Department of Transportation (Caltrans). Together, these agencies determine container types used and license hazardous waste haulers to transport hazardous waste on public roads. However, transportation of hazardous materials is also restricted to certain routes in California as identified by the Federal Motor Carrier Safety Administration (FMCSA 2020).

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local governments and private agencies. Response to hazardous materials incidents is one part of the plan. The plan is managed by the Governor's Office of Emergency Services, which coordinates the responses of other agencies in the project area.

#### Management of Construction Activities

Through the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) and the National Pollutant Discharge Elimination System (NPDES) program, RWQCBs have the authority to require proper management of hazardous materials during project construction. For a detailed description of the Porter-Cologne Act, the NPDES program, and the role of the North Coast RWQCB, see Section 3.10, "Hydrology and Water Quality."

The State Water Resources Control Board adopted the statewide NPDES General Permit in August 1999. The state requires that projects disturbing more than one acre of land during construction file a Notice of Intent with the RWQCB to be covered under this permit.

Construction activities subject to the General Permit include clearing, grading, stockpiling, and excavation. Dischargers are required to eliminate or reduce nonstormwater discharges to storm sewer systems and other waters. A stormwater pollution prevention plan (SWPPP) must be developed and implemented for each site covered by the permit. The SWPPP must include best management plans (BMPs) designed to prevent construction pollutants from contacting stormwater and keep products of erosion from moving off-site into receiving waters throughout the construction and life of the project; the BMPs must address source control and, if necessary, pollutant control.

#### Worker Safety

The California Occupational Safety and Health Administration (Cal/OSHA) assumes primary responsibility for developing and enforcing workplace safety regulations in the state. Cal/OSHA standards, which typically are more stringent than federal OSHA regulations, are presented in title 8 of the CCR. Cal/OSHA conducts on-site evaluations and issues notices of violation to enforce necessary improvements to health and safety practices.

Title 8 of the CCR also includes regulations that provide for worker safety when explosives are used during construction activities. These regulations identify licensing, safety, storage, and transportation requirements related to the use of explosives in construction.

#### California Accidental Release Prevention Program

The goal of the California Accidental Release Prevention Program (CCR, title 19, chapter 4.5) is to reduce the likelihood and severity of consequences of any releases of extremely hazardous materials. Any business that handles regulated substances (chemicals that pose a major threat to public health and safety or the environment because they are highly toxic, flammable, or explosive, including ammonia, chlorine gas, hydrogen, nitric acid, and propane) must prepare a risk management plan. The risk management plan is a detailed engineering

analysis of the potential accident factors present at a business and the measures that can be implemented to reduce this accident potential. The plan must provide safety information, hazard data, operating procedures, and training and maintenance requirements. The list of regulated substances is found in section 2770.5 of the program regulations.

#### Handbook for Forest, Ranch, and Rural Roads

The Handbook for Forest, Ranch, and Rural Roads (Road Handbook), published by Pacific Watershed Associates (PWA) in partnership with the Mendocino County Resource Conservation District, is a practical guide and field manual that covers the fundamentals of road planning, design, construction, reconstruction (upgrading), maintenance and closure. The Road Handbook contains guidelines for developing and maintaining a single forest, ranch or rural road or an entire wildland road-access system. The Road Handbook is aimed at producing efficient, low-cost, low-impact, low maintenance roads that have minimal impact on the streams, water quality, and aquatic resources of a watershed (Mendocino County Resource Conservation District 2015).

#### Hazardous Waste Control Law and Universal Waste Rule

Under CCR, title 22 and the California Hazardous Waste Control Law, DTSC regulates the generation, transportation, treatment, storage, and disposal of hazardous waste. California's Universal Waste Rule allows individuals and business to transport, handle, and recycle certain common hazardous wastes, termed universal wastes, in a manner that differs from the requirements regarding most hazardous wastes. Universal wastes include televisions, computers, and other electronic devices, as well as batteries, fluorescent lamps, mercury thermostats, and other mercury-containing equipment. The hazardous waste regulations (CCR title 22, division 4.5, chapter 11) identify seven categories of hazardous wastes that can be managed as universal wastes. Any unwanted item that falls within one of these waste streams can be handled, transported, and recycled following the simple requirements set forth in the universal waste regulations.

#### Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program) (CCR Title 27) was mandated by the state of California in 1993. The Unified Program was created to consolidate, coordinate, and make consistent the administrative requirements, permits, inspections, and enforcement activities for six hazardous materials programs. The program has six elements, including:

- ▶ Hazardous Waste Generators and Hazardous Waste On-site Treatment
- ▶ Underground Storage Tanks
- ▶ Aboveground Petroleum Storage Act
- ▶ Hazardous Materials Release Response Plans and Inventories
- ▶ California Accidental Release Prevention
- ▶ Uniform Fire Code Hazardous Materials Management Plans and Hazardous Materials Inventory Statements

At the local level, implementation of a Unified Program is accomplished by identifying a Certified Unified Program Agency (CUPA) that coordinates all of these activities to streamline the process for local businesses. The Mendocino County Department of Environmental Health is approved by Cal/EPA as the CUPA for Mendocino County.

**Construction General Permit for Stormwater Discharges Associated with Construction Activity**  
The state requires that projects disturbing more than one acre of land during construction file a Notice of Intent with the RWQCB to be covered under the statewide General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities. Construction activities subject to the Construction General Permit include clearing, grading, stockpiling, and excavation. Dischargers are required to eliminate or reduce nonstormwater discharges to storm sewer systems and other waters. A SWPPP must be developed and implemented for each site covered by the permit. The SWPPP must include BMPs designed to prevent construction pollutants from contacting stormwater.

#### Government Code Section 65962.5: Cortese List

Government Code section 65962.5 requires that DTSC compile and update a list of hazardous waste facilities; land designated as hazardous waste property; hazardous waste disposals on public land; sites that contain potential hazards to public health and safety or the environment, the risk of fire or explosion, and toxic hazards; and all sites included in the Abandoned Site Assessment Program. This law is commonly referred to as the “Cortese List” (after the legislator who authored the legislation that enacted it). The list, or a site’s presence on the list, has bearing on the local permitting process, as well as on compliance with CEQA. Because this statute was enacted more than 20 years ago, some of the provisions refer to agency activities that are no longer being implemented, and in some cases, the information to be included in the Cortese List does not exist.

#### California Department of Transportation

Caltrans is the state agency responsible for design, construction, maintenance, and operation of the California State Highway System, as well as the segments of the Interstate Highway System that lie within California. Caltrans District 1 is responsible for the operation and maintenance of State Route (SR) 1, SR 20, SR 253, SR 148, SR 175, and United States (US) Highway 101 in the project area. Caltrans requires a transportation permit for any transport of heavy construction equipment or materials that necessitates the use of oversized vehicles on state highways.

#### California Highway Patrol

CHP is the state agency responsible for providing uniform traffic law enforcement throughout the state, by assuring the safe, convenient, and efficient transportation of people and good on the State highways system. CHP 516, requires that drivers hauling hazardous agricultural materials obtain a Hazardous Agricultural Materials (HAM) certificate. However, Section 12804.2 of the California Vehicle Code (CVC) exempts a person from the requirement to obtain a hazardous materials (HM) or tank endorsement on their driver license, provided the person:

- ▶ Is employed in agricultural operation;
- ▶ Is driving a vehicle which does not require a commercial driver license and is controlled by a farmer;
- ▶ Is transporting agricultural products or machinery to or from a farm;
- ▶ Has completed training meeting the requirements outlined in Section 172.704(a) of Title 49 of the Code of Federal Regulations (CFR);
- ▶ Possesses a verification of training document, commonly known as a HAM Certificate, when operating a vehicle requiring the display of placards pursuant to Section 27903 CVC;

- ▶ Is operating the vehicle at a distance of not more than 50 miles from farm to farm or from point of distribution to point of application; or
- ▶ Is in possession of a CHP 344, Hazardous Materials Transportation Basic Incident Safety Procedures.

### California Department of Pesticide Regulation Guidance

Detailed implementing regulations for the CDPR pesticide regulatory program are codified in CCR, title 3, division 6. CDPR oversees state pesticide laws, including pesticide labeling, and is vested by EPA to enforce federal pesticide laws in California. CDPR also oversees the activities of the County agricultural commissioners related to enforcement of pesticide regulations and related environmental laws and regulations locally.

As identified in CCR, title 3, division 6, CDPR evaluates proposed pesticide products and registers those pesticides that it determines can be used safely. In addition, CDPR oversight includes:

- ▶ Licensing of pesticide professionals,
- ▶ Site-specific permits required before restricted-use pesticides may be used in agriculture,
- ▶ Strict rules to protect workers and consumers,
- ▶ Mandatory reporting of pesticide use by agricultural and pest control businesses,
- ▶ Environmental monitoring of water and air, and
- ▶ Testing of fresh produce for pesticide residues.

The regulations require that employers of pesticide workers provide protective clothing, eyewear, gloves, respirators, and any other required protection, and require employers to ensure that protective wear is worn according to product labels during application. The regulations also require that employers provide field workers with adequate training in pesticide application and safety, communicate pesticide-related hazards to field workers, ensure that emergency medical services are available to field workers, and ensure adherence to restricted-entry intervals between pesticide treatments (CCR, title 3, section 6764). CDPR requires that the application of pesticides or other pest control in connection with the indoor or outdoor cultivation of commercial cannabis complies with division 6 of the Food and Agricultural Code (commencing with section 11401), and its implementing regulations (CCR, title 3, section 6000 et seq.).

### Pesticide Use in Commercial Cannabis Cultivation

Commercial cannabis pests vary according to cultivar (variety), whether the plants are grown indoors or outdoors, and where the plants are grown geographically. Pesticides legal for use on commercial cannabis must have active ingredients that are exempt from residue tolerance requirements and are either exempt from registration requirements or registered for a use that is broad enough to include use on marijuana. Residue tolerance requirements are set by EPA for each pesticide on each food crop and is the amount of pesticide residue allowed to remain in or on each treated crop with “reasonable certainty of no harm.” Some pesticides found to be safe are exempted from the tolerance requirements. Some of these pesticides are bacterial-based insect pathogens (e.g., *Bacillus thuringiensis*) or biofungicides (e.g., *Bacillus subtilis*, *Gliocladium virens*). Active ingredients exempt from registration requirements are mostly food-grade essential oils, such as peppermint oil or rosemary oil (CDPR 2015).

CDPR designates certain pesticide active ingredients as California “Restricted Materials” when it determines that those pesticides are especially hazardous to human health or the environment and require permitting. Such permits will not be issued for commercial cannabis cultivation sites.

#### California Code of Regulations - Testing Standards for Commercial Cannabis Goods

As required under CCR, title 4, section 15719, licensed commercial cannabis laboratories shall analyze representative samples of cannabis and cannabis products to determine whether residual pesticides are present. A list of pesticides is divided into two categories and provided along with their action levels. The sample shall be deemed to have passed the residual pesticides testing if both or the following conditions are met: (1) the presence of any residual pesticide listed in Category I identified in section 15719 are not detected, and (2) the presence of any residual pesticide listed in in Category II in section 15719 does not exceed the identified action levels. In addition to residual pesticides testing, cannabis and cannabis products must also be sampled for the following constituents:

- ▶ cannabinoids;
- ▶ foreign material;
- ▶ heavy metals;
- ▶ microbial impurities;
- ▶ mycotoxins;
- ▶ moisture content and water activity;
- ▶ residual solvents and processing chemicals;
- ▶ terpenoids, if applicable; and
- ▶ homogeneity, if applicable.

#### Pesticide Contamination Prevention Act

The Pesticide Contamination Prevention Act (sections 13145–13152 of the Food and Agricultural Code) requires CDPR to:

- ▶ obtain environmental fate and chemistry data for agricultural pesticides before they can be registered for use in California;
- ▶ identify agricultural pesticides with the potential to pollute groundwater;
- ▶ sample wells to determine the presence of agricultural pesticides in groundwater;
- ▶ obtain, report, and analyze the results of well sampling for pesticides by public agencies;
- ▶ formally review any detected pesticide to determine whether its use can be allowed; and
- ▶ adopt use modifications to protect groundwater from pollution if formal review indicates that continued use can be allowed.

The act requires CDPR to develop numerical values for water solubility, soil adsorption coefficient, hydrolysis, aerobic and anaerobic soil metabolism, and field dissipation of pesticides to protect groundwater, based in part on data submitted by pesticide registrants.

The act also states that CDPR shall establish a list of pesticides that have the potential to pollute groundwater, called the Groundwater Protection List. Any person who uses a pesticide listed on the Groundwater Protection List is required to file a report with the County agricultural

commissioner, and pesticide dealers are required to make quarterly reports to CDPR of all sales of pesticides on the list to persons not otherwise required to file a report. The Pesticide Contamination Prevention Act ensures that pesticides allowed for use in California, including those that may be used in commercial cannabis cultivation, will have been studied by CDPR for their potential to contaminate groundwater and the environment.

#### California Code of Regulations - Cannabis Cultivation Regulations

CCR, title 4, division 19 includes following requirements regarding the handling of pesticides:

- ▶ Section 16307(a): Licensees shall comply with all pesticide laws and regulations enforced by the Department of Pesticide Regulation.
- ▶ Section 16307(b): For all pesticides that are exempt from registration requirements, licensees shall comply with all pesticide laws and regulations enforced by the Department of Pesticide regulation and with the following pesticide application and storage protocols:
  - (1) Comply with all pesticide label directions;
  - (2) Store chemicals in a secure building or shed to prevent access by wildlife;
  - (3) Contain any chemical leaks and immediately clean up any spills;
  - (4) Apply the minimum amount of product necessary to control the target pest;
  - (5) Prevent offsite drift;
  - (6) Do not apply pesticides when pollinators are present;
  - (7) Do not allow drift to flowering plants attractive to pollinators;
  - (8) Do not spray directly to surface water or allow pesticide product to drift to surface water. Spray only when wind is blowing away from surface water bodies;
  - (9) Do not apply pesticides when they may reach surface water or groundwater; and
  - (10) Only use properly labeled pesticides. If no label is available consult the Department of Pesticide Regulation.

## LOCAL

### Mendocino County Air Quality Management District Policies for Areas Containing Naturally Occurring Asbestos

The Mendocino County Air Quality Management District (MCAQMD) uses mapping prepared by Mendocino County to identify areas likely to have asbestos containing geologic features. For projects in areas identified as potentially containing naturally occurring asbestos (NOA), the MCAQMD requires an evaluation and report to determine that any observed NOA is below levels of regulatory concern in the areas being disturbed consistent with CCR, title 17, section 93105(c)(1).

MCAQMD policies that if NOA is present at levels above regulatory concern, or the applicant chooses not to have the testing and evaluation conducted, the MCAQMD requires that the following mitigation measures in accordance with CCR, title 17, section 93105(d) and (e) be followed (MCAQMD 2013):

1. For road construction and maintenance (CCR, title 17, section 93105(d)):
  - Submit notification at least 14 days prior to commencing work.

- Implement dust control measures to prevent visible emissions.
  - Maintain vehicle speed less than 15 miles per hour (mph) in all unpaved areas.
  - No visible track-out onto paved roads.
2. For construction and grading projects less than 1 acre (CCR, title 17, section 93105(e)(1)):
    - Maintain vehicle speed less than 15 mph in all unpaved areas.
    - Implement dust control measures to prevent visible emissions.
    - Vehicle wash-down prior to moving off the property or project site.
    - Clean visible track-out as needed but at least once per day.
  3. For construction and grading projects 1 acre or more (CCR, title 17, section 93105(e)(2)):
    - Submittal of an Asbestos Dust Mitigation Plan in accordance with section 93105(e)(4).
    - All Asbestos Dust Mitigation Plan requirements must be implemented and maintained throughout the project.
    - Stabilize disturbed areas after construction.
    - Report and record all geologic survey and sampling analysis results.
  4. All fill removed from areas containing NOA must be disposed of in accordance with all applicable laws and regulations.
  5. Approved dust suppressants are to be used on all unpaved surfaces annually.
  6. Construction within 0.25 miles of a school, hospital, or other sensitive receptors can occur only with a District permit.
  7. Discovery of NOA after start of a project requires stoppage of work, notification to the MCAQMD and implementation of NOA requirements for the project site prior to the restarting of work.
  8. All on-site workers must be notified of the presence or possible presence of NOA per Operational Safety and Health Administration requirements.

### Mendocino County General Plan

The Development Element (2021) of the Mendocino County General Plan sets forth goals, objectives, and policies for airport safety, flood risks or dam failures, hazardous materials, seismic or geological hazards, wildfires and structures, climate change, and land use policies (Mendocino County 2021a). Applicable policies related to hazards are provided below.

- ▶ **Policy DE-172:** Land use decisions and development should be carried out in a manner that will reduce aviation-related hazards (including hazards to aircraft and hazards posed by aircraft). This could be accomplished through a variety of measures, including the following:
  - Maintaining compatible zoning, land uses, densities, and intensities within airport influence zones.
  - Protecting the viability of existing airport operations and expansion potential.
- ▶ **Policy DE-212:** All development projects shall include plans and facilities to store and manage solid waste and hazardous materials and wastes in a safe and environmentally sound manner.

- ▶ **Policy DE-218:** Land uses, densities, and intensities shall be designed to reduce human risk and exposure to hazardous conditions and events.
- ▶ **Policy DE-219.1:** Maintain emergency response plan(s) designed to reduce risk and exposure to hazardous conditions and events, respond to emergencies, and facilitate recovery.

#### Mendocino County Multi-Jurisdictional Hazard Mitigation Plan

The County Multi-Jurisdictional Hazard Mitigation Plan (adopted in 2021) analyzes the nature, history, location, extent, and probability of future events for identified hazards throughout Mendocino County. Hazards include dam failure, earthquake, flood, a hazardous materials event, landslide, tsunami, urban conflagration, and wildland fire. The plan also provides a blueprint for reducing potential hazards by developing a list of mitigation goals and potential actions to address the risks facing Mendocino County. Mitigation actions include preventive actions, property protection techniques, natural resource protection strategies, structural projects, emergency services, evacuation provisions that include maintenance and vegetation clearance of evacuation routes, and public information and awareness activities (Mendocino County 2021b).

#### Mendocino County Fire Vulnerability Assessment and Emergency Evacuation Preparedness Plan

The Mendocino County Fire Vulnerability Assessment and Emergency Evacuation Preparedness Plan consists of three components: the Fire Vulnerability Assessment, the Public Outreach Plan, and the Evacuation Plan. The Vulnerability Assessment identifies high fire risk areas in the County. It reviews existing adaptation methods and actions for addressing wildfire vulnerabilities and provides specific mitigation strategies for dealing with wildfire vulnerabilities. The Evacuation Plan establishes strategies for managing evacuations relating to wildland fire threats. The Public Outreach Plan identifies methods for educating local communities about fire safety and emergency evacuation.

#### Mendocino County Certified Unified Program Agency

The Mendocino County Certified Unified Program Agency (CUPA) is a local agency certified by CalEPA that implements and enforces hazardous waste and hazardous materials through a regulatory management program. The Mendocino County CUPA provides inspections, oversight, emergency response, and annual training for regulators to minimize hazardous waste and potential spills.

#### Mendocino County Airport Comprehensive Land Use Plan

The Mendocino County Airport Comprehensive Land Use Plan (ACLUP) (Mendocino County 1996) sets forth the criteria and policies that the airport land use commission (ALUC) uses in assessing the compatibility between the public use airports and land use development and activities in the areas surrounding them (Mendocino County 1996). State law requires that the County, because of its authority over land uses in the ALUC planning area, modify the general plan and any affected specific plans to be consistent with the ACLUP.

Mendocino County is served by six public airports: Boonville, Ells Field, Little River, Ocean Ridge, Round Valley, and Ukiah Municipal.

#### Mendocino County Code of Ordinances

The Mendocino County Code of Ordinances contains the following requirements related to hazards and hazardous materials:



### Section 9.28.040: Permits Required

No person shall own or operate an underground storage tank, unless a permit for such ownership or operation is issued by the Mendocino County Department of Public Health as specified herein.

### Section 10A.04.020: Aerial Application of Phenoxy Herbicides Prohibited

Any aerial application, in any amount, of phenoxy herbicides, including, but not limited to 2, 4, 5-T, 2, 4, D; Silvex; or any matter containing the chemical Dioxin is prohibited.

### Section 10A.17.040: General Limitations on Cultivation of Cannabis

The following limitations shall apply to all cultivation of cannabis in Mendocino County, including but not limited to cultivation pursuant to a Permit issued under this Chapter or an exemption provided for Section 10A.17.030. Cultivation of cannabis shall also be subject to all applicable restrictions of Mendocino County Code Chapter 20.242.

(A) The cultivation of cannabis in Mendocino County, in any amount or quantity by any entity, shall not be allowed in the following areas:

- (1) Within one thousand (1,000 feet of a youth-oriented facility, a school, or a park as defined herein that is in existence at the time a CCBL is initially applied for.

### Section 10A.17.090: CCBL Application and Zoning Review

(E) A cultivation and operations plan which includes elements that meet or exceed the minimum legal standards for the following: water storage, conservation and use; drainage, runoff and erosion control; watershed and habitat protection; and proper storage of fertilizers, pesticides and other regulated products to be used on the legal parcel. The plan will also provide a description of cultivation activities including, but not limited to, permit type, cultivation area, soil/media importation and management, the approximate date(s) of all cannabis cultivation activities that have been conducted on the legal parcel prior to the effective date of this ordinance, and schedule of activities during each month of the growing and harvesting season. The cultivation and operations plan shall also include the following:

- (2) If a generator is proposed to support any aspect of the cultivation site or related operations, the cultivation and operations plan shall identify any containment structure and dimensions necessary to contain any leak or spill that may develop or occur as a result of relying on any generator for backup power generation. The plan shall also include a maintenance plan for the generator, detailing how spent oil, used oil filters, expired batteries and other hazardous wastes generated from the operation of the generator will be handled, including fuel storage and delivery systems.
- (3) Any fuel, fertilizer, pesticides, or other substance toxic to wildlife, children, or pets, must be stored in a secured and locked structure or device.
- (8) The results of a "Cortese List" database search for sites known to be contaminated with hazardous materials. If the parcel of the cultivation site is listed on the "Cortese List," the cultivation and operations plan shall demonstrate that the cultivation is in compliance with any cleanup and/or abatement order that is established for the site.

## 3.9.2 Environmental Setting

For purposes of this section, the term "hazardous materials" refers to both hazardous substances and hazardous wastes. A "hazardous material" is defined in the CFR as "a

substance or material that...is capable of posing an unreasonable risk to health, safety, and property when transported in commerce” (49 CFR 171.8). California Health and Safety Code section 25501 defines a hazardous material as follows:

“Hazardous material” means any material that, because of its quantity, concentration, or physical, or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. “Hazardous materials” include, but are not limited to, hazardous substances, hazardous waste, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

“Hazardous wastes” are defined in California Health and Safety Code section 25141(b) as wastes that:

because of the quantity, concentration, or physical, chemical, or infectious characteristics, [may either] cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness [or] pose a substantial present or potential hazard to human health or the environment...when improperly treated, stored, transported, or disposed of, or otherwise managed.

## ACCIDENTAL SPILLS AND ILLEGAL DISPOSAL OF HAZARDOUS WASTE

The California Governor’s Office of Emergency Services keeps a record of hazardous spills in the state. According to the 2022 report, Mendocino County had 34 hazardous materials spills (CalOES 2022). All but nine of these spills have been remediated.

Statewide evidence suggests that improper storage, use, and disposal of hazardous materials is a major problem at unlicensed commercial cannabis cultivation sites. Statewide enforcement activities have found substandard storage practices for hazardous materials, and law enforcement officials have observed that hazardous materials and/or hazardous waste are often dispersed throughout commercial cultivation sites. In addition to endangering wildlife and the environment, such improper use, storage, and disposal of chemicals can endanger commercial cannabis cultivation workers, as well as enforcement officers or members of the public who happen upon cultivation sites. Bodily contact or inhalation of these materials may cause illness or adverse health consequences (California Department of Food and Agriculture 2017).

## TRANSPORT OF HAZARDOUS MATERIALS

Hazardous materials, hazardous wastes, and petroleum products are a subset of the goods routinely shipped along the transportation corridors in the project area. In California, unless specifically exempt, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. DTSC maintains a list of active registered hazardous waste transporters throughout California, and the California Department of Public Health regulates the haulers of hazardous waste. Three agencies maintain searchable databases that track hazardous material releases in reportable quantities: EPA maintains the Hazardous Materials Incident Report System, which contains data on hazardous material spill incidents reported to DOT; the California Office of Emergency Services maintains the California Hazardous Materials Incident Report System, which contains information on reported hazardous material accidental releases or spills; and the State Water Resources

Control Board's Site Cleanup Program maintains information on reported hazardous material accidental releases or spills (SWRCB 2024; DTSC 2024). US Highway 101 is used to transport a range of hazardous cargo, including flammable liquids, corrosive materials, compressed and/or poisonous gases, explosives, flammable solids, and irritating materials.

## NATURALLY OCCURRING ASBESTOS

"Asbestos" is a term used for several types of naturally occurring fibrous minerals found in many parts of California. Asbestos is commonly found in ultramafic rock, including serpentine, and near fault zones. The amount of asbestos typically present in these rocks ranges from less than one percent to up to approximately 25 percent and sometimes more. Asbestos is released from ultramafic and serpentine rock when it is broken or crushed. This can happen when cars drive over unpaved roads or driveways that are surfaced with these rocks and when land is graded for building purposes. Mendocino County is home to serpentine rock conditions and has the potential for naturally occurring asbestos (NOA). Figure 3.9-1 illustrates areas where soils with NOA are located throughout the County. Rocks containing asbestos are common within the eastern belt of the Franciscan Formation in Mendocino County, including the occurrence of small localized areas of serpentine along the coastal belt (Mendocino County 2008).

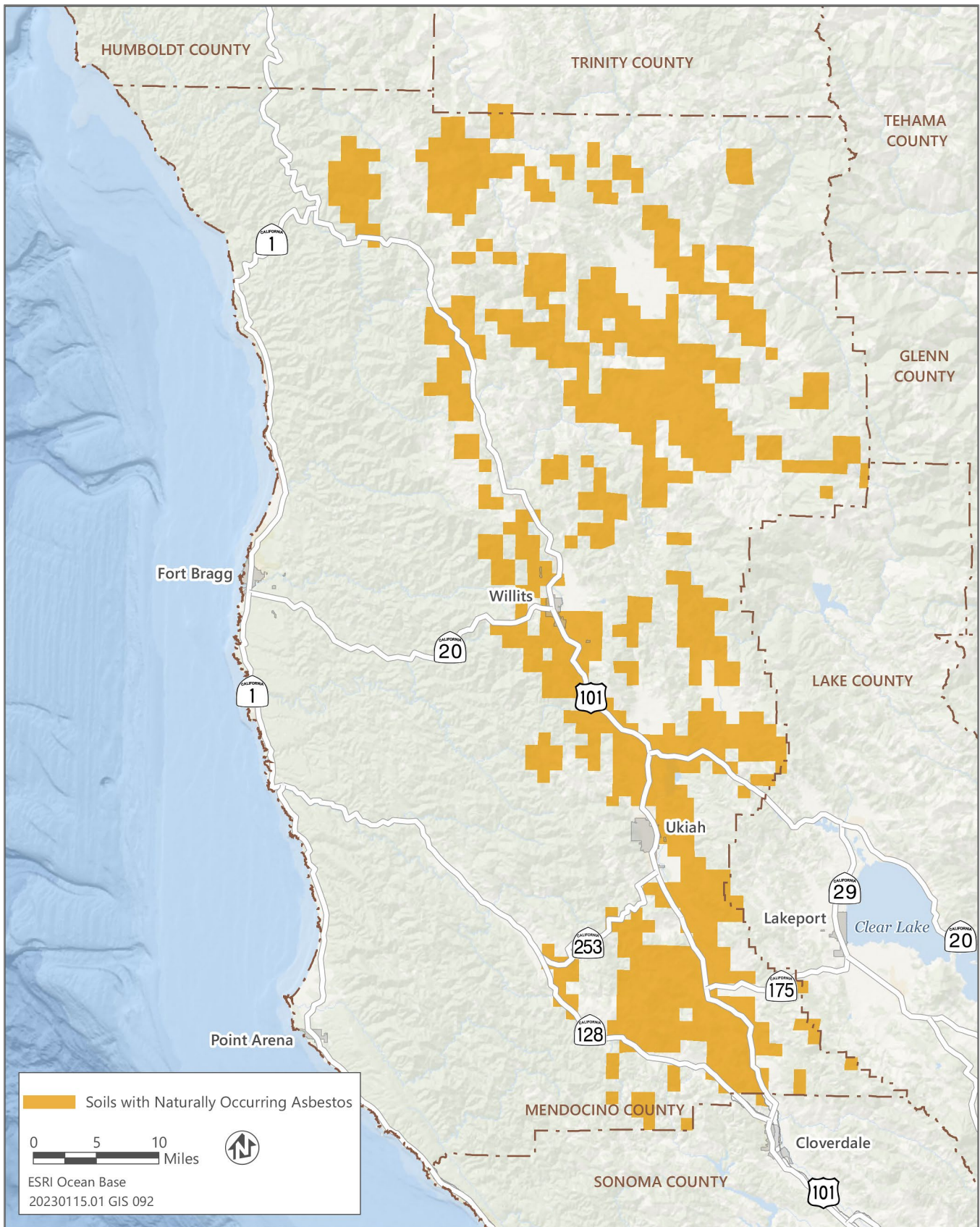
## SCHOOLS

Children are particularly susceptible to long-term effects from emissions of hazardous materials. Therefore, locations where children spend extended periods, such as schools, are particularly sensitive to hazardous air emissions and accidental release associated with the handling of extremely hazardous materials, substances, or wastes. However, MCCR section 10A.17.040(A)(1) requires that cultivation sites be located at least 1,000 feet from schools. There are 64 public, charter, and private schools (e.g., elementary, middle, and high schools) in Mendocino County (Mendocino County Office of Education 2023).

## AIRPORTS

Mendocino County is served by six public airports: Boonville, Ells Field, Little River, Ocean Ridge, Round Valley, and Ukiah Municipal. Land use compatibility and associated safety considerations are addressed in the Mendocino County ACLUP. Airport-related hazards are generally associated with aircraft accidents, particularly during takeoffs and landings. Airport operation hazards include incompatible land uses, power transmission lines, wildlife hazards (e.g., bird strikes), and tall structures that penetrate the imaginary surfaces surrounding the airport (Mendocino County 2008).

Mendocino County is subject to land use compatibility criteria and policies set forth in the ACLUP, including issues related to density, building heights, and hazards associated with electrical interference and bird strikes. Furthermore, applicable restrictions associated with airport safety requirements for land use must be consistent with General Plan Policy DE-172, identified above.



Source: Data downloaded from Mendocino County in 2022; adapted by Ascent in 2024.

**Figure 3.9-1 Areas with Naturally Occurring Asbestos**

### 3.9.3 Environmental Impacts and Mitigation Measures

#### METHODOLOGY

Impacts related to hazards and hazardous materials were analyzed qualitatively based on a review of anticipated licensed commercial cannabis cultivation activities and associated equipment and materials that may be used as part of annual commercial cannabis licensing. The analysis focused on the potential for existing and future licensed commercial cannabis cultivation businesses to create hazards to humans through the transport, use, exposure, or accidental release of hazardous materials and exposure to other hazards. These hazards were analyzed in the context of existing laws and regulations and the extent to which existing regulations and regulations adequately address and minimize the potential impacts of the hazards associated with the project. Annual license applications must include operations and security plans that contain information showing that the activities meet or exceed minimum legal standards for proper storage of fertilizers, pesticides, and other regulated products to be used on the parcel.

Because new sites for potential commercial cannabis cultivation operations are yet unknown, physical surveys of the sites could not be conducted. Rather, this program-level analysis is based on hazards typically associated with certain land uses and an overall understanding of the key safety concerns that could result from commercial cannabis cultivation operations.

#### THRESHOLDS OF SIGNIFICANCE

An impact related to hazards and hazardous materials would be significant if implementation of the project would:

- ▶ Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- ▶ Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment;
- ▶ Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 miles of an existing or proposed school;
- ▶ Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would create a significant hazard to the public or the environment;
- ▶ For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area; or
- ▶ Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

#### ISSUES NOT DISCUSSED FURTHER

All the issues identified in the thresholds of significance are addressed in the following analysis. Impacts related to wildfire are addressed in Section 3.17, "Wildfire."

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Impact 3.9-1: Create a Significant Hazard through Transport, Use, or Disposal of Hazardous Materials, or Due to Upset and Accident Conditions

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Existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could create a hazard through the routine transport, use, or disposal of hazardous materials, or due to upset and accident conditions, during construction or operational activities. Commercial cannabis cultivation operations involve the use of pesticides, herbicides, rodenticides, and other chemicals for the growing of commercial cannabis. However, existing provisionally licensed commercial cannabis cultivation and new licensed commercial cannabis cultivation sites would be required to comply with existing applicable rules and regulations specifically designed to protect public health. As described in Section 3.9.1 “Regulatory Setting,” regulation of licensed commercial cannabis cultivation operations under the MCCR and CCR, title 4, division 19 includes requirements related to the storage and use of pesticides, herbicides, and rodenticides, as well as testing of commercial cannabis goods to ensure that contamination or exposure does not occur.

Accordingly, for the reasons described below, this impact would be **less than significant**.

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#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual licensure would not result in new impacts to public health associated with the hazardous material use as operations are not anticipated to be significantly altered through the annual licensing process. Existing provisionally licensed commercial cannabis operations would continue to be required to comply with state and local regulations. However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. Expansion of existing commercial cannabis cultivation sites would still be required to comply with and CCR title 4, division 19, which would require proper storage and use of pesticides, herbicides, rodenticides, and other chemicals for the growing of commercial cannabis. The MCCR also limits commercial cannabis cultivation and nursery sites to 22,000 square feet of commercial cannabis canopy per site, which would apply to expanded commercial cannabis cultivation sites. These provisions would require proper storage and use of agricultural chemicals thereby reducing the potential for upset or accidental conditions to occur. For these reasons, including compliance with existing applicable rules and regulations would prevent any impacts related to hazardous materials from existing provisionally licensed commercial cannabis operations; therefore, this impact would be less than significant.

#### Future Licensed Sites

New licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations could temporarily increase the regional transport, use, storage, and disposal of hazardous materials and petroleum products (such as diesel fuel, lubricants, paints and solvents, and cement products containing strong basic or acidic chemicals) that are commonly used at construction sites. Hazardous waste generated during construction may consist of welding materials, fuel and lubricant containers, paint and solvent containers, and cement products containing basic or acidic chemicals. However, these types of routine uses of

hazardous materials and petroleum products are regulated by CCR, title 4, division 19 and the MCCR and would be used, stored, and disposed of in accordance with applicable federal, state, and local laws.

Operation of new licensed commercial cannabis operations could also involve the use of hazardous materials, such as fuel for power equipment and generators, pesticides, rodenticides, and chemicals and gases for extraction activities. Cultivation may employ rechargeable batteries to power operations associated with the use of solar power. Eventually, the batteries would no longer hold a significant charge and would need to be properly managed at the end of their life. In California, all types of batteries are considered to be hazardous waste and are managed under the Universal Waste Rule unless it is determined that they do not exhibit a characteristic of a hazardous waste. Compliance with existing laws and regulations related to the transport, use, and disposal of hazardous materials would avoid creating a substantial hazard to the public.

The operation of businesses that use, create, or dispose of hazardous materials is regulated and monitored by federal, state, and local regulations that provide a high level of protection to the public and the environment from the hazardous materials manufactured in, transported to, and disposed of in the region. RCRA, title 22 of the CCR, and the Hazardous Waste Control Law regulate the generation, transportation, treatment, storage, and disposal of hazardous waste. These laws impose regulatory systems for handling hazardous waste in a manner that protects human health and the environment, including requirements regarding the classification of materials, and packaging. CalEPA oversees the regulation and management of hazardous materials on a statewide level through DTSC. Use of hazardous materials requires permits and monitoring to avoid hazardous waste release through the Mendocino County CUPA. Additionally, businesses that generate hazardous waste are required to have an EPA identification number to monitor and track hazardous waste activities.

Depending on the size of new licensed commercial cannabis operation and nature of activities, licensees may be required to prepare a hazardous material business plan and/or hazardous materials management plan. Additionally, new licensed commercial cannabis cultivation sites would be required to comply with OSHA and Cal/OSHA requirements, such as providing personal protective equipment, as necessary, to protect the health of workers.

As noted above, the new licensed commercial cannabis operations would be required to comply with state and local commercial cannabis-related requirements regarding the storage and use of hazardous materials. With enforcement of existing hazardous materials regulations and the requirements of the annual license, this impact would be less than significant.

### Summary

Because existing provisionally licensed, potential expansion of existing provisionally licensed, and future licensed commercial cannabis cultivation sites within the unincorporated County would be required to comply with existing state and local regulations intended to protect the public from potential hazards associated with the routine transport, use, or disposal of hazardous materials, or upset and accident conditions, impacts would be **less than significant**.

### Mitigation Measures

No mitigation is required for this impact.

### Impact 3.9-2: Create Potential Human Hazards from Exposure to Existing On-Site Hazardous Materials

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Existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could include construction activities that disturb subsurface materials and could encounter previously unidentified contamination from past practices, placement of undocumented fill, or even unauthorized disposal of hazardous wastes. This could include hazardous materials sites identified in lists compiled pursuant to Government Code section 65962.5. Encountering these materials could expose workers, the public, or the environment to adverse effects depending on the volume, materials involved, and concentrations. In addition, construction activities could expose naturally occurring asbestos. Mendocino County contains ultramafic rock, along with other rock types, that could contain naturally occurring asbestos. Encountering these rock types could trigger a referral to the MCAQMD for implementation of their Policies for Areas Containing NOA. New licensed commercial cannabis cultivation sites would be required to comply with MCCR section 10A.17.090, which requires evaluation of previous land uses that could have created a hazardous conditions as well as with MCAQMD provisions that address naturally occurring asbestos. This impact would be **less than significant**.

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#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual licensure would not result in new impacts to public health associated with the hazardous material discovery because operations are not anticipated to be significantly altered through the annual licensing process.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation operations features would still be similar to those associated with other agricultural activities common with potential exposure to on-site hazardous materials and therefore would not adversely alter the potential to expose humans to hazardous materials. Expansion of existing commercial cannabis cultivation sites would still be required to comply with Government Code section 65962.5 to ensure that sites have not been previously contaminated in such a way that could expose humans to on-site hazardous materials as well as compliance with MCAQMD Policies for Areas Containing NOA that requires mitigation to protect public health from NOA exposure. As a result, this impact would be less than significant.

#### Future Licensed Sites

Construction of new licensed commercial cannabis cultivation site and associated processing and/or distribution transport-only operations could encounter previously unidentified contamination from past practices as well as result in the airborne release of NOA. As identified in Section 3.9.1, "Regulatory Setting," future commercial cannabis cultivation applications would be required under MCCR section 10A.17.090(E)(8) to conduct site review and database searches for the potential of onsite contamination and demonstrate that any onsite contamination is remediated in compliance with any cleanup or abatement order. In addition, future licensed commercial cannabis cultivation sites would be subject to compliance with MCAQMD for implementation of their Policies for Areas Containing NOA that requires



mitigation to protect public health from NOA exposure. Compliance with these requirements would protect public health from discovered hazardous materials onsite. Thus, this impact would be less than significant.

### Summary

As identified above, existing provisionally licensed, potential expansion of existing provisionally licensed, and future licensed commercial cannabis cultivation sites would be required to comply with MCCR section 10A.17.090(E)(8) and MCAQMD for implementation of their Policies for Areas Containing NOA that provide performance standards that would protect public health. Therefore, this impact would be **less than significant**.

### Mitigation Measures

No mitigation is required for this impact.

### Impact 3.9-3: Emit Hazardous Emissions or Handle Hazardous Materials within 0.25 Miles of a School

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Existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations are not anticipated to use large quantities of hazardous materials. Materials for commercial cannabis cultivation operations would be used in accordance with applicable regulations to limit the potential for accident or upset conditions. Setbacks from school sites are required to be at least 1,000 feet from commercial cannabis cultivation sites as stated under MCCR section 10A.17.040(A)(1). This impact would be **less than significant**.

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As noted in discussion for Impact 3.9-1, the use and handling of hazardous materials by commercial cannabis operations are covered by regulations to protect public health under federal, state, and County standards.

### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual licensure would continue to use small amounts of hazardous materials that are regulated. Existing provisionally licensed commercial cannabis cultivation processing and/or distribution transport-only operations occur in remote rural areas, far from high-traffic areas with a strong public presence (such as schools). MCCR section 10A.17.040(A)(1) requires that cultivation sites be located at least 1,000 feet from schools. Because of these land use conditions and regulations (including CCR, title 4, section 16307(a) and (b), which enforces the deliberate handling of hazardous materials), this impact would be less than significant.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation operations features would still be similar to those associated with other agricultural activities common in areas located near schools. Expansion of existing commercial cannabis cultivation sites would still be required to comply with MCCR section 10A.17.040(A)(1) that requires that commercial cannabis cultivation sites be located a minimum of 1,000 feet from any school. The MCCR also limits commercial cannabis cultivation and nursery sites to 22,000 square feet of commercial cannabis canopy per site that would apply to expanded commercial cannabis cultivation sites. These provisions would require that existing provisionally licensed sites would not be located

within close proximity to a school. For these reasons, this impact would be less than significant.

#### Future Licensed Sites

Proposed new licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations would use small amounts of hazardous materials that are regulated similar to existing provisionally licensed commercial cannabis cultivation sites. New licensed commercial cannabis cultivation sites would be subject to MCCR section 10A.17.040(A)(1), which requires that cultivation sites be located at least 1,000 feet from schools as well as CCR, title 4, section 16307(a) and (b), which enforces the deliberate handling of hazardous materials.

For new schools developed in unincorporated areas of the County, section 17213(b) of the California Education Code establishes requirements for assessments and approvals that address the potential for existing contamination on the site and whether nearby land uses might reasonably be anticipated to emit hazardous air emissions or handle hazardous materials. Assessment of existing contamination is conducted in coordination with DTSC's School Property Evaluation and Cleanup Division, which is responsible for accessing, investigating, and cleaning up proposed school sites. This division ensures that selected properties are free of contamination or, if the properties were previously contaminated, that they have been cleaned up to a level that protects the students and staff who would occupy a new school. All proposed school sites that would receive state funding for acquisition or construction would be required to go through a rigorous environmental review and cleanup process under DTSC's oversight.

Therefore, the impact of new licensed commercial cannabis cultivation sites to existing and potential new schools would be less than significant.

#### Summary

Because existing provisionally licensed, potential expansion of existing provisionally licensed, and future licensed commercial cannabis cultivation sites would be required to comply with MCCR section 10A.17.040(A)(1) and CCR, title 4, section 16307(a) and (b), this impact would be **less than significant**.

#### Mitigation Measures

No mitigation is required for this impact.

#### Impact 3.9-4: Result in a Safety Hazard or Excessive Noise for People Residing or Working in a Project Area That Is Located Within 2 Miles of a Public Airport or Public Use Airport

Existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations located near public airports would be required to comply with the Mendocino County ACLUP, which includes requirements for land use compatibility in the vicinity of airports. Further, future licensed commercial cannabis cultivation sites would not result in new sensitive land uses or attract dense populations that would be subject to safety or noise hazards associated with existing airports. Therefore, licensed commercial cannabis cultivation sites would not create a safety hazard or excessive noise exposure for people working or residing near a public airport. This impact would be **less than significant**.

Mendocino County is served by six public airports: Boonville, Ells Field, Little River, Ocean Ridge, Round Valley, and Ukiah Municipal. Land use compatibility and associated safety considerations are addressed in the Mendocino County ACLUP, as discussed in Section 3.9.1, “Regulatory Setting.”

#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual licensure would not result in new impacts to the operation of existing airports as operations are not anticipated to be significantly altered through the annual licensing process. Any future modification of these sites would be required to comply with the ACLUP.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. Expansion of existing commercial cannabis cultivation sites would still be required to comply with the Mendocino County ACLUP, which includes requirements for land use compatibility in the vicinity of airports. For this reason, this impact would be less than significant.

#### Future Licensed Sites

Proposed new licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations would be required to comply with policies set forth in the ACLUP. These criteria explain the types, densities, and heights of land uses permitted within each airport land use compatibility zone to provide for both safe airport operation and land use compatibility. Compliance with these regulations would ensure that commercial cannabis operations occur in allowable zoning districts identified in the ACLUP, which would reduce the risk of safety hazards for people and activities within 2 miles of a public or private airport. Thus, this impact would be less than significant.

#### Summary

Because existing provisionally licensed, potential expansion of existing provisionally licensed, and future licensed commercial cannabis cultivation sites would be required to comply with policies set forth in the ACLUP, including setbacks from existing airports and zoning requirements, impacts would be **less than significant**.

#### Mitigation Measures

No mitigation is required for this impact.

#### Impact 3.9-5: Impair Emergency Response or Evacuation Plans

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Construction and operation of licensed commercial cannabis cultivation sites are subject to and constructed in accordance with applicable State and Mendocino County policies and standards, including established roadway design and safety standards, such as Caltrans Standard Specifications and the County Roads and Development Standards, as discussed further in Section 3.15, “Transportation.” These standards prevent the development of transportation infrastructure that would result in inadequate emergency access or would significantly impair emergency response or evacuation plans. Therefore, this impact would be **less than significant**.

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As described in Section 3.9.1, “Regulatory Setting,” the County Multi-Jurisdictional Hazard Mitigation Plan addresses emergency response and evacuation plans for a variety of emergency events that may require communication to the public and evacuation action. This plan also includes provisions for the maintenance and vegetation of evacuation routes.

#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual licensure would not result in new impacts to emergency response or evacuation plans because operations are not anticipated to be significantly altered through the annual licensing process.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. Expansion of existing commercial cannabis cultivation sites would still be required to comply with regulations and standards outlined in PRC sections 4290 and 4291, local fire protection agency requirements, and the California Fire Code to minimize hazards of fire as well as provide emergency access/evacuation routes. Additionally, existing provisionally licensed cultivation sites would be required to continue to comply with sections 10A.17.070(N), 10A.17.070(V), and 10A.17.090 (E)(3) of the MCCR to reduce wildfire exposure risks by ensuring proper storage of potential fuel and ignition sources and by ensuring proper defensible space protocols, distances, and access/evacuation routes are maintained (consistent with the County Multi-Jurisdictional Hazard Mitigation Plan). For these reasons, this impact would be less than significant.

#### Future Licensed Sites

Licensing of new commercial cannabis cultivation and associated processing and/or distribution transport-only operations may include construction of new structures, new or improved access roads or crossings to cultivation sites, and on-site grading. Per section E.4 of the County Roads and Development Standards, all contractors, permittees, or agencies doing work within public roads, or the public right of way would be required to develop and implement a Traffic Control Plan (TCP) consistent with Chapter 12 of the Caltrans Standards Specifications. Section 12-1.01 of the Caltrans specifications details that temporary traffic control must comply with the Part 6 “Temporary Traffic Control” of the California MUTCD, which includes provisions to ensure emergency response time and access is not hindered during construction.

Per section C.3.L of the County Roads and Development Standards, any future development that would gain access from an existing road that does not meet applicable standards would be responsible for improving the full length of the existing access road to the point where it is adequate to meet the intent of road standards, as reviewed by the Department of Transportation Director and determined by the Approval Authority. Therefore, the grade, turning, and passage needs of emergency vehicles for future licensed sites would be met.

New licensed sites would be required to comply with regulations and standards outlined in PRC sections 4290 and 4291, local fire protection agency requirements, and the California Fire Code for emergency and fire access and evacuation. Additionally, these new licensed site would also be required to comply with sections 10A.17.070(N), 10A.17.070(V), and 10A.17.090 (E)(3) of the MCCR to by ensuring proper defensible space and access to sites are maintained (consistent with the County Multi-Jurisdictional Hazard Mitigation Plan). New licensed sites would follow construction and design standards set forth in the California Fire

Code, as adopted by the County in section 18.04.060 of the County Code of Ordinances. Therefore, due to the required adherence to local and State emergency access design standards and regulations, future licensed sites would result in adequate emergency vehicle access and associated evacuation needs consistent with County policies and standards. This impact would be less than significant.

### **Summary**

Because existing provisionally licensed, potential expansion of existing provisionally licensed, and future licensed commercial cannabis cultivation sites would be subject to and constructed in accordance with applicable County policies, including established roadway design and safety standards, impacts would be **less than significant**.

### **Mitigation Measures**

No mitigation is required for this impact.

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## 3.10 HYDROLOGY AND WATER QUALITY

This section identifies the regulatory context and policies related to hydrology and water quality, describes the existing hydrologic conditions in Mendocino County, and evaluates potential project-related impacts on hydrology and the water quality of receiving waters.

Comment letters submitted in response to the NOP for this EIR addressed issues pertaining to adverse effects in flood zones; impacts on water supplies, including surface water and groundwater; and impacts related to water diversion (see Appendix A). These issues are addressed below.

### 3.10.1 Regulatory Setting

#### FEDERAL

##### Clean Water Act

The U.S. Environmental Protection Agency (EPA) is the lead federal agency responsible for water quality management. The Clean Water Act (CWA) (33 U.S.C. section 1251 et seq.) is the primary federal law that governs and authorizes water quality control activities by EPA as well as the states. Various elements of the CWA address water quality. These are discussed below.

##### CWA Water Quality Criteria/Standards

Pursuant to federal law, EPA has published water quality regulations under Title 40 of the Code of Federal Regulations (CFR). Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. As defined by the act, water quality standards consist of designated beneficial uses of the water body in question and criteria that protect the designated uses. Section 304(a) of the CWA requires EPA to publish advisory water quality criteria that accurately reflect the latest scientific knowledge on the kind and extent of all effects on health and welfare that may be expected from the presence of pollutants in water. Where multiple uses exist, water quality standards must protect the most sensitive use. As described in the discussion of state regulations below, the State Water Resources Control Board (SWRCB) and its nine regional water quality control boards (RWQCBs) have designated authority in California to identify beneficial uses and adopt applicable water quality objectives.

##### CWA Section 303(d) Impaired Waters List

Under section 303(d) of the CWA, states are required to develop lists of water bodies that do not attain water quality objectives after implementation of required levels of treatment by point source dischargers (municipalities and industries). Section 303(d) of the CWA requires that the state develop a total maximum daily load (TMDL) for each of the listed pollutants. The TMDL is the amount of the pollutant that the water body can receive and still comply with water quality objectives. The TMDL is also a plan to reduce loading of a specific pollutant from various sources to achieve compliance with water quality objectives. In California, implementation of TMDLs is achieved through water quality control plans, known as Basin Plans, of the RWQCBs. See the “State” section, below.

### CWA Section 404

In accordance with section 404 of the CWA, the U.S. Army Corps of Engineers (USACE) regulates discharge of dredged or fill material into waters of the United States. Waters of the United States and their lateral limits are defined in Title 33, Part 328.3(a) of the CFR to include navigable waters of the United States, interstate waters, all other waters where the use or degradation or destruction of the waters could affect interstate or foreign commerce, tributaries to any of these waters, and wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries. Any activity resulting in the placement of dredged or fill material within waters of the United States requires a permit from USACE. In accordance with section 401 of the CWA, projects that apply for a USACE permit for discharge of dredged or fill material must obtain water quality certification from the appropriate RWQCB indicating that the project will uphold water quality standards. Waters of the United States and wetland protection requirements of the CWA administered by USACE are further discussed in Section 3.5, “Biological Resources.”

### National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program was established in the CWA to regulate municipal and industrial discharges to surface waters of the United States. NPDES permit regulations have been established for broad categories of discharges, including point source waste discharges and nonpoint source stormwater runoff. Each NPDES permit identifies limits on allowable concentrations and mass emissions of pollutants contained in the discharge. Sections 401 and 402 of the CWA contain general requirements regarding NPDES permits.

“Nonpoint source” pollution originates over a wide area rather than from a definable point. Nonpoint source pollution often enters receiving water in the form of surface runoff and is not conveyed by way of pipelines or discrete conveyances. Two types of nonpoint source discharges are controlled by the NPDES program: discharges caused by general construction activities and the general quality of stormwater in municipal stormwater systems. The goal of the NPDES nonpoint source regulations is to improve the quality of stormwater discharged to receiving waters to the maximum extent practicable. The RWQCBs in California are responsible for implementing the NPDES permit system (see the “State” section, below).

### Federal Antidegradation Policy

The federal antidegradation policy, established in 1968, is designed to protect existing uses of waters and water quality and national water resources. The federal policy directs states to adopt a statewide policy that includes the following primary provisions:

- ▶ Existing instream uses and the water quality necessary to protect those uses shall be maintained and protected.
- ▶ Where existing water quality is better than necessary to support fishing and swimming conditions, that quality shall be maintained and protected unless the state finds that allowing lower water quality is necessary for important local economic or social development.
- ▶ Where high-quality waters constitute an outstanding national resource, such as waters of national and state parks, wildlife refuges, and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.



## National Wild and Scenic Rivers Systems

The National Wild and Scenic Rivers System was created by Congress in 1968 (Public Law 90-542; 16 U.S. Code 1271 et seq.) to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. The act is notable for safeguarding the special character of these rivers, while also recognizing the potential for their appropriate use and development. It encourages river management that crosses political boundaries and promotes public participation in developing goals for river protection.

Rivers may be designated by Congress or, if certain requirements are met, the Secretary of the Interior. Each river is administered by either a federal or state agency. Designated segments need not include the entire river and may include tributaries. For federally administered rivers, the designated boundaries generally average one-quarter mile on either bank in the lower 48 states and one-half mile on rivers outside national parks in Alaska to protect river-related values.

Protected rivers are designated as wild, scenic, or recreational rivers, and different segments of a given river may be designated with one or all of these classifications. California has approximately 189,454 miles of river, of which 1,999.6 miles are designated as wild or scenic, or 1 percent of the state's river miles (National Wild and Scenic Rivers Systems 2023a). Sections of the Eel River in Mendocino County, including the North, Middle, and South Forks of the river, as well as the Black Butte River and Cold Creek, are classified as wild, scenic, or recreational under the Wild and Scenic Rivers Act (Mendocino County 2008).

### Rivers Classified as *Wild, Scenic, or Recreational*

**Wild river areas** are those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

**Scenic river areas** are those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

**Recreational river areas** are those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

Regardless of classification, each river in the national system is administered with the goal of protecting and enhancing the values that caused it to be designated. Designation neither prohibits development nor gives the federal government control over private property. Recreation, agricultural practices, residential development, and other uses may continue. Protection of the river is provided through voluntary stewardship by landowners and river users and through regulation and programs of federal, state, local, or tribal governments. In most cases, not all land within boundaries is, or will be, publicly owned, and the act limits how much land the federal government can acquire from willing sellers. Visitors to these rivers are cautioned to be aware of and respect private property rights.

The act purposefully strives to balance dam and other construction at appropriate sections of rivers with permanent protection for some of the country's most outstanding free-flowing rivers. To accomplish this, it prohibits federal support for actions such as the construction of dams or other instream activities that would harm the river's free-flowing condition, water quality, or outstanding resource values. However, designation does not affect existing water rights or the

existing jurisdiction of states and the federal government over waters as determined by established principles of law.

#### National Flood Insurance Act

The Federal Emergency Management Agency (FEMA) is tasked with responding to, planning for, recovering from and mitigating against disasters. The Federal Insurance and Mitigation Administration within FEMA is responsible for administering the National Flood Insurance Program (NFIP) and administering programs that aid with mitigating future damages from natural hazards.

FEMA prepares Flood Insurance Rate Maps (FIRMs) that delineate the regulatory floodplain to assist local governments with the land use planning and floodplain management decisions needed to meet the requirements of NFIP. Floodplains are divided into flood hazard areas, which are areas designated per their potential for flooding, as delineated on FIRMs. Special Flood Hazard Areas are the areas identified as having a 1 percent chance of flooding each year (otherwise known as the 100-year flood). In general, the NFIP mandates that development is not to proceed within the regulatory 100-year floodplain if the development is expected to increase flood elevation by 1 foot or more.

#### Safe Drinking Water Act

As mandated by the Safe Drinking Water Act (Public Law 93-523), passed in 1974, EPA regulates contaminants of concern to domestic water supply. Such contaminants are defined as those that pose a public health threat or that alter the aesthetic acceptability of the water. These types of contaminants are regulated by EPA primary and secondary maximum contaminant levels (MCLs). MCLs and the process for setting these standards are reviewed triennially. Amendments to the Safe Drinking Water Act enacted in 1986 established an accelerated schedule for setting drinking water MCLs. EPA has delegated responsibility for California's drinking water program to the California Department of Health Services (DHS). DHS is accountable to EPA for program implementation and for adoption of standards and regulations that are at least as stringent as those developed by EPA.

## STATE

#### Porter-Cologne Water Quality Control Act

California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Porter-Cologne Act, Water Code section 13000 et seq.). The Porter-Cologne Act grants SWRCB and each of the nine RWQCBs power to protect water quality and is the primary vehicle for implementation of California's responsibilities under the CWA. The applicable RWQCB for the proposed project is the North Coast RWQCB. SWRCB and the North Coast RWQCB have the authority and responsibility to adopt plans and policies, regulate discharges to surface water and groundwater, regulate waste disposal sites, and require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substances, sewage, or oil or petroleum products.

Each RWQCB must formulate and adopt a Basin Plan for its region. The Basin Plans must conform to the policies set forth in the Porter-Cologne Act and established by SWRCB in its state water policy. The Porter-Cologne Act also provides that an RWQCB may include within its Basin Plan water discharge prohibitions applicable to particular conditions, areas, or types of waste.

## NPDES Construction General Permit for Stormwater Discharges Associated with Construction Activity

SWRCB adopted the statewide NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (General Permit) in August 1999. The state requires that projects disturbing more than 1 acre of land during construction file a Notice of Intent with the RWQCB to be covered under this permit. Construction activities subject to the General Construction Permit include clearing, grading, stockpiling, and excavation. Dischargers are required to eliminate or reduce nonstormwater discharges to storm sewer systems and other waters. A storm water pollution prevention plan (SWPPP) must be developed and implemented for each site covered by the permit. The SWPPP must include best management practices (BMPs) designed to prevent construction pollutants from contacting stormwater and keep products of erosion from moving off-site into receiving waters throughout the construction and life of the project; the BMPs must address source control and, if necessary, pollutant control.

## State Drinking Water Standards

Title 22, Division 4, Chapter 15, of the CCR establishes parameters for safe drinking water throughout the state. These drinking water standards are similar to, but in many cases more stringent than, federal standards. Title 22 contains both primary standards, and secondary standards related to aesthetics (taste and odor). These standards include limits for water quality parameters that may be found in runoff from permitted or unpermitted commercial cannabis cultivation sites, such as heavy metals, pesticides, petroleum hydrocarbons, color, foaming agents, turbidity, and total dissolved solids/specific conductance.

## Policy for Implementation of Toxics Standards in Inland Surface Waters, Enclosed Bays, and Estuaries of California

In 1994, SWRCB and EPA agreed to a coordinated approach for addressing priority toxic pollutants in inland surface waters, enclosed bays, and estuaries of California. In March 2000, SWRCB adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, commonly referred to as the State Implementation Policy. This policy implements National Toxics Rule and California Toxics Rule criteria and applicable Basin Plan objectives for toxic pollutants. When an RWQCB issues any permit allowing the discharge of any toxic pollutant(s) in accordance with the CWA or the Porter-Cologne Act, the permit's promulgation and implementation must be consistent with the State Implementation Policy's substantive or procedural requirements. Any deviation from the State Implementation Policy requires the concurrence of EPA if the RWQCB is issuing any permit under the CWA. Consistency with the State Implementation Policy would occur when water permits are issued for proposed program activities.

## California Pesticide Management Plan for Water Quality

The California Pesticide Management Plan for Water Quality is a joint effort between the California Department of Pesticide Regulation (CDPR), county agricultural commissioners, SWRCB, and the RWQCBs to protect water quality from pesticide pollution. To reduce the possibility of pesticides entering groundwater or surface water, a four-stage approach was designed by CDPR and SWRCB. Stage 1 involves educational outreach to the community to prevent pesticide contamination in water supplies. Stage 2 occurs after pesticides are detected in a water supply, and an appropriate response is selected that is safe and site-specific. If Stage 2 is not effective, then Stage 3 tactics are employed, which include implementing restricted material use permit requirements, regulations, and other regulatory authority by

CDPR and the county agricultural commissioners. In addition, SWRCB and the RWQCBs can employ Stage 4 and a variety of water quality control planning programs and other regulatory measures to protect water quality, as necessary.

#### Surface Water Protection Program

CDPR implements the California Pesticide Management Plan for surface water protection through its Surface Water Protection Program, under a Management Agency Agreement with SWRCB. The Surface Water Protection Program is designed to characterize pesticide residues, identify contamination sources, determine flow of pesticides to surface water, and prepare site-specific mitigation measures. The program addresses both agricultural and nonagricultural sources of pesticide residues in surface waters. It has preventive and response components that reduce the presence of pesticides in surface waters. The preventive component includes local outreach to promote management practices that reduce pesticide runoff. Prevention also relies on CDPR's registration process, in which potential adverse effects on surface water quality, and particularly those in high-risk situations, are evaluated. The response component includes mitigation options to meet water quality goals, recognizing the value of self-regulating efforts to reduce pesticides in surface water as well as regulatory authorities of CDPR, SWRCB, and the RWQCBs.

#### Pesticide Contamination Prevention Act

The Pesticide Contamination Prevention Act (Food and Agricultural Code sections 13145–13152) requires CDPR to:

- ▶ Obtain environmental fate and chemistry data for agricultural pesticides before they can be registered for use in California.
- ▶ Identify agricultural pesticides with the potential to pollute groundwater.
- ▶ Sample wells to determine the presence of agricultural pesticides in groundwater.
- ▶ Obtain, report, and analyze the results of well sampling for pesticides by public agencies.
- ▶ Formally review any detected pesticide to determine whether its use can be allowed.
- ▶ Adopt use modifications to protect groundwater from pollution if formal review indicates that continued use can be allowed.

The act requires CDPR to develop numerical values for water solubility, soil adsorption coefficient, hydrolysis, aerobic and anaerobic soil metabolism, and field dissipation of pesticides to protect groundwater, based in part on data submitted by pesticide registrants.

The act also states that CDPR shall establish a list of pesticides that have the potential to pollute groundwater, called the Groundwater Protection List. Any person who uses a pesticide that is listed on the Groundwater Protection List is required to file a report with the county agricultural commissioner, and pesticide dealers are required to make quarterly reports to CDPR of all sales of pesticides on the list to persons not otherwise required to file a report. The Pesticide Contamination Prevention Act ensures that pesticides allowed for use in California, including those that may be used in commercial cannabis cultivation, will have been studied by CDPR for their potential to contaminate groundwater and the environment.

#### Groundwater Protection Program

CDPR implements the Pesticide Contamination Prevention Act through its Groundwater Protection Program, which is coordinated with SWRCB under the California Pesticide Management Plan. The Groundwater Protection Program evaluates and samples pesticides to

determine whether they may contaminate groundwater, identifies areas sensitive to pesticide contamination, and develops mitigation measures to prevent the movement of pesticides. CDPR may adopt regulations to carry out these mitigation measures. CDPR conducts four groundwater monitoring programs. The first monitors whether pesticides on the Groundwater Protection List with the potential to pollute have been found in groundwater. The second type is four-section monitoring, which monitors wells near a contaminated well. The third monitoring type is sensitive-area monitoring that identifies areas sensitive to pesticide pollution. The fourth type is investigative monitoring, used to identify and understand the factors that affect pesticide movement into groundwater.

### State Surface Water Rights System

SWRCB administers a water rights system for the diversion of surface waters (springs, streams, and rivers), including diversion of water from subterranean streams flowing in known and definite channels. The granting of a water right provides permission to withdraw water from a river, stream, or groundwater source for a “reasonable” and “beneficial” use. Water right permits and licenses identify the amounts, conditions, and construction timetables for a proposed diversion. Before issuing the permit, SWRCB must consider all prior rights and the availability of water in the basin, as well as the flows needed to preserve instream uses such as recreation and fish and wildlife habitat. Water rights are administered using a seniority system based on the date of applying for the water right—commonly referred to as “first in time, first in right.” Junior water rights holders may not divert water in a manner that would reduce the ability of senior water rights holders to exercise their water right.

All surface water used for commercial cannabis cultivation must be associated with a valid water right, whether the cultivator personally holds such a water right or it is held by the water purveyor supplying the commercial cannabis cultivation operation (e.g., a municipal water system or a water delivery service).

### California Water Code

The California Water Code is enforced by the California Department of Water Resources (DWR). The mission of DWR is “to manage the water resources of California in cooperation with other agencies, to benefit the State’s people, and to protect, restore, and enhance the natural and human environments” DWR is responsible for promoting California’s general welfare by ensuring beneficial water use and development statewide.

### Diversion Water Use

California Water Code section 5101 requires each person or organization that uses diverted surface water or pumped groundwater from a known subterranean stream after December 31, 1965, to file with SWRCB an initial Statement of Water Diversion and Use before July 1 of the following year. Supplemental Statements are required at 3-year intervals following the filing of an Initial Statement if there is continued diversion of water.

The main purpose of the Statement Program is to create a central repository for records of diversions of water. This repository differs from the records of appropriated water rights that are registered, permitted, and licensed. A Statement is not a confirmed water right; it is only a statement of diversion and use.

Additionally, SWRCB regulates the State’s Cannabis Cultivation Program’s Water Rights, including a Cannabis Small Irrigation Use Registration (Cannabis SIUR) which is a streamlined option to obtain a small appropriative water right to divert and store surface water for commercial cannabis. Further, the Cannabis SIUR prohibits cannabis cultivators from diverting

surface water during the dry season forbearance period, from April 1 through October 31 of each calendar year. This means that water used for cannabis cultivation activities must be diverted to off-stream storage during the wet season to be used during the dry season.

### Groundwater Management

Groundwater management is outlined in the Water Code sections 10750 through 10755.4. The Groundwater Management Act was first introduced in 1992 as Assembly Bill (AB) 3030 (Chapter 947, Statutes of 1992) and has since been modified by Senate Bill (SB) 1938 (Chapter 983, Statutes of 2002), AB 359 (Chapter 572, Statutes of 2011), and the Sustainable Groundwater Management Act (SGMA) (SB 1168 (Chapter 346, Statutes of 2014), SB 1319 (Chapter 348, Statutes of 2014), and AB 1739 (Chapter 347, Statutes of 2014)). The intent of the acts is to encourage local agencies to work cooperatively to manage groundwater resources within their jurisdictions and to provide a methodology for developing a Groundwater Management Plan.

### Sustainable Groundwater Management Act of 2014

The SGMA became effective on January 1, 2015, and applies to all groundwater basins in the state (Water Code section 10720.3). By enacting the SGMA, the legislature intended to provide local agencies with the authority and the technical and financial assistance necessary to sustainably manage groundwater within their jurisdiction (Water Code section 10720.1).

The SGMA requires DWR to categorize each groundwater basin in the state as high-, medium-, low-, or very low priority (Water Code sections 10720.7, 10722.4). All basins designated as high- or medium-priority basins must be managed by a groundwater sustainability agency under a groundwater sustainability plan that complies with Water Code section 10727 et seq. As further discussed below, the Ukiah Valley Basin Groundwater Authority prepared the 2021 Ukiah Valley Basin Groundwater Sustainability Plan in compliance with SGMA.

### California Nondegradation Policy

In 1968, as required under the federal antidegradation policy described previously, SWRCB adopted a nondegradation policy aimed at maintaining high quality for waters in California. The nondegradation policy states that the disposal of wastes into state waters shall be regulated to achieve the highest water quality consistent with maximum benefit to the people of the state and to promote the peace, health, safety, and welfare of the people of the state. The policy provides as follows:

- a) Where the existing quality of water is better than required under existing water quality control plans, such quality would be maintained until it has been demonstrated that any change would be consistent with maximum benefit to the people of the state and would not unreasonably affect present and anticipated beneficial uses of such water.
- b) Any activity which produces waste or increases the volume or concentration of waste and which discharges to existing high-quality waters would be required to meet waste discharge requirements (WDRs).

### California Wild and Scenic River Designation

Subject to a declaration that rivers with “extraordinary scenic, recreational, fishery, or wildlife values” should be preserved in their free-flowing state as the “highest and most beneficial use,” the California State Legislature created a California Wild and Scenic Rivers System in 1972, now administered by the California Resources Agency. While the U.S. Congress had created a

national system designating the same rivers in 1968, the California system is intended to enhance local coordination of riparian management.

Under the California system, rivers were classified as wild, scenic, or recreational, according to the following criteria as stated in PRC section 5093.53:

- ▶ Wild rivers are those “free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted.”
- ▶ Scenic rivers are those “free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.”
- ▶ Recreational rivers are those “readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.”

#### California Administrative Code

The Administrative Code (CCR, title 24, Part 1) defines secondary drinking water standards, which are established primarily for reasons of consumer acceptance (i.e., taste) rather than for health issues (CCR, title 24, section 64449).

#### California Well Standards

DWR Bulletins 74-81 and 74-90 authorized the establishment of well standards and regulations pertaining to the construction, alteration, and destruction of wells. California Water Code section 13750.5 requires that those responsible for the construction, alteration, or destruction of water wells, cathodic protection wells, groundwater monitoring wells, or geothermal heat exchange wells possess a C-57 Water Well Contractor’s License. The Contractors State License Board issues this license. California Water Code section 13751 requires that anyone who constructs, alters, or destroys a water well, cathodic protection well, groundwater monitoring well, or geothermal heat exchange well must file with DWR a report of completion within 60 days of the completion of the work.

#### State Water Resources Control Board Regulations for Cannabis Cultivation

Discharges related to cannabis cultivation must be covered under the SWRCB Cannabis Policy under Order WQ 2023-0102-DWQ, General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities (Cannabis Cultivation General Order). The Cannabis Cultivation General Order is currently undergoing an update and is going before the State Water Board for readoption (SWRCB 2024a). Dischargers enrolled under the North Coast RWQCB order may generally continue to operate their facility with their existing order’s setback, although new or expanded areas must comply with the state order, which is summarized as follows.

The Cannabis General Order provides a statewide tiered approach for permitting discharges and threatened discharges of waste from cannabis cultivation and associated activities. The tier structure consists of two tiers:

- ▶ Tier 1 outdoor commercial cultivation activities disturb an area equal to or greater than 2,000 square feet and less than 1 acre (43,560 square feet).
- ▶ Tier 2 outdoor commercial cultivation activities disturb an area equal to or greater than 1 acre.

Cultivation sites within the County are limited to less than 1 acre and therefore only Tier 1 requirements would apply for this project. For the purposes of this regulation, land disturbances refers to areas where natural conditions have been modified in a way that may result in an

increase in turbidity in water discharged from the site. Land disturbance includes all activities whatsoever associated with developing or modifying land for cannabis cultivation related activities or access. Land disturbance activities include, but are not limited to, construction of roads, buildings, water storage areas and excavation, grading, and site clearing.

Tier 1 and Tier 2 enrollees must characterize the risk designation based on the slope of disturbed areas and the proximity to a water body. Applicants must comply with the riparian setback and slope limits and are classified as low, moderate, or high risk, as described below:

- ▶ **Low Risk:** A cannabis cultivation site is classified as low risk if no part of the disturbed area is located on a slope of 30 percent or greater. Such cannabis cultivators shall register as low risk and submit a Site Management Plan.
- ▶ **Moderate Risk:** A cannabis cultivation site is classified as moderate risk if any part of the disturbed area is located on a slope greater than 30 percent and less than 50 percent. Such cannabis cultivators shall register as moderate risk and submit a Site Erosion and Sediment Control Plan.
- ▶ **High Risk:** A cannabis cultivation site is classified as high risk if any part of the disturbed area exists within the riparian setback limits. Such cannabis cultivators shall register as high risk, submit a Disturbed Area Stabilization Plan, and shall address the compliance issue as described below. Because such cannabis cultivators pose a higher risk to water quality and will require a higher level of RWQCB oversight, they are subject to a higher application and annual fee. When the cannabis cultivation site is reconfigured to comply with the riparian setbacks, the cannabis cultivator can request the RWQCB reclassify the site to a lower risk level and allow a lower annual fee to be assessed.

To obtain coverage under the waiver or enroll under the general order, the discharger is required to submit an online application and application fee and relevant technical reports. Technical report requirements are based on tier and risk level (Table 3.10-1).

**Table 3.10-1 Technical Report Requirements by Tier**

<b>Tier</b>	<b>Risk Level</b>	<b>Technical Reports</b>
Conditionally Exempt	N/A	Site Closure Report
Tier 1	All	Site Management Plan Site Closure Report Site Management Plan
	Moderate	Site Erosion Sediment Control Plan
	High	Disturbed Area Stabilization Plan
Tier 2	All	Site Management Plan Nitrogen Management Plan Site Closure Report
	Moderate	Site Erosion Sediment Control Plan
	High	Disturbed Area Stabilization Plan

Source: SWRCB Order WQ 2023-0102-DWQ.

A summary of the types of information included in the technical reports is provided as follows.

#### Site Management Plan

A Site Management Plan describes how the commercial cannabis cultivator is complying with the requirements listed in Attachment A of SWRCB Order WQ 2023-0102-DWQ. These requirements include a description of how the requirements are implemented property wide,



including requirements implemented to address discharges from legacy activities and water diversions, as well as WDRs related to commercial cannabis cultivation. Dischargers must also indicate how the best practical treatment or control (BPTC) measures included in the Cannabis Policy will be implemented. The Site Management Plan may include a schedule to achieve compliance, but all work must be completed by the onset of the winter period each year.

#### Best Practical Treatment or Control

The requirements related to water diversion and waste discharge for commercial cannabis cultivation cover the following 10 BPTC categories:

1. Riparian and wetland protection and management
2. Water diversion, storage, and use
3. Irrigation runoff
4. Land development and maintenance, erosion control, and drainage features
5. Soil disposal
6. Stream crossing installation and maintenance
7. Fertilizer and soil use and storage
8. Cultivation-related waste disposal
9. Refuse and human waste disposal
10. Winterization

#### Site Erosion and Sediment Control Plan

A Site Erosion and Sediment Control Plan describes how the cannabis cultivator will implement the site erosion and sediment control requirements listed in Attachment A of SWRCB Order WQ 2023-0102-DWQ. The report must include an analysis of slope stability and is subject to approval by the RWQCB. When required, the Site Erosion and Sediment Control Plan is to be prepared by a qualified individual (i.e., a registered professional per the Cannabis Policy requirements).

#### Disturbed Area Stabilization Plan

A Disturbed Area Stabilization Plan describes how BPTC measures will be implemented to achieve the goal of stabilizing the disturbed area to minimize the discharge of sediment off-site and complying with the riparian setback requirements. The report must be approved by the RWQCB Executive Officer before implementation. When required, the Disturbed Area Stabilization Plan shall be prepared by a qualified professional.

#### Nitrogen Management Plan

A nitrogen management plan is required for the commercial cannabis cultivation site. The plan provides calculations of all the nitrogen applied to the commercial cannabis cultivation area (dissolved in irrigation water, originating in soil amendments, and applied fertilizers) and describes procedures to limit excessive fertilizer application.

#### Site Closure Report

A Site Closure Report describes how the site will be decommissioned to prevent sediment and turbidity discharges that degrade water quality. If construction activities are proposed in the Site Closure Report, a project implementation schedule shall be included in the report. A

Notice of Termination must be submitted (Attachment C of Attachment A of SWRCB Order WQ 2023-0102-DWQ) with the Site Closure Report.

### Monitoring and Reporting Program

The monitoring and reporting program describes requirements for monitoring a commercial cannabis cultivation site and its associated facilities. Tier 1 and Tier 2 facilities must report on issues pertaining to facility status, site maintenance status, and stormwater runoff monitoring. Tables 3.10-2, 3.10-3, and 3.10-4 provide an overview of these requirements.

**Table 3.10-2 Facility Status**

Monitoring Requirement	Description
Winterization Measures Implemented	Report winterization procedures implemented, any outstanding measures, and the schedule for completion.
Tier Status Confirmation	Report any change in the tier status. (Stabilization of disturbed areas may change the tier status of a facility. Contact the Regional Water Quality Control Board if a change in status is appropriate.)
Third Party Identification	Report any change in third party status as appropriate. Nitrogen Application Report generated monthly and annual total nitrogen use for bulk, solid, and liquid forms of nitrogen. Provide the data as pounds/canopy acre/time (month or year) as described in Attachment D, Nitrogen Management Plan. If plant tissue was collected to determine limited nitrogen availability, the results shall be submitted.

Source: SWRCB 2018.

**Table 3.10-3 Site Maintenance Status**

Observations	Description	Monitoring Frequency
Surface Water Runoff	Report any conditions of surface water runoff, including location, duration, source of runoff (irrigation water, storm water, etc.).	Monthly
Soil Erosion Control	Report any indications of soil erosion (e.g., gully, turbid water discharge, landslide, etc.). Monthly Sediment Capture Report on the status of sediment capture measures (e.g., silt fence, fiber rolls, settling basin, etc.).	Monthly
Erosion/Sediment Capture Maintenance	Report maintenance activities to maintain the effectiveness of erosion control and sediment capture measures (e.g., reinstallation of straw mulch, hydroseeding, tarp placement, removal or stabilization of sediment captured, removal of settled sediment in a basin, etc.)	Monthly
Stabilization of Disturbed Areas	Dischargers characterized as high risk (with any portion of the disturbed area within the setbacks) shall provide a status report describing activities performed to stabilize the disturbed area within the setback.	Monthly
Material(s) Storage Erosion/Spills Prevention	Report materials delivered or stored at the site that could degrade water quality if discharged off-site (e.g., potting soil, manure, chemical fertilizer, gasoline, herbicides, pesticides, etc.).	Monthly
Holding Tank, Septic Tank, or Chemical Toilet Servicing	Report the dates, activity, and name of the servicing company for servicing holding tanks or chemical toilets.	Monthly

Source: SWRCB 2018.

**Table 3.10-4 Stormwater Runoff Monitoring**

Constituent	Frequency	Monitoring Frequency
Turbidity	Once per calendar month when precipitation exceeds 0.25 inches/day or when stormwater runoff from the site is generated	All months until winterization procedures are completed.
pH	Once per calendar month when precipitation amount is forecast to exceed 0.25 inch/day	All months until winterization procedures are completed.

Source: SWRCB 2018.

Annual reports are required to be submitted to the North Coast RWQCB. The Cannabis Policy includes informal and formal enforcement actions to address a violation or threatened violation of water rights and/or water quality law, regulations, policies, plans, or orders. These actions include a notice of violation, cleanup and abatement orders, cease and desist order, revocation of water rights permits, and modifications or rescission of WDR permits.

### Numeric and Instream Flow Requirements

Attachment A of SWRCB Order WQ 2023-0102-DWQ establishes principles and guidelines (Requirements) for commercial cannabis cultivation activities to protect water quality and instream flows, in consultation with California Department of Fish and Wildlife (CDFW) and the California Department of Cannabis Control. The requirements are divided into five main categories:

- ▶ Section 1, General Requirements and Prohibitions, and Cannabis General Water Quality Certification
- ▶ Section 2, Requirements Related to Water Diversions and Waste Discharge for Cannabis Cultivation
- ▶ Section 3, Numeric and Narrative Instream Flow Requirements (including Gauging)
- ▶ Section 4, Watershed Compliance Gauge Assignments
- ▶ Section 5, Planning and Reporting
- ▶ Instream flow requirements were established by SWRCB in consultation with CDFW for the protection of aquatic species life history needs, including endangered anadromous salmonids. Numeric instream flow requirements (minimum instream flows required to protect aquatic species) are established for each region in the state in Attachment A of SWRCB Order WQ 2023-0102-DWQ. Aquatic base flows have also been established to address instream flow impacts from groundwater diversions (further discussed below). SWRCB's flow standards and diversion requirements were developed to protect fish spawning, migration, and rearing for endangered anadromous salmonids, and flows needed to maintain natural flow variability within each watershed. The diversion requirements would ensure that the individual and cumulative effects of water diversions and discharges associated with commercial cannabis cultivation do not affect instream flows necessary for fish spawning, migration, and rearing for endangered anadromous salmonids, and flows needed to maintain natural flow variability (SWRCB 2017a). The policy was scientifically peer reviewed by four experts. The peer review determined that water quality, instream flow, and diversion requirements of the policy were based on sound scientific knowledge, methods, and data (SWRCB 2017b).

General Requirements and Prohibitions in Attachment A of SWRCB Order WQ 2023-0102-DWQ implement existing SWRCB authorities and address issues such as compliance with state and local permits, discharge prohibitions, riparian setbacks, protection of tribal cultural resources, and SWRCB's right to access properties for inspections.

Detailed information related to the requirements that pertain to hydrology and water quality is provided below.

## Instream Flow Requirements

### *Flow and Gauging Requirements*

The instream flow requirements apply to cannabis cultivators throughout the state. The numeric instream flow requirements are developed at compliance gauges statewide. The instream flow requirements may be updated over time, as reasonably necessary. Interested parties may submit scientifically defensible information (e.g., instream flow studies) that supports modification to the instream flow requirements to the Deputy Director of SWRCB for consideration during updates to the Cannabis Policy. There are gauges within Mendocino County within the Eel River, Russian River, Navaro River, and Gualala River watersheds.

### *Surface Water Diversion Forbearance Period*

Absent restrictions on water diversion, the individual and cumulative effects of water diversions for commercial cannabis cultivation during the dry season are likely to significantly decrease instream flow and, in some instances, reduce hydrologic connectivity or completely dewater the stream.

Minimum flows that provide habitat connectivity are needed to maintain juvenile salmonid passage conditions in late spring and early summer. Instream flows are also needed to maintain habitat conditions necessary for juvenile salmonid viability throughout the dry season, including adequate dissolved oxygen concentrations, low stream temperatures, and high rates of invertebrate drift from riffles to pools. Further, many species depend on spring recession flows as migratory or breeding cues. SWRCB has established a surface water diversion forbearance period (April 1 to October 31 each year) to ensure adequate flows are maintained throughout the dry season and protect aquatic species, aquatic habitat, and water quality.

### *Wet Season Surface Water Instream Flow Requirements*

Minimum instream flow requirements during the wet season are needed for the protection of aquatic species life history needs. For threatened and endangered anadromous salmonids, minimum flows are needed to address life history needs, such as:

1. Maintaining natural abundance and availability of spawning habitat;
2. Minimizing unnatural adult exposure, stress, predation, and delay during adult spawning migration; and
3. Sustaining high-quality and abundant juvenile salmonid winter rearing habitat.

To meet the timeline, scale, and purpose of SWRCB Order WQ 2023-00102-DWQ, SWRCB, in consultation with CDFW, has determined that the Tessmann Method is the best methodology to develop interim instream flow requirements. The Tessmann Method develops instream flow requirements by using percentages of historical mean annual and mean monthly natural streamflow. For the development of long-term instream flow requirements, SWRCB, in consultation with CDFW, will evaluate other scientifically robust methods that are more reflective of regional variability and the needs of target species. SWRCB applied the Tessmann Method to a predicted historical flow data set sourced from a flow modeling effort conducted by the U.S. Geological Survey (USGS) in cooperation with The Nature Conservancy and Trout Unlimited (USGS flow modeling data). The interim instream flow requirements were calculated for compliance gauges throughout the state. The Tessmann Method and the USGS flow modeling data allow for instream flow requirements to be calculated at additional compliance points throughout the state. This allows SWRCB to use the

Tessmann Method and the USGS flow modeling data to calculate or adjust a flow requirement, as needed, throughout the state.

### *Maintain High-Flow Events*

To preserve the annual first flush flow event, the surface water diversion period for commercial cannabis cultivation will not occur until the real-time daily average flow is greater than the minimum monthly instream flow requirement at a compliance gauge for 7 consecutive days or after December 15 when flows are greater than the numeric flow requirement, whichever occurs first. Surface water diversions must bypass a minimum of 50 percent of the streamflow past the point of diversion. SWRCB will monitor other high-flow events that occur throughout the wet season to evaluate whether additional requirements are needed to maintain high-flow variability during other periods of the wet season.

### *Groundwater Requirements*

To address potential impacts of groundwater diversions on surface flow, SWRCB's Deputy Director for Water Rights may require a forbearance period or other measures for cannabis groundwater diversions in areas where such restrictions are necessary to protect instream flows. Such areas may include watersheds with high surface water-groundwater connectivity, large numbers of cannabis groundwater diversions, and/or groundwater diversions in close proximity to streams. An aquatic base flow was developed at each compliance gauge during the surface water forbearance period (dry season) to inform the need for additional actions to address impacts associated with cannabis groundwater diversions. The aquatic base flow was established in consultation with CDFW. The aquatic base flow is established using USGS flow modeling data to calculate mean monthly flows and applying the New England Aquatic Base Flow Standard methodology at the compliance gauges in the nine priority regions. The aquatic base flow is the set of chemical, physical, and biological conditions that represent limiting conditions for aquatic life in stream environments. This allows SWRCB to apply the standard to the USGS flow modeling data to calculate an aquatic base flow Requirement at additional compliance points, as needed, throughout the state. SWRCB will monitor instream flows during the dry season and evaluate the number and location of cannabis groundwater diversions to determine whether imposition of a groundwater forbearance period or other measures are necessary to address potential localized effects of groundwater diversions.

### *Compliance Gauges and Requirements*

Compliance gauge assignments have been developed for all watershed areas throughout the state. Numeric instream flow Requirements are applied at a subset of existing gauges reported on two websites: (1) the USGS National Water Information System or (2) DWR's California Data Exchange Center.

Watershed areas that do not have existing gauges are assigned a compliance gauge for a different location in the same watershed or for a nearby watershed with similar flow characteristics. Cannabis cultivators in ungauged watersheds may be required to install a gauge if information indicates that use of the assigned gauge does not adequately protect instream flows. Cannabis cultivators in watersheds without an assigned gauge may be required to install a gauge if information indicates that a gauge is necessary to adequately protect instream flows. SWRCB will monitor where commercial cannabis cultivation diversions are located to track areas where locally concentrated commercial cannabis cultivation water diversions within a watershed may adversely affect instream flows.

Many dams in California have existing instream flow requirements through the Federal Energy Regulatory Commission licensing program or through Biological Opinions issued by the

National Marine Fisheries Service or the U.S. Fish and Wildlife Service, or through water right decisions. Cannabis cultivators shall comply with either existing instream flow requirements (e.g., SWRCB Orders, Biological Opinions, Federal Energy Regulatory Commission Licensing Program) or the Tessmann instream flow Requirements, whichever is greater.

The instream flow requirement compliance gauges are located in areas that are generally representative of the water availability and total demand occurring upstream of the gauging location or in a similar watershed. However, impacts may still occur in areas where there is significant localized commercial cannabis cultivation compared to water availability or where the compliance gauge does not accurately reflect the demand in a paired watershed. To help ensure diversion of water for commercial cannabis cultivation does not negatively affect the flows needed for fish spawning, migration, and rearing, or the flows needed to maintain natural flow variability, the cannabis cultivator shall maintain a minimum bypass of at least 50 percent of the streamflow past the cannabis cultivator's point of diversion, in addition to the applicable numeric instream flow requirements.

#### Land Development and Maintenance, Erosion Control, and Drainage Features

Section 2 of the Requirements in Attachment A of SWRCB Order WQ 2023-0102-DWQ addresses land development and maintenance, erosion control, and drainage features. These Requirements place limitations on earthmoving, including prohibition of grading on slopes that exceed 50 percent; dust control measures; methods to limit the potential for leaks of hazardous or toxic materials into soils and waterways; erosion prevention and sediment capture measures; and standards for drainages associated with access roads, culverts, and land development.

#### Stream Crossing Installation and Maintenance

The requirements in Attachment A of SWRCB Order WQ 2023-0102-DWQ place limitations of work in watercourses and permanently ponded areas. Standard practices are provided to address the design of watercourse crossings and necessary maintenance activities. Guidance is also provided to address temporary watercourse diversion and dewatering.

#### Soil Disposal and Spoils Management

The Requirements address the storage of soil, construction, and waste materials associated with cannabis cultivation.

#### Exemptions

SWRCB Order WQ 2023-0102-DWQ includes an exemption for when activities are considered to pose a low threat to water quality: personal use cannabis cultivators, indoor commercial cultivation activities, and outdoor commercial cultivation activities that disturb less than 2,000 square feet. Personal use cannabis cultivators are generally not subject to commercial cultivation regulations; indoor and operations that disturb less than 2,000 square feet are considered to be conditional exemption but are still subject to compliance with the regulations.

Commercial cannabis cultivation activities that disturb an area (in aggregate) less than 2,000 square feet on one parcel or on contiguous parcels managed as a single operation may be conditionally exempt from enrolling under the order but are required to obtain coverage under the waiver of WDRs. This exemption does not limit SWRCB's authority to inspect the site, evaluate the exemption status, or evaluate other water quality or water right regulatory requirements.

## California Forest Practice Rules of 2017

The California Forest Practice Rules of 2017 (Title 14, CCR Chapters 4, 4.5, and 10) implements the provision of the Z'berg-Nejedly Forest Practice Act of 1973. The Cannabis Policy requires access roads to be constructed consistent with the requirements in CCR, title 14, Chapter 4. The Handbook for Forest Ranch and Rural Roads (Road Handbook) describes how to implement these regulations and provides a guide for planning, designing, constructing, reconstructing, upgrading, maintaining, and closing wildland roads. Development of the Road Handbook was funded in part by SWRCB, EPA, and the California Department of Forestry and Fire Protection.

The Road Handbook recommends limited road slopes for safety, maintenance, and drainage issues. Road alignments should be designed with gentle to moderate slopes to minimize damage to the roadbed, allow for frequent and effective road surface drainage, and for safety. Roads with a slope of less than 1 percent can be difficult to drain and may develop potholes and other signs of impaired drainage. Steep roads are more likely to suffer from erosion and road surface damage, especially if they are used when wet. Steep roads can be more difficult to drain because surface runoff may flow down the road in wheel ruts rather than off the outside edge where it can be discharged and dissipated. In snow zones, steep roads may represent a safety hazard if they are used during cold weather periods. New road alignments should be constructed with slopes of 3–8 percent or less wherever possible. Forest roads should generally be kept below 12 percent except for short pitches of 500 feet or less where road slopes may go up to 20 percent. These steeper road slopes should be paved or rock surfaced and equipped with adequate drainage. Existing roads that do not comply with these limits require additional inspection by a Qualified Professional, as defined in the Policy, to determine if improvements are needed.

## California Code of Regulations

### Cannabis Cultivation Licensing Requirements

CCR, title 4, section 15011(a), Additional Information, states:

- (11) If applicable, the applicant shall provide evidence that the proposed premises is not located in whole or in part in a watershed or other geographic area that the State Water Resources Control Board or the Department of Fish and Wildlife has determined to be significantly adversely impacted by cannabis cultivation pursuant to section 26060(a)(2) of the Business and Professions Code.

CCR, title 4, section 16307, Pesticide Use Requirements, states:

- (a) Licensed cultivators shall comply with all applicable pesticide statutes and regulations enforced by the Department of Pesticide Regulation.
- (b) For all pesticides that are exempt from registration requirements, licensed cultivators shall comply with all applicable pesticide statutes and regulations enforced by the Department of Pesticide Regulation and the following pesticide application and storage protocols: (1) Comply with all pesticide label directions; (2) Store chemicals in a secure building or shed to prevent access by wildlife; (3) Contain any chemical leaks and immediately clean up any spills; (4) Apply the minimum amount of product necessary to control the target pest; (5) Prevent offsite drift; (6) Do not apply pesticides when pollinators are present; (7) Do not allow drift to flowering plants attractive to pollinators; (8) Do not spray directly to surface water or allow pesticide product to drift to surface water. Spray only when wind is blowing away from surface water bodies; (9) Do not apply pesticides when they may reach surface

water or groundwater; and (10) Only use properly labeled pesticides. If no label is available, consult the Department of Pesticide Regulation.

CCR, title 4, section 16311, Supplemental Water Source Information, states:

The following information shall be provided for each water source identified by the applicant:

(a) Retail water supply sources:

- (1) If the water source is a retail water supplier, as defined in section 13575 of the Water Code, such as a municipal provider, provide the following:
  - (A) Name of the retail water supplier; and
  - (B) A copy of the most recent water service bill or written documentation from the water supplier stating that service will be provided at the premises address.
- (2) If the water source is a small retail water supplier, such as a delivery service, and is subject to section 26060.1(a)(1)(B) of the Business and Professions Code and the retail water supplier contract is for delivery or pickup of water from a surface water body or an underground stream flowing in a known and definite channel, provide all of the following:
  - (A) The name of the retail water supplier under the contract;
  - (B) The water source and geographic location coordinates, in either latitude and longitude or the California Coordinate System, of any point of diversion used by the retail water supplier to divert water delivered to the commercial cannabis business under the contract;
  - (C) The authorized place of use of any water right used by the retail water supplier to divert water delivered to the commercial cannabis business under the contract;
  - (D) The maximum amount of water delivered to the commercial cannabis business for cannabis cultivation in any year; and
  - (E) A copy of the most recent water service bill.
- (3) If the water source is a small retail water supplier, such as a delivery service, and is subject to section 26060.1(a)(1)(B) of the Business and Professions Code and the retail water supplier contract is for delivery or pickup of water from a groundwater well, provide all of the following:
  - (A) The name of the retail water supplier under the contract;
  - (B) The geographic location coordinates for any groundwater well used to supply water delivered to the commercial cannabis business, in either latitude and longitude or the California Coordinate System;
  - (C) The maximum amount of water delivered to the commercial cannabis business for cannabis cultivation in any year;
  - (D) A copy of the well completion report filed with the Department of Water Resources pursuant to section 13751 of the Water Code for each percolating groundwater well used to divert water delivered to the commercial cannabis business. If no well completion report is available, the applicant shall provide evidence from the Department of Water Resources indicating that the Department of Water Resources does not have a record of the well completion report. When no well completion report



is available, the State Water Resources Control Board may request additional information about the well; and

(E) A copy of the most recent water service bill.

(b) If the water source is a groundwater well, provide the following:

- (1) The groundwater well's geographic location coordinates, in either latitude and longitude or the California Coordinate System; and
- (2) A copy of the well completion report filed with the Department of Water Resources pursuant to section 13751 of the Water Code. If no well completion report is available, the applicant shall provide evidence from the Department of Water Resources indicating that the Department of Water Resources does not have a record of the well completion report. If no well completion report is available, the State Water Resources Control Board may request additional information about the well.

(c) If the water source is a rainwater catchment system, provide the following:

- (1) The total square footage of the catchment footprint area(s).
- (2) The total storage capacity, in gallons, of the catchment system(s).
- (3) A detailed description and photographs of the rainwater catchment system infrastructure, including the location, size, and type of all surface areas that collect rainwater. Examples of rainwater collection surface areas include a rooftop and greenhouse.
- (4) Geographic location coordinates of the rainwater catchment infrastructure in either latitude and longitude or the California Coordinate System.

(d) If the water source is a diversion from a waterbody (such as a river, stream, creek, pond, lake, etc.), provide any applicable water right statement, application, permit, license, or small irrigation use registration identification number(s), and a copy of any applicable statement, registration certificate, permit, license, or proof of a pending application issued under part 2 (commencing with section 1200) of division 2 of the California Water Code as evidence of approval of a water diversion by the State Water Resources Control Board.

## LOCAL

### North Coast Regional Water Quality Control Board Basin Plan

The North Coast RWQCB Basin Plan provides the basis for protecting water quality in California. Basin Plans are mandated by both the CWA and the Porter-Cologne Act. Sections 13240–13247 of the Porter-Cologne Act specify the required contents of a regional basin plan.

The Basin Plan is the North Coast RWQCB's master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the state, including surface waters and groundwater. It also includes programs of implementation to achieve water quality objectives. Beneficial uses designated within the North Coast Region include municipal and domestic supply, agricultural supply, industrial service supply, industrial process supply, groundwater recharge, freshwater replenishment, navigation, hydropower generation, water contact recreation, noncontact water recreation, commercial and sport fishing, aquaculture, and various habitats. The Basin Plan was most recently updated in 2018. Please see the discussion of SWRCB above concerning management of cannabis operations.

**North Coast Regional Water Quality Control Board Sediment TMDL Implementation Policy**  
As part of its efforts to control sediment waste discharges and restore sediment impaired water bodies, the RWQCB adopted the Total Maximum Daily Load Implementation Policy Statement for Sediment Impaired Receiving Waters in the North Coast Region, which is also known as the Sediment TMDL Implementation Policy, on November 29, 2004. This policy was adopted through Resolution R1-2004-0087.

The Sediment TMDL Implementation Policy states that RWQCB staff shall control sediment pollution by using existing permitting and enforcement tools. The goals of the policy are to control sediment waste discharges to impaired water bodies so that the TMDLs are met, sediment water quality objectives are attained, and beneficial uses are no longer adversely affected by sediment.

The Sediment TMDL Implementation Policy also directs staff to develop: (1) a Work Plan that describes how and when permitting and enforcement tools are to be used, (2) a Guidance Document on Sediment Waste Discharge Control, (3) a Sediment TMDL Implementation Monitoring Strategy, and (4) a Desired Conditions Report.

**North Coast Regional Water Quality Control Board Water Quality Control Policy for Siting, Design, Operation, and Maintenance of On-Site Wastewater Treatment Systems**  
On-site wastewater treatment systems (OWTS), commonly known as septic systems, primarily treat domestic wastewater and employ subsurface disposal. On June 19, 2012, SWRCB adopted Resolution No. 2012-0032, adopting the Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems (OWTS Policy). The OWTS Policy uses a risk-based, tiered approach for the regulation and management of OWTS installations and replacements and sets the level of performance and protection expected from OWTS. Most notably the policy establishes a framework that promotes Local Agency Management Plans developed for local governments to implement. The revision of Chapter 4 of the Basin Plan to incorporate the statewide OWTS Policy, with modification, has been approved by the Office of Administrative Law and is now in effect.

#### **Ukiah Valley Groundwater Basin Sustainability Plan**

A portion of the County is underlain by the Ukiah Valley Groundwater Basin, which is managed by the Ukiah Valley Basin Groundwater Sustainability Agency (UVBGSA). The UVBGSA was created to serve as the state-mandated Groundwater Sustainability Agency as required by the Sustainable Groundwater Management Act of 2014. In December 2021, the UVBGSA adopted the Ukiah Valley Basin Groundwater Sustainability Plan (GSP) that identifies an initial groundwater sustainable yield of 6,500 acre-feet annually, but that the sustainable yield may be increased associated with increases in groundwater storage and water availability from implementation of the GSP (UVBGSA 2021). In water year 2022, 5,423 acre-feet per year of groundwater was produced from agricultural, municipal, and nonmunicipal pumps (UVBGSA 2023).

#### **Mendocino County Emergency Operations Plan**

The Mendocino County Emergency Operations Plan (EOP) serves as the primary guide for coordinating and responding to all emergencies and disasters within the County. It complies with local ordinances, state law, and state and federal emergency planning guidance including the Standardized Emergency Management System, National Incident Management System and the Incident Command System. The EOP addresses response to and short-term recovery from disasters and emergency situations affecting the Mendocino County Operational Area. The purpose of this plan is to facilitate multi-agency and multi-jurisdictional coordination during

emergency operations, particularly between Mendocino County, local and tribal governments, special districts as well as state and Federal agencies. The current Mendocino County Operational Area Emergency plan was approved by the Mendocino County Board of Supervisors on September 13, 2016 (Resolution number 16-119) (Mendocino County 2016).

#### Mendocino County Multi-Jurisdictional Hazard Mitigation Plan

The Mendocino County Multi-Hazard Mitigation Plan identifies hazards specific to Mendocino County and the cities of Fort Bragg, Point Arena, Ukiah, and Willits, including a hazard vulnerability analysis for dam failure, earthquake, flood, hazardous material event, landslide, tsunami, urban conflagration, and wildland fire. The plan also specifies County- and city-specific Mitigation Action Plans along with an implementation process to ensure the success of an ongoing program to minimize hazard impacts to Mendocino County and the incorporated communities (Mendocino County 2021).

#### Mendocino County General Plan

Mendocino County General Plan Resource Management Element provides the following policies regarding hydrology and water quality in Mendocino County:

- ▶ **Policy RM-1:** Protect stream corridors and associated riparian habitat.
- ▶ **Policy RM-3:** Work cooperatively with property owners, agencies, and organizations to develop and support programs that maintain the integrity of stream systems for flood control, aquatic habitat, and water supply.
- ▶ **Policy RM-5:** Promote and encourage land-use activities that maintain or improve channel elevation and banks for rivers and streams in the county.
- ▶ **Policy RM-6:** Promote sustainable management and conservation of the county's water resources.
- ▶ **Policy RM-9:** The development and implementation of new water-conserving technologies should be encouraged as a means of reducing water demands.
- ▶ **Policy RM-11:** Work with local, state, and federal agencies and organizations to develop and protect water supplies in a manner that is consistent with adopted General Plan policies, recognizing sustainable yields and protections for the environment. The County will:
  - Promote and support the development of water storage facilities.
  - Promote wastewater reclamation and reuse for irrigation, landscaping, and other appropriate uses.
  - Protect existing groundwater recharge areas from sediment, chemical inputs, and other negative effects of development.
  - Promote the formation of groundwater management areas by existing water districts or by the County, where the competition for the available groundwater resource is resulting in lowering water tables.
  - Investigate and pursue opportunities to prevent the loss of existing water supplies, including the Eel River diversions through the Potter Valley Project.
  - Work with the State Department of Water Resources to finalize the State's "Instream Flow Policy."
- ▶ **Policy RM-13:** Local water resources should be reserved for in-county use.

- ▶ **Policy RM-16:** The County will cooperate with other agencies, including the State of California Department of Water Resources, to halt illegal diversions of water from streams and rivers.
- ▶ **Policy RM-17:** No development shall be allowed by the County beyond proof of the capability of the available water supply.
- ▶ **Policy RM-18:** No division of land or Use Permit shall be approved without proof of an adequate (as defined by the County Environmental Health Division) potable water supply for each parcel being created or proposed for special use.
- ▶ **Policy RM-19:** Promote the incorporation of project design features that will improve water quality by minimizing impervious surface areas, maximizing on-site retention of stormwater runoff, and preserving existing vegetation to the extent possible. Examples include:
  - Using Low Impact Development (LID) techniques.
  - Updating the County’s Building Codes to address “green” building and LID techniques that can reduce pollution of runoff water and promoting these techniques.
- ▶ **Policy RM-21:** Promote and support agricultural best management practices that protect or enhance surface and groundwater quality.
- ▶ **Policy RM-22:** Support public and private programs to reduce water contamination and improve the water quality in county rivers and streams, specifically those that do not meet federal water quality standards.
- ▶ **Policy RM-23:** The County shall work with other responsible regulatory agencies to prevent the discharge or threatened discharge of sediment from any activity in amounts harmful to beneficial uses of the water.

#### Brooktrails Township Specific Plan

The Specific Plan Element of the Brooktrails Township Specific Plan contains the following policies related to hydrology and water quality (Mendocino County 2002):

#### Chapter 6, “Environmental Resources”

- ▶ **Hydrology and Water Quality Policy ER-6.4A:** Protect the Township’s water supply by controlling future construction around lakes, creeks and other water supply sources.
- ▶ **Hydrology and Water Quality Policy ER-6.4B:** Protect the Willits Creek watershed from erosion and sedimentation. Stabilizes stream banks with vegetation and other low impact restoration techniques as necessary.

#### Ukiah Valley Area Plan

The Water Management Element of the Ukiah Valley Area Plan contains the following policies related to hydrology and water quality (Mendocino County 2011):

#### Section 6, “Water Management”

- ▶ **Policy WM1.2:** Protect and enhance quality of the Valley’s groundwater system and long-term sustained yield.
- ▶ **Policy WM2.2:** Require proof of water before approving development projects.
- ▶ **Policy WM3.1:** Integrate urban water conservation Best Management Practices into community planning.
- ▶ **Policy WM4.2:** Protect water supplies from adverse impacts.

## Mendocino County Code of Ordinances

### Floodplains

Chapter 22.17 is intended to promote public health, safety, and general welfare, and to minimize public and private losses due to flood conditions. Section 22.17.305 of the Floodplain Ordinance requires a development permit to be issued before any construction or other development begins within a floodplain, as defined by the Federal Insurance Administration of the Federal Emergency Management Agency (FEMA) in the Flood Insurance Study (FIS), Flood Insurance Rate Maps (FIRMs), and Flood Boundary and Floodway Maps (FBFMs). Permits would be issued to: restrict or prohibit uses that are dangerous to health, safety, and property due to water or erosion hazard; require uses that are vulnerable to flood to be protected against flood damage; control the alteration of natural floodplains, stream channels, and natural protective barriers; control filing, grading, dredging, and other development that may increase flood damage; and prevent or regulate the construction of flood barrier that may increase flood hazards in other areas.

### Tsunami

Chapter 20.500 addresses development proposed in the Coastal Zone located within hazard areas. Section 20.500.020 of the Mendocino County Code of Ordinances limits harbor development and related uses within tsunami inundation areas.

### Water Wells

Chapter 16.04 regulates the construction, repair, and destruction of water wells in the County and provides for the destruction of abandoned wells and the abatement of wells found to be public nuisances or hazards. The construction, repair, or destruction of a well is prohibited without a written permit from the Health Department, and abandoned wells or wells in a condition that cause traps or that pollutes groundwater are also prohibited. New wells are required to comply with applicable California Well Standards (Bulletins 74-81 and 74-90).

### Septic Systems

Section 16.08.015 of the Mendocino County Code of Ordinances requires all structures from which, or in which, domestic waste may be generated to be connected to an approved sewage system approved by the County. It additionally states that no person or other entity shall reside in the or otherwise use a structure generating domestic waste unless it is connected to a sewage system approved by the County.

### Establishment of Development Permit

Section 22.17.305 of the Mendocino County Code of Ordinances requires that a development permit shall be obtained before any construction or other development begins within any area of special flood hazard established in section 22.17.210 of the Mendocino County Code of Ordinances. Application for a development permit shall be made on forms furnished by the Floodplain Administrator and may include, but not be limited to plans in duplicate drawn to scale showing the nature, location, dimensions, and elevation of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities; and the location of the foregoing. Specifically, the following information is required.

(A) Site plan, including but not limited to:

- (1) For all proposed structures, spot ground elevations at building corners and twenty-foot or smaller intervals along the foundation footprint, or one-foot contour elevations throughout the building site; and

- (2) Proposed locations of water supply, sanitary sewer, and utilities; and
  - (3) If available, the base flood elevation from the Flood Insurance Study and/or Flood Insurance Rate Map; and
  - (4) If applicable, the location of the regulatory floodway.
- (B) Foundation design detail, including but not limited to:
- (1) Proposed elevation in relation to mean sea level, of the lowest floor (including basement) of all structures; and
  - (2) For a crawl-space foundation, location and total net area of foundation openings as required in Section 22.17.405(A)(3) of this ordinance and FEMA Technical Bulletins 1-93 and 7-93; and
  - (3) For foundations placed on fill, the location and height of fill, and compaction requirements (compacted to ninety-five percent (95%) using the Standard Proctor Test method).
- (C) Proposed elevation in relation to mean sea level to which any nonresidential structure will be floodproofed, as required in Section 22.17.405(B) of this ordinance and FEMA Technical Bulletin TB 3-93; and
- (D) All appropriate certifications listed in Section 22.17.315(D) of this ordinance; and
- (E) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

#### Mendocino County Cannabis Regulation

The Mendocino County Cannabis Regulation (MCCR) contains the following requirements related to hydrology and water quality:

##### Section 10A.17.040: General Limitations on Cultivation of Cannabis

The following limitations shall apply to all cultivation of cannabis in Mendocino County, including but not limited to cultivation pursuant to a CCBL [Cannabis Cultivation Business License] issued under this Chapter or an exemption provided for in Section 10A.17.030. Cultivation of cannabis shall also be subject to all applicable restrictions of Mendocino County Code Chapter 20.242.

- (G) All cultivation of cannabis shall not utilize water that has been or is illegally diverted from any spring, wetland, stream, creek, or river. The activities associated with the cultivation of cannabis shall not create erosion or result in contaminated runoff into any stream, creek, river or body of water.

##### Section 10A.17.070: Requirements for All CCBLs

The following limitations shall apply to all cultivation of cannabis in Mendocino County, including but not limited to cultivation pursuant to a CCBL issued under this Chapter or an exemption provided for in Section 10A.17.030. Cultivation of cannabis shall also be subject to all applicable restrictions of Mendocino County Code Chapter 20.242.

- (H) CCBL Holders shall comply with all statutes, regulations and requirements of the California State Water Resources Control Board, Division of Water Rights, including obtaining and complying with any applicable and approved permit, license, or registration, and the annual filing of a statement of diversion and use of surface water from a stream, river, underground stream, or other watercourse pursuant to Water Code Section 5101.

- (I) North Coast Regional Water Quality Control Board (NCRWQCB).
- (1) CCBL Holders shall establish and maintain enrollment in Tier 1, 2 or 3 with NCRWQCB Order No. 2015-0023, if applicable, or any superseding or substantially equivalent rule that may be subsequently adopted by the NCRWQCB, the County of Mendocino or other responsible agency, or shall obtain proof of exemption from said Order
  - (2) For cultivation areas for which no enrollment pursuant to NCRWQCB Order No. 2015-0023 is required, the site shall comply with the standard conditions set forth in that Order, as well as the applicable “Best Management Practices for Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effects” as presented in Appendix B of the Order, or any superseding or substantially equivalent rule that may be subsequently adopted by the NCRWQCB, the County of Mendocino or other responsible agency.
- (J) If any component of the cultivation facility, including access roads, water supply, grading, or terracing, impacts the bed or bank of any stream or other watercourse, the CCBL Holder shall have notified the California Department of Fish and Wildlife (CDFW) pursuant to section 1602 of the Fish and Game Code and shall obtain all relevant approvals or authorizations as may be required by CDFW prior to commencing cultivation.
- (K) For cultivation sites that involve construction or other work in waters of the United States that are not otherwise exempt or excluded, including streams and wetlands, CCBL Holders shall obtain a Clean Water Act (CWA) Section 404 permit from the Army Corps of Engineers and a CWA Section 401 water quality certification from the NCRWQCB prior to commencing such construction, unless otherwise allowed by the relevant agencies.
- (L) For projects that disturb one (1) or more acres of soil or projects that disturb less than one (1) acre but that are part of a larger common plan of development that in total disturbs one or more acres, CCBL Holders shall obtain coverage as may be required under the State Water Resources Control Board (SWRCB) General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009-0009-DWQ, or any superseding, substantially equivalent or additional rule applicable to such activities that may be subsequently adopted by the SWRCB or other responsible agency. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility.

Section 10A.17.080: CCBL Phases and Requirements Specific to Each Phase

Unless specifically exempted, in addition to compliance with all other requirements of this Chapter, all CCBLs shall comply with the following requirements:

- (C) Requirements specific to Phase Three CCBL's (application accepted after April 2, 2021).
- (1) Watershed Assessment. All CCBL applications, except for legal parcels located in the Agricultural (A-G) zoning district, shall demonstrate there is adequate water to serve the cultivation site.
    - (a) If surface water (or groundwater influenced by surface water) will be used, applicants may demonstrate that there is adequate water by providing (i) a watershed assessment that establishes there is sufficient watershed supply to serve the proposed cultivation site and existing uses within the watershed, and (ii) a water right exists to serve the cultivation site. A watershed assessment shall consist of an established "In Stream Flow

Policy" as prepared by the State Water Resources Control Board Division of Water Rights or an equivalent document approved by that agency.

- (b) If groundwater not influenced by surface water will be used, the applicant may demonstrate that there is adequate water by providing a water availability analysis which will address the adequacy of the proposed water supply, the direct effects on adjacent and surrounding water users, and possible cumulative adverse impacts of the development on the water supply within the watershed and show there is a sustained yield to support the proposed level of use.
- (c) If water will be provided by a mutual water company, municipal or private utility or similar community provider, the applicant may demonstrate that there is adequate water by providing a will serve letter from the proposed provider.

### 3.10.2 Environmental Setting

#### HYDROLOGY AND DRAINAGE

##### Regional Hydrology

Mendocino County can be broadly divided into three major hydrologic units, or drainage basins: the Eel, Russian, and Coastal basins. Water resources are derived in, and surface runoff is disposed of, through these three drainage basins. The major rivers in the County are the Eel; the Navarro; the Garcia; the South Fork of the Eel; and the Russian River and its tributaries. A hydrologic map of the County is depicted in Figure 3.10-1. These waterways and their watersheds extend beyond Mendocino County's boundaries and include portions of Humboldt County, Lake County, and Sonoma County.

Surface water flow conditions vary substantially by season. Surface runoff in each basin is derived almost entirely from rainfall. Water flow responds directly to the rainfall pattern, and flows will drop quickly without sustaining rainfall. During the dry summer months, water flow must be supplied from groundwater seepage, channel storage, reservoir storage, or diversions. The highest median flow conditions occur during the winter and spring months (December to April) for county rivers that flow through Mendocino County to the Pacific Ocean (Mendocino County 2008).

##### Flood Conditions

There are 10 primary flooding sources in Mendocino County: the Big-Navarro-Garcia Rivers, Gualala River-Salmon Creek, Lower Eel River, Mattole River, Middle Fork Eel River, Russian River, South Fork Eel River, Upper Cache Creek, Upper Eel River, and Upper Stony Creek. The flood season in Mendocino County usually lasts from early November until the end of March. The flooding source, drainage area, and affected area of these waterways as they relate to Mendocino County are described in Table 3.10-5.

Some historical flood records date back to 1911, but USGS has maintained gauges in Mendocino County since 1937. The greatest flood recorded for the area occurred in December 1964. Flooding has also been recorded for the years 1937, 1955, 1958, 1964, 1966, 1974, 1983, 1986, 1995, 1997, 1998, and 2006. Flooding that occurred in December 1955 and 1964 and January 1974 were notably destructive (FEMA 2022).





Source: Data received from Mendocino County in 2023; adapted by Ascent in 2023.

**Figure 3.10-1 Hydrologic Map**

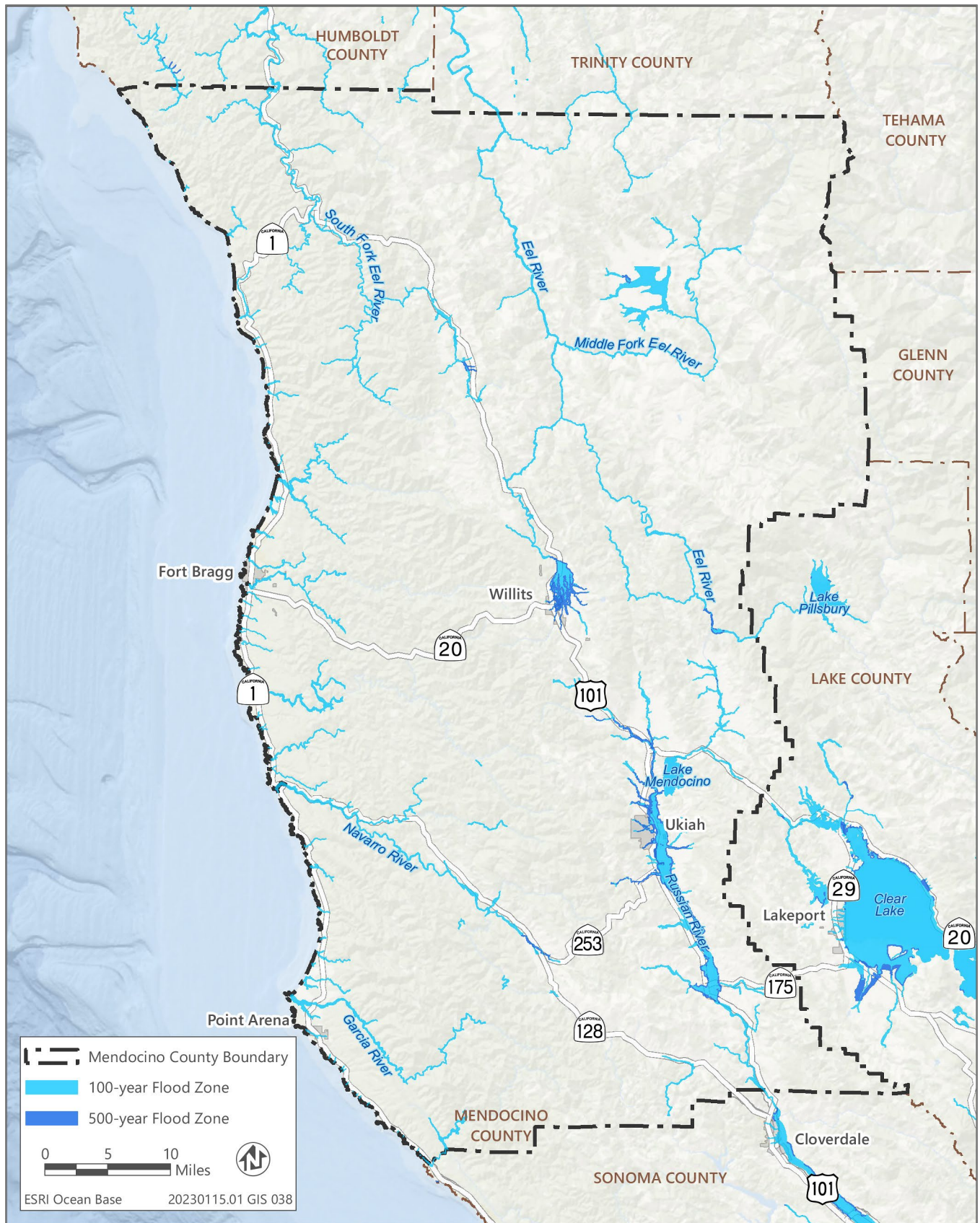
**Table 3.10-5 Flood Conditions in Mendocino County**

<b>Flooding Source</b>	<b>Drainage Area (square miles)</b>	<b>Description of Affected Area</b>
Big-Navarro-Garcia Rivers	1,601	This large watershed in the northwestern portion of Mendocino County consists primarily of the Big, Navarro, and Garcia Rivers and their tributaries, along with smaller flooding sources flowing directly into the Pacific Ocean.
Gualala River-Salmon Creek	554	Located in the southwest portion of the County, this relatively small watershed consists primarily of tributaries to the Gualala River.
Lower Eel River	1,529	This large watershed is located in the north-central Mendocino County and consists of the Eel River and its tributaries in the northern portion of the County.
Mattole River	747	A small portion of this watershed is located in the northwest portion of Mendocino County. It consists of the Mattole River and its tributaries, as well as a few streams flowing directly into the Pacific Ocean.
Middle Fork Eel River	753	Located in the northeastern portion of the County, this watershed consists of the Middle Fork of the Eel River and its many tributaries.
Russian River	1,484	This large watershed is located in the eastern and southeastern portions of Mendocino County and includes the mainstem of the Russian River and its many tributaries.
South Fork Eel River	689	Located in the northern portion of the County, this watershed includes the South Fork Eel River and its tributaries.
Upper Cache Creek	1,164	This watershed is located primarily in Lake County, but small portions are also located in Mendocino County.
Upper Eel River	709	Located in the center portion of the County, this watershed includes the Eel River and its tributaries.
Upper Stony Creek	776	Primarily located in Lake and Glenn Counties, a very small segment of this watershed is located in the northeastern portion of Mendocino County.

Source: FEMA 2022.

### 100-Year Floodplain

Standard measurement of floodplains includes demarcation of areas expected to be flooded during floods with these recurrence intervals, as determined by USACE. FEMA has adopted the 100-year (1-percent annual chance) flood as the base for floodplain management purposes. FEMA has mapped flood-prone areas. The maps provide the basis for regulating floodplains in conformance with the NFIP. In Mendocino County, the main type of flooding to occur is riverine. Riverine or overbank flooding occurs due to excessive rainfall. The County has adopted floodplain regulations to continue participation in the NFIP (Mendocino County 2021). Mendocino County's 100-year floodplains are shown in Figure 3.10-2.



Source: Data downloaded from FEMA in 2023; adapted by Ascent in 2023.

**Figure 3.10-2 Flood Zones**

### Dam Failure Potential

Dam failure would cause a flood hazard similar to that described above, except that inundation would occur more rapidly. There are 16 dams of concern that are either in Mendocino County or impound rivers that flow through the County. A failure of any of these dams would threaten life and property to some degree. The major dams that would have substantial impact on the County in the event of failure are the Coyote Dam, the Cape Horn Dam, and the Scott Dam. Dam failure inundation areas would mainly affect lands planned for development in the unincorporated lands surrounding Willits and the Ukiah Valley along the Russian River (Mendocino County 2008).

### Tsunami Inundation Areas

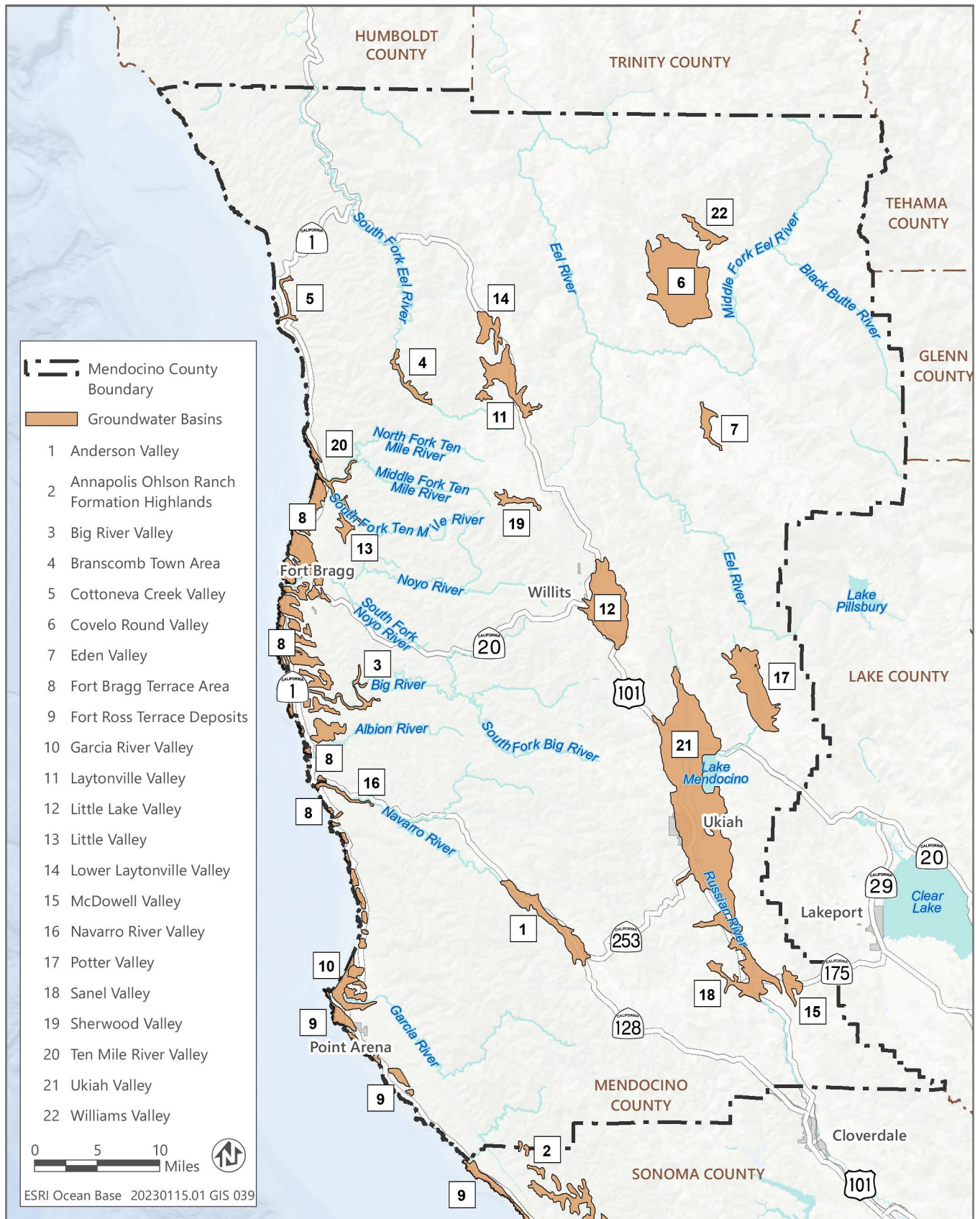
Tsunami inundation areas lie almost exclusively within the Coastal Zone, where they are addressed as part of the Hazards section of the certified Local Coastal Program and the Coastal Act. Most existing and planned development that is located within mapped tsunami evacuation areas is located within the Fort Bragg and Point Arena segments of the Mendocino County Coastal Zone. The Mendocino County Multi-Jurisdictional Hazard Mitigation Plan provides risk assessments and mitigation strategies that would reduce tsunami hazards within the County (Mendocino County 2021).

### Groundwater Hydrology

Bulletin 118 is California's official publication on the occurrence and nature of groundwater statewide. Bulletin 118 defines the boundaries and describes the hydrologic characteristics of California's groundwater basins and provides information on groundwater management and recommendations for the future. Within Mendocino County, there are six major groundwater basins designated by DWR: Anderson Valley, Laytonville Valley, Little Lake Valley, Potter Valley, Covelo Round Valley, and Ukiah Valley Groundwater Basin. There are additional groundwater basins located in mountainous areas throughout the County. These are depicted in Figure 3.10-3 and further described below. Outside of these groundwater basins groundwater occurs in fractured bedrock conditions.

Basin Prioritization is a technical process that utilizes the best available data and information to classify California's 515 groundwater basins into one of four categories high-, medium-, low-, or very low-priority. The classification process is based on eight components that are identified in the California Water Code section 10933(b), and include the following: (1) population; (2) rate of population growth; (3) number of supply wells; (4) total number of wells; (5) total irrigated acreage; (6) degree to which persons overlying the basin rely on groundwater as their primary source of water; (7) documented impacts on the groundwater within the basin, including overdraft, subsidence, saline intrusion, and other water quality degradation; and (8) any other information determined to be relevant by the department, including adverse impacts on local habitat and local streamflows (SWRCB 2024b).

The following is a summary of available data on some groundwater basins in the County as well as groundwater level trend data from the California Department of Water Resources (DWR) The Water Data Library.



Source: Data downloaded from DWR in 2022; adapted by Ascent in 2023.

**Figure 3.10-3 Groundwater Basins**

### Anderson Valley Groundwater Basin

The Anderson Valley Groundwater Basin is located within the southwestern portion of Anderson Valley, a long, narrow inland valley located in the Coast Ranges of central Mendocino County. This northwest-southeast oriented basin is approximately nine miles long and averages less than one mile in width. The basin is bounded on all sides by bedrock of the Franciscan Complex. The Anderson Valley Groundwater Basin covers 4,970 acres and has an estimated capacity of 47,000 acre-feet (DWR 2004a). Groundwater level data from wells in the basin generally show stable groundwater conditions between 2002 through 2024 with the exception of a recent 10-foot level reduction in the eastern portion of the basin in 2023 (DWR 2024).

### Laytonville Valley Groundwater Basin

Laytonville Valley, also known as Long Valley, is a narrow, northwest-trending basin located in northwest-central Mendocino County. This groundwater basin covers 5,020 acres and has an estimated capacity ranging from 14,000 to 21,000 acre-feet (DWR 2004b). Groundwater level data from wells in the basin generally show stable groundwater conditions between 1955 through 2023 with no trends in level changes (DWR 2024).

### Little Lake Valley Groundwater Basin

Little Lake Valley Groundwater Basin is an irregular shaped basin located in the Coast Ranges within central Mendocino County. The valley drains to the north by several streams. This groundwater basin covers 10,020 acres and has an estimated capacity ranging from 35,000 to 50,000 acre-feet (DWR 2004c). Groundwater level data from wells in the basin generally show stable groundwater conditions between 1955 through 2023 with no trends in level changes (DWR 2024).

### Potter Valley Groundwater Basin

Potter Valley is located in the northernmost valley in the Russian River drainage basin. This northwest-trending valley is approximately 8 miles long, up to 2 miles wide, and drains to the south through the East Fork of the Russian River. This groundwater basin covers 8,243 acres and is estimated to contain 10,000 acre-foot of water capacity. However, approximately 60,000 acre-foot of storage is contained in the older continental deposits (DWR 2004d). Groundwater level data from wells in the basin generally show stable groundwater conditions between 1993 through 2024 with no trends in level changes (DWR 2024).

### Covelo Round Valley Groundwater Basin

The Covelo Round Valley Groundwater Basin, located in the northeast-central portion of Mendocino County, is a down-faulted block partially filled with alluvium and continental deposits. The valley is drained to the east and southeast by Mill Creek, a tributary of the Middle Fork of the Eel River. This groundwater basin covers 16,400 acres and is estimated to contain 230,000 acre-foot of water capacity (DWR 2004e). Groundwater level data from wells in the basin generally show stable groundwater conditions between 1952 through 2022 with no trends in level changes (DWR 2024).

### Ukiah Valley Groundwater Basin

The Ukiah Valley Groundwater Basin, located in southeastern Mendocino County, is approximately 22 miles long and 5 miles wide at the widest point, and is the largest of several groundwater basins along the Russian River. The Russian River traverses the entire length of the Ukiah Valley groundwater basin and is met by many tributaries from both the east and west sides of Redwood and Ukiah Valleys. This groundwater basin covers 37,500 acres (DWR 2004f). The Ukiah Valley Basin Groundwater Sustainability Plan identifies that the basin

consists of two aquifers that have a combined storage capacity of 384,000 to 444,000 acre-feet per year and has generally stable groundwater levels (UVBGS 2021).

### Sanel Valley Groundwater Basin

The Sanel Valley Groundwater Basin is located south of the Ukiah Valley Groundwater Basin. Groundwater level data from wells in the basin generally show stable groundwater conditions between 1969 through 2024 with no trends in level changes (DWR 2024).

## WATER QUALITY

### Surface Water Quality

The state and federal wild and scenic rivers programs and TMDL designations are aimed at waterway protection and rehabilitation, respectively. A summary of the waterways subject to these programs is described as follows.

### Federally Designated

The Eel and Black Butte Rivers are designated as federal wild and scenic rivers in Mendocino County. A description of these waterways and their outstandingly remarkable values is provided below.

#### Eel River

The designated reaches of the Eel River include:

- ▶ From the mouth of the river to 100 yards below Van Ardsdale Dam,
- ▶ The Middle Fork from its confluence with the main stem to the southern boundary of the Yolla Bolly Wilderness Area,
- ▶ The South Fork from its confluence with the main stem to the Section Four Creek confluence,
- ▶ The North Fork from its confluence with the main stem to Old Gilman Ranch, and
- ▶ The Van Duzen River from the confluence with the Eel River to Dinsmore Bridge.

The Eel River is designated as having outstandingly remarkable values for fisheries and recreation (National Wild and Scenic Rivers Systems 2023b).

#### Black Butte River

The designated reaches of the Black Butte River include:

- ▶ From the Mendocino County line to its confluence with the Middle Eel River, and
- ▶ The Cold Creek from the Mendocino County line to its confluence to the Black Butte River.

The Black Butte River is designated as having outstandingly remarkable values for culture and fisheries (National Wild and Scenic Rivers Systems 2023c).

### California

Sections of rivers in the Eel, Van Duzen, and Black Butte River basins were classified as wild, scenic, or recreational by the California State Legislature, as summarized in Table 3.10-6.

**Table 3.10-6 Wild, Scenic, and Recreational Rivers of Mendocino County<sup>1</sup>**

River	Section	Designations
Eel River, Mainstem	From 100 yards below Van Arsdale Dam to the Pacific Ocean	Wild, Scenic, Recreational
Eel River, South Fork	From the mouth of Section Four Creek near Branscomb to the river mouth below Weott	Wild, Recreational
Eel River, Middle Fork	From the intersection of the river with the southern boundary of the Middle Eel-Yolla Bolly Wilderness Area to the river mouth at Dos Rios	Wild, Scenic, Recreational
Van Duzen River	From powerline crossing above Little Larabee Creek to Dinsmore Bridge	Scenic, Recreational
Black Butte River, Mainstem	From the Mendocino County line to the confluence with Middle Eel River	Wild, Scenic

Source: California Public Resources Code section 5093.545.

**List of Impaired Waterways**

Every 6 years, the North Coast RWQCB evaluates water quality information and identifies water bodies that do not meet water quality standards and are not supporting their beneficial uses. Those waters are placed on a list of impaired water bodies that identifies the pollutant or stressor causing impairment and establishes a schedule for development a control plan or address the impairment. Table 3.10-7 shows the most recent list of impaired waterways (303(d) list) within Mendocino County and includes all of the County’s watersheds. As shown below, listing is primarily associated with sediment/siltation and temperature. These pollutants are attributed to various sources, including removal of riparian vegetation, mining, erosion, logging road construction/maintenance, unsurfaced roads, high numbers of watercourse crossings by roadways with insufficient drainage facilities, and flow alteration/regulation/modifications.

**Table 3.10-7 List of Impaired Waterways in Mendocino County (2020/2022 303(d) List)<sup>2</sup>**

<b>Eel River Hydrologic Unit, Middle Main Hydrologic Area</b>	Sedimentation/Siltation
	Aluminum
	Temperature
<b>Eel River Hydrologic Unit, Middle Fork Hydrologic Area, Wilderness and Black Butte Hydrologic Subareas</b>	Temperature
<b>Eel River Hydrologic Unit, Van Duzen River Hydrologic Area</b>	Sedimentation/Siltation
	Aluminum
<b>Eel River Hydrologic Unit, South Fork Hydrologic Area</b>	Sedimentation/Siltation
	Turbidity
	Aluminum
	Temperature

Source: SWRCB 2022.

**Cannabis Priority Watersheds**

SWRCB, in coordination with CDFW, has identified “Cannabis Priority Watersheds” throughout the state. All Cannabis Priority Watersheds contain a high concentration of commercial cannabis cultivation; noncompliant commercial cannabis cultivation in these high-value areas

<sup>1</sup> These rivers are also located within Humboldt County.

<sup>2</sup> These waterways are also located within Humboldt County.



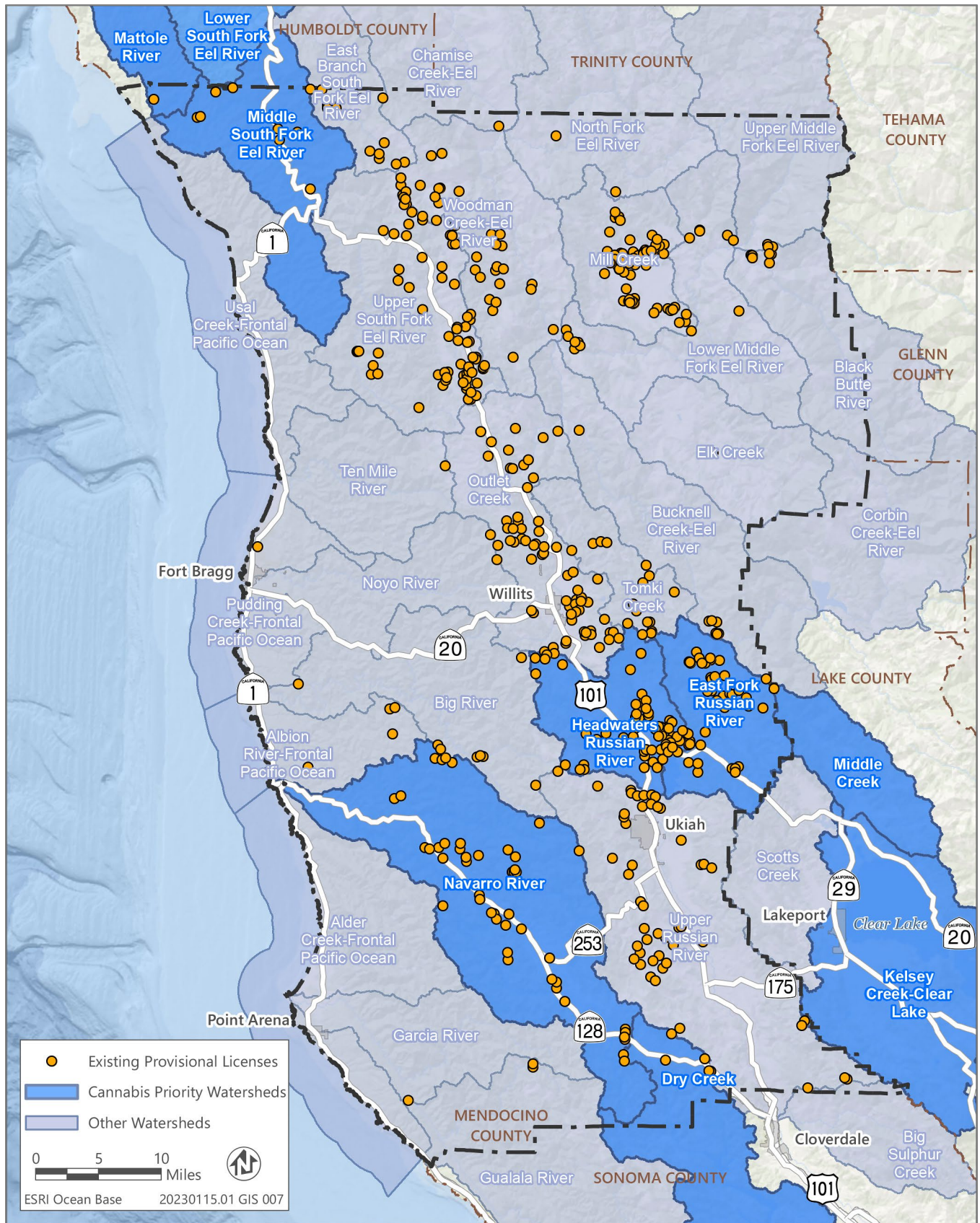
has the potential to cause severe environmental impacts. There are currently 173 existing provisionally licensed commercial cannabis cultivation sites located within Cannabis Priority Watersheds throughout the County. Pursuant to Business and Professions Code section 26060(a)(1), if SWRCB or CDFW notifies DCC in writing that commercial cannabis cultivation is causing significant adverse impacts on the environment in a watershed or other geographic area, DCC shall not issue new licenses or increase the total number of plant identifiers within that watershed or area while the moratorium is in effect.

A “Cannabis Priority Watershed” may also meet some or all of the following criteria:

- ▶ Contains or supports critical habitat for terrestrial or aquatic species. “Critical habitat” is a term defined and used in the federal and California Endangered Species Acts and refers to specific geographic areas that contain features essential to the conservation of an endangered or threatened species and that may require special management and protection. Critical habitat may also include areas that are not currently occupied by the species but will be needed for its recovery;
- ▶ Contains water courses with low-flow conditions where water levels recede or are at risk of receding into the “danger zone” for aquatic life. These are survival-level flows at which aquatic habitat and species will be harmed;
- ▶ Contains a critical water supply, where excessive water usage or diversions present unreasonable stress or pose a significant threat to the long-term and sustainable water use;
- ▶ Has complaints that allege commercial cannabis cultivation that contributes to or causes natural resources violations, or that affects senior water right holders;
- ▶ Is part of past or ongoing restoration efforts;
- ▶ Is listed under CWA section 303(d) as an impaired waterbody;
- ▶ Contains a surface water body that is listed as a fully appropriated stream; and
- ▶ Contains a waterbody is designated as a “Wild and Scenic River” pursuant to PRC section 5093.

The current (2023) Cannabis Priority Watersheds in Mendocino County are provided as follows and are shown in Figure 3.10-1 and Figure 3.10-4.

- ▶ Mattole River: This watershed consists of approximately 194,560 acres.
- ▶ Middle South Fork Eel River: This watershed consists of approximately 482,000 acres within the County.
- ▶ East Fork Russian River: This watershed consists of approximately 67,073 acres.
- ▶ Headwaters Russian River: This watershed size is unknown; however, it is a component of the Russian River Watershed that consists of approximately 960,000 acres.
- ▶ Navarro River: This watershed consists of approximately 201,600 acres.
- ▶ Dry Creek: This watershed consists of approximately 64,000 acres.



Source: Data received from Mendocino County in 2023; adapted by Ascent in 2023.

**Figure 3.10-4 Cannabis Priority Watersheds**

### Groundwater Quality

Groundwater quality can be affected by many things, but the chief controls on the characteristics of groundwater quality are the source and chemical composition of recharge water, properties of the host sediment, and history of discharge or leakage of pollutants. Groundwater quality impairments in the County are moderately extensive. There are multiple groundwater basins in the County that are considered impaired. Anderson Valley Groundwater Basin is considered impaired because of high levels of sodium-magnesium bicarbonate water, while Laytonville and Ukiah Valley Groundwater Basins are predominately calcium bicarbonate water, as a result of seawater intrusion and shallow aquifers. The remaining groundwater basins within the County are predominately calcium-magnesium bicarbonate water (Mendocino County 2008).

## EXISTING STRESSORS ON HYDROLOGY AND WATER QUALITY FROM COMMERCIAL CANNABIS CULTIVATION

Predominantly unregulated for years, thousands of cannabis cultivators have developed unlicensed commercial cannabis cultivation sites in remote areas of California near streams. In many cases, the routine unlicensed commercial cannabis cultivation practices result in damage to streams and wildlife. These practices (e.g., clearing trees, grading, and road construction) have been conducted in a manner that can cause large amounts of sediment to flow into streams during rains along with decomposed granite flowing into the streams. Some unlicensed cannabis cultivators have also discharged pesticides, fertilizers, fuels, trash, and human waste around the sites, which then discharges into waters of the state. In the North Coast region, the state has invested millions of dollars to restore streams damaged by decades of timber harvesting. Unlicensed commercial cannabis cultivation can impede the efficacy of these restoration efforts (SWRCB 2017b). The extent of unlicensed commercial cannabis cultivation in the Cannabis Priority Watersheds is unknown.

In addition to these water quality discharge–related impacts, unlicensed cannabis cultivators may also impair water quality if they divert water from streams in the dry season, when flows are low. In some cases, diversion of flow during the dry season has caused complete elimination of streamflows. The effects of these diversions have been exacerbated in recent years by periods of drought (SWRCB 2017b). Water quality–related constituents of concern associated with unlicensed commercial cannabis cultivation discharges include nitrogen, pathogens (represented by coliform bacteria), phosphorus, salinity, and turbidity. Water quality can be affected by excessive use of fertilizer, soil amendments, or other sources. The constituents have the potential to discharge to groundwater by infiltration and to other waters of the state by either surface runoff or groundwater seepage (SWRCB 2017b).

### 3.10.3 Environmental Impacts and Mitigation Measures

#### METHODOLOGY

This analysis evaluates the effect of continued operation of existing provisionally licensed commercial cannabis cultivation premises and the development of new commercial cannabis cultivation operations countywide. Evaluation of potential hydrologic and water quality impacts is based on a review of existing documents and studies that address water resources. Information obtained from these sources was reviewed and summarized to describe existing conditions and to identify potential environmental effects, based on the standards of significance presented in

this section. In determining the level of significance, the analysis assumes that the project would comply with relevant federal, state, and local laws, ordinances, and regulations.

The following estimated water demands (Table 3.10-8) were used in the groundwater and surface water diversion impact discussions below for future new licensed commercial cannabis cultivation uses by type based on the assumptions identified in Table 3.0-1 in “Approach to the Environmental Analysis,” in the introduction to this chapter.

**Table 3.10-8 Estimated Project Irrigation Water Demand for Future New Commercial Cannabis Cultivation, Processing, and Distribution Uses**

Cannabis Use	Demand Ratio	New Commercial Cannabis Cultivation Acreage	Acre-Feet per Year
<b>Commercial Cannabis Cultivation</b>			
Outdoor	1.39 acre-feet per acre per year	59.91	83.27
Mixed-light	2.65 acre-feet per acre per year	99.23	262.96
Indoor	4.88 acre-feet per acre per year	8.11	39.58
Nursery	4.88 acre-feet per acre per year	56.47	275.57
Processing	0.35 acre-feet per site per year	N/A	3.5
Distribution Transport-Only	0.18 acre-feet per site per year	N/A	7.2
<b>Total</b>			<b>672.08</b>

Note: It is assumed that nursery water demands would be similar to indoor commercial cannabis cultivation water demands.

Source: Compiled by Ascent in 2023. Future new commercial cannabis cultivation acreage based on Table 3.0-1. Assumes 10 new processing licenses, and 40 new distribution transport-only licenses. Demand ratio provided by Table 3.10-9 of the Yolo County Cannabis Land Use Ordinance Draft EIR (Yolo County 2019). These water demand factors were used as compared to those used in the Trinity County Cannabis Program EIR (Trinity County 2020) as they provided further breakdown between commercial cannabis cultivation types.

## THRESHOLDS OF SIGNIFICANCE

An impact on hydrology or water quality is considered significant if implementation of the Cannabis Licensing Project would do any of the following:

- ▶ Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;
- ▶ Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
- ▶ Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would:
  - Result in substantial erosion or siltation on- or off-site;
  - Result in flooding on-site or off-site;
  - Create or contribute runoff water that would exceed the capacity of existing or planned stormwater- drainage systems or provide substantial additional sources of polluted runoff;
  - Impede or redirect flood flows;
- ▶ In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; and/or
- ▶ Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

## ISSUES NOT DISCUSSED FURTHER

### Release of Pollutants in Flood Hazard Zone

Mendocino County Code Ordinance, Chapter 22.17 Floodplain Ordinance (Mendocino County Code of Ordinances section 22.17.305) is applied to all lands situated within the areas of special flood hazard as identified on the Federal Insurance Administration's FIRM for Mendocino County. These regulations are intended to protect lives and property from flood hazards and require that building permit applications be compared to the flood hazard maps published by FEMA to determine whether a proposed structures and improvements will be located in an area with potential flood hazards. If a proposed new commercial cannabis cultivation use appears to be subject to flood hazards, the applicant is required to submit a site-specific engineering analysis to ensure the design of the structure meets federal requirements for flood hazard protection before approving the building permit. In addition, MCCR section 10A.17.040(G) would ensure water quality impacts would not occur in floodplains as it prohibits activities associated with commercial cannabis cultivation that would create erosion or result in contaminated runoff into any stream, creek, river or body of water. Thus, no significant impacts associated flooding hazards or alteration of drainage conditions or associated water quality would occur. These issues are not further discussed below.

### Release of Pollutants in Tsunamis and Seiches

Environmental impact analyses under CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future users or residents, but when a proposed project risks exacerbating environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future residents or users. In those specific instances, it is the project's impact on the environment and not the environment's impact on the project that compels an evaluation of how future residents or users could be affected by exacerbated conditions (*California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369). Transitioning existing provisional commercial cannabis cultivation sites to annual licensure and licensing new commercial cannabis cultivation and associated processing uses within the County would be consistent with the State licensing and MCCR requirement and would not exacerbate any existing conditions related to the potential for seiche, tsunami, mudflow, or dam failure. In addition, Chapter 20.500 addresses development proposed in the Coastal Zone located within hazard areas. Section 20.500.020 of the Mendocino County Code of Ordinances limits harbor development and related uses within tsunami inundation areas or more generally within the County's coastal zone. These topics are not discussed further.

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Impact 3.10-1: Degrade Water Quality and Floodplains

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Potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could have the potential to modify surface drainage and flows in such a manner that increased sedimentation and erosion could take place, leading to water quality degradation as well as impacts to floodplains. This could further impact impaired waterways that are subject to TMDLs. Commercial cannabis cultivation operations could result in additional water quality impacts to surface water and groundwater resources and the associated beneficial uses identified in the North Coast RWQCB Basin Plan. Compliance with the requirements SWRCB Order WQ 2023-0102-DWQ and County regulations would address water quality impacts. This impact would be **less than significant**.

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Construction and operation of licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could modify surface drainage and flows, which may affect water quality through discharges of sediment to surface water from roads or other land improvements; discharges of fertilizers, pesticides, and other chemicals to surface waters or groundwater; spills or leaks of fuels, lubricants, hydraulic oil, or other chemicals associated with pumps, construction, or other equipment; and discharges of trash, household refuse, or domestic wastewater. In addition, construction of ponds, and grading for other water storage devices and structures can lead to erosion, which may deposit sediments and other constituents into surface waters. Due to past and current land use activities, hydrologic units in Mendocino County are subject to the 303(d) list of impaired waterways and associated with the North Coast RWQCB Sedimentation TMDL. Generally, listing of the waterways is associated with sedimentation, siltation, temperature, and turbidity. In addition, the Mattole River, Middle South Fork Eel River, East Fork Russian River, Headwaters Russian River, Navarro River, and Dry Creek are listed as Cannabis Priority Watersheds in Mendocino County.

As discussed above in Section 3.10.1, "Regulatory Setting," SWRCB Order WQ 2023-0102-DWQ contains requirements for commercial cannabis cultivation. These requirements include plans that address site erosion and sediment control, disturbed areas stabilization, nitrogen management, implementation of BPTC, site closure procedures, and monitoring and reporting requirements. In addition, the Order contains requirements for land development maintenance, erosion control, drainage features, stream crossing installation and maintenance, soil disposal and spoils management, and roadway design and maintenance. Furthermore, MCCR section 10A.17.040(G) requires that commercial cannabis cultivation practices shall not use water that has been or is illegally diverted from any spring, wetland, stream, creek, or river that may result in erosion or contaminate runoff. Cannabis operations are also subject to Chapter 18.70 of the County Code of Ordinances requires permitting and an approved grading plan prepared by civil engineer for any activity that would handle 5,000 cubic yards or greater of material.

#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual licensure would not result in additional impacts to surface water and groundwater quality as operations are not anticipated to be significantly altered through the annual licensing process. Commercial cannabis cultivation activities associated with these sites would continue to be subject to the water quality control requirements of Attachment A (Section 1, General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ, which requires a site evaluation for any future site expansion activities, and MCCR section 10A.17.040(G), which prohibits activities associated with commercial cannabis cultivation to cause eroded materials or contaminated runoff to be deposited into any stream, creek, river or body of water. For these reasons, this impact would be less than significant for existing provisionally licensed sites would retain the extent of their existing licensed commercial cannabis cultivation.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. Expansion of existing commercial cannabis cultivation sites would still be required to comply with SWRCB Order WQ 2023-0102-DWQ and MCCR section 10A.17.040(G) which prohibits activities associated with commercial cannabis cultivation to cause materials or contaminated runoff to be deposited into any body of water. The MCCR also limits commercial

cannabis cultivation and nursery sites to 22,000 square feet of commercial cannabis canopy per site that would apply to expanded commercial cannabis cultivation sites. Thus, impacts associated with existing provisionally licensed commercial cannabis cultivation operations would be less than significant.

#### Future Licensed Sites

New licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations may include ground disturbance, vegetation removal, and grading, which could lead to accelerated erosion and sedimentation that causes poor water quality from high turbidity, total suspended solids, and total dissolved solids in local waterways, thus contributing to further degraded conditions in already impaired waterways.

Channel morphology, substrate composition, gradient, and type of riparian vegetation, among other factors, influence the velocity and flow of surface water, and therefore the ability of a river or stream to move sediment. When the volume and pattern of surface water discharge are altered from their natural character, increases or decreases in the force of moving water will result, translating to increases or decreases in the rate of erosion as well potential changes to floodplain conditions. During the winter months, Mendocino County experiences substantial rainfall and, at high elevations, snowfall. Snowmelt in the spring leads to increased streamflow volumes in the rivers and streams of the County. Topography in much of the County is rugged and steep. This confluence of physiographic conditions enhances the risk of runoff erosion associated with new commercial cannabis site preparation and construction, especially during storm and high-flow events (Mendocino County 2008). Poorly constructed unpaved roads are prone to accelerated wear and erosion that can lead to catastrophic failure. Road failure, especially at culverts or other types of watercourse crossings, can degrade water quality and destroy riparian habitats. Depending on the local topography and soil conditions, terraces or water storage ponds may be subject to failures, which could degrade local waterways. However, the water quality and site stability requirements of SWRCB Order WQ 2023-0102-DWQ, County Code of Ordinances Chapter 18.70, and MCCR section 10A.17.040(G), which prohibits activities associated with commercial cannabis cultivation to cause eroded materials or contaminated runoff to be deposited into any stream, creek, river or body of water ensure that runoff from cannabis operations cannot reach waterways and thus would not contribute to or cause substantial water quality degradation. New licensed commercial cannabis cultivation operations would result in less-than-significant impacts to water quality and floodplains.

#### Summary

Existing provisionally licensed, potential expansion of existing provisionally licensed, and future licensed commercial cannabis cultivation sites would be subject to the water quality control requirements of Attachment A (General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ as well as County standards. Therefore, this impact would be **less than significant**.

#### Mitigation Measures

No mitigation is required for this impact.

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### Impact 3.10-2: Decrease Groundwater Supply or Interfere with Groundwater Recharge

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Potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations as part of the implementation of the project would increase groundwater production. However, MCCR section 10A.17.080(C)(1)(b) would require a watershed assessment, for groundwater use, to establish if there is sufficient watershed supply to serve the proposed commercial cannabis cultivation site. In addition, new wells constructed in Mendocino County are subject to permit requirements under Mendocino County Ordinance Chapter 16.04. These requirements would address the potential effects of short-term and long-term well operation in isolated locations that could affect the operability of adjacent wells. In addition, licensed commercial cannabis cultivation sites within the Ukiah Valley Groundwater Basin would not conflict with the Ukiah Valley Basin GSP. As a result, this impact would be **less than significant**.

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Using the water demand factors identified in Table 3.10-8, it is estimated that the existing 623 provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations have a total water demand of approximately 387 acre-feet per year. Commercial cannabis cultivation may rely upon groundwater resources to support water demand. In areas where groundwater is available, and depending on the location of extraction and condition of local groundwater resources, it is possible for drawdown at a well in one location to affect groundwater elevations in other wells. One of the most important factors is distance; larger parcels generally have larger areas to draw from, thereby reducing the potential to adversely affect adjacent properties. The close proximity of wells to other wells, and structure and volume of the groundwater basin (among many factors), can influence if a well would affect other wells.

Groundwater recharge may be affected by increased areas of impervious surfaces that would impede percolation of water into underlying basins. As provided in Table 3.0-1, the total area of building and structures associated potential new licensed commercial cannabis cultivation sites is projected to consist of approximately 7,279,200 square feet (approximately 167 acres). These buildings and structure would be spread out throughout the County, and would not substantially increase the overall area of developed uses compared to the total area of urban and built-up land within the County. Thus, the impacts to groundwater recharge would not be significant.

As previously described in Section 3.10.2, "Environmental Setting," available groundwater well monitoring data for the County has identified generally stable groundwater levels in the inland groundwater basins where licensed commercial cannabis cultivation sites would be located. The exception is associated with the Ukiah Valley Groundwater Basin, which was designated by DWR as a medium priority basin and is subject to an approved GSP.

New wells constructed in Mendocino County are subject to permit requirements under Mendocino County Ordinance Chapter 16.04. In addition, pursuant to MCCR section 10A.17.080, all Phase Three cannabis site applicants planning to use groundwater, which is not influenced by surface water, as a water supply must demonstrate that there is adequate water by providing a water availability analysis that addresses the adequacy of the proposed water supply, the direct effects on the adjacent and surrounding water users, possible cumulative adverse impacts of the development on the water supply within the watershed, and evidence that of a sustained yield to support the proposed level of use.



### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites transitioning to annual licensure would not result in additional impacts to groundwater as operations are not anticipated to be significantly altered through the annual licensing process.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. As further described below under “Future Licensed Sites,” available information indicates that groundwater conditions are generally stable and substantial capacity is available throughout the County. Expansion of existing commercial cannabis cultivation sites would still be required to comply with MCCR section 10A.17.080(C)(1)(b) which requires cannabis site applicants planning to use groundwater demonstrate that there is adequate water by providing a water availability analysis that addresses the adequacy of the proposed water supply on site. The MCCR also limits commercial cannabis cultivation and nursery sites to 22,000 square feet of commercial cannabis canopy per site that would apply to expanded commercial cannabis cultivation sites. These provisions would require that there is sufficient watershed supply prior to starting cultivation.

Thus, impacts associated with existing provisionally licensed commercial cannabis cultivation operations would be less than significant.

### Future Licensed Sites

As noted above, groundwater levels in the County are generally stable and, with the exception of the Ukiah Valley Basin described further below, are not subject to GPSs (DWR 2024). Available information indicates that groundwater conditions are generally stable and substantial capacity is available throughout the County. For example, Anderson Valley Groundwater Basin is estimated to have a capacity of 47,000 acre-feet (DWR 2004b), Laytonville Valley Groundwater Basin is estimated to have a capacity of 14,000 to 21,000 (DWR 2004b) Little Lake Valley Groundwater Basin is estimated to have a capacity of 35,000 to 50,000 acre-feet (DWR 2004c), the Potter Valley Groundwater Basin is estimated to have a capacity of 10,00 acre-feet, and the Covelo Round Valley Groundwater Basin is estimated to contain 230,000 acre-feet of water capacity (DWR 2004e). With the capacity of these groundwater basins in mind, and given the groundwater supplies within the County are stable, the estimated increase in 672.08 acre-feet per year of groundwater production (see Table 3.10-8) would not be substantial in terms of the County-wide capacity and generally stable availability of groundwater supplies. In addition, new wells are subject to issues of a permit from the County, per Mendocino County Ordinance Chapter 16.04. Furthermore, as described above, MCCR section 10A.17.080(C)(1)(b) would require a watershed assessment to established sufficient groundwater supply to serve the proposed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations.

With regard to conflicts with a GSP, new licensed commercial cannabis cultivation sites located in the Ukiah Valley Groundwater Basin would be subject to the Ukiah Valley Basin GSP. The Ukiah Valley Basin GSP identifies groundwater sustainable yield of 6,500 acre-feet annually, which factor approximately 5,983 acre-feet annually of groundwater pumping from municipal and agricultural uses (UVBGSA 2021). In Water Year 2022, a total of 5,423 acre-feet of groundwater was produced from the Ukiah Valley Groundwater Basin, 4,275 acre-feet of which were pumped by municipal and agricultural users (UVBGSA 2023). As shown in Table 3.10-8, projected water demand for all future commercial cannabis cultivation sites (661.38 acre-feet per year) would be within the remaining sustainable yield (note that all new commercial cannabis cultivation use locations are not anticipated to occur solely within the Ukiah Valley Groundwater Basin).

Therefore, because groundwater levels within the County are generally stable, with substantial capacity, and because projected cannabis water use would not conflict with implementation of the Ukiah Valley Basin GSP, this impact would be less than significant.

### Summary

Because existing provisionally licensed, potential expansion of existing provisionally licensed, and future licensed commercial cannabis cultivation sites would be subject to County standards and adequate groundwater resources exist, impacts to groundwater supply would be **less than significant**.

### Mitigation Measures

No mitigation is required for this impact.

### Impact 3.10-3: Result in Diversion of Surface Water

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Potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites, and associated processing and/or distribution transport-only operations as part of the implementation of the project could result in decreased flow rates on county streams and rivers from surface water diversion. Low flows are associated with increased temperature and may also aggravate the effects of water pollution. Compliance with SWRCB Order WQ 2023-0102-DWQ requires that certain flow and gauging requirements be met and that a surface water diversion forbearance period be implemented. This impact would be **less than significant**.

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As noted in Section 3.10.2, "Environmental Setting," the Eel River is designated as an impaired waterway because low flows affect temperature and water quality. In addition, SWRCB has identified the following watersheds, Mattole River, Middle South Fork Eel River, East Fork Russian River, Navarro River, and Dry Creek, as Cannabis Priority Watersheds in Mendocino County because of water quality, low flow, and other related issues. The location of existing commercial cannabis cultivation sites in relation to the Cannabis Priority Watersheds are illustrated in Figure 3.10-4. As identified in Impact 3.10-2, it is estimated that the existing 623 licensed commercial cannabis cultivation sites and associated uses have a total water demand of approximately 387 acre-feet per year.

The adverse effects on surface water flows and water quality associated with current unlicensed/illegal commercial cannabis cultivation have been well documented. In Mendocino County, surface water diversions for existing and illegal cannabis operations can substantially reduce or eliminate surface water flows during dry summer months. There is additional concern that more severe and prolonged drought conditions, related to climate change, could further diminish summer stream flow rates in northern California.

### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites transitioning to annual licensure would not result in additional impacts to surface water resources because operations are not anticipated to be significantly altered through the annual licensing process.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. Expansion of existing commercial cannabis cultivation sites would still be required to comply with SWRCB Order WQ 2023-0102-DWQ standards for water diversions described in

Section 3.10.1, "Regulatory Setting." Water diversions and associated rates can occur only when determined by SWRCB, based on an online database that must be checked daily. In addition, there is a mandatory water diversion forbearance period during the dry months of the year when waterway flows low. SWRCB's flow standards and diversion requirements were developed to protect fish spawning, migration, and rearing for endangered anadromous salmonids, and flows needed to maintain natural flow variability within each watershed. The diversion requirements would ensure that the individual and cumulative effects of water diversions and discharges associated with commercial cannabis cultivation do not affect instream flows necessary for fish spawning, migration, and rearing for endangered anadromous salmonids, and flows needed to maintain natural flow variability (SWRCB 2017a). The policy was scientifically peer-reviewed by four experts. The peer review determined that water quality, instream flow, and diversion requirements of the policy were based on sound scientific knowledge, methods, and data (SWRCB 2017b). Additionally, MCCR also limits commercial cannabis cultivation and nursery sites to 22,000 square feet of commercial cannabis canopy per site that would apply to expanded commercial cannabis cultivation sites. These provisions would require the applicant follow SWRCB's flow standards and diversion requirements prior to performing water diversions onsite.

Thus, impacts associated with existing provisionally licensed commercial cannabis cultivation operations would be less than significant.

#### Future Licensed Sites

New licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would be required to comply with MCCR section 10A.17.080(C)(1)(b), which would require a watershed assessment for all surface water or groundwater influenced by surface water to consist of requirements set forth under SWRCB Order WQ 2023-0102-DWQ standards for water diversions described in Section 3.10.1, "Regulatory Setting." SWRCB's flow standards and diversion requirements were developed to protect fish spawning, migration, and rearing for endangered anadromous salmonids, and flows needed to maintain natural flow variability within each watershed. The diversion requirements would ensure that the individual and cumulative effects of water diversions and discharges associated with commercial cannabis cultivation do not affect instream flows necessary for fish spawning, migration, and rearing for endangered anadromous salmonids, and flows needed to maintain natural flow variability (SWRCB 2017a). The policy was scientifically peer-reviewed by four experts. The peer review determined that water quality, instream flow, and diversion requirements of the policy were based on sound scientific knowledge, methods, and data (SWRCB 2017b). Thus, impacts associated with new licensed commercial cannabis cultivation operations would be less than significant.

#### Summary

Because provisionally licensed, potential expansion of existing provisionally licensed, and future licensed commercial cannabis cultivation sites would require that all commercial cannabis operations comply with the water diversion requirements under MCCR section 10A.17.080(C)(1)(b) and SWRCB Order WQ 2023-0102-DWQ, which contains instream flow requirements and a period of surface water diversion forbearance during dry months. As noted above, these surface water diversion restrictions are protective fisheries and their associated habitat. Therefore, impacts to surface water resources would be **less than significant**.

#### Mitigation Measures

No mitigation is required for this impact.

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## 3.11 LAND USE AND PLANNING

This section evaluates consistency of the project with applicable land use plans and policies. The physical environmental effects associated with the project, many of which pertain to issues of land use compatibility (e.g., noise, aesthetics, air quality), are evaluated in other sections of this chapter of this Draft EIR.

Comment letters submitted in response to the notice of preparation (NOP) for this EIR identified issues pertaining to Williamson Act contract lands and land use designations. Compatibility with Williamson Act contract lands is addressed in Section 3.2, "Agriculture and Forestry Resources." All comments received in response to the NOP are presented in Appendix A of this EIR.

### 3.11.1 Regulatory Setting

#### FEDERAL

No federal plans, policies, regulations, or laws related to land use are applicable to the project.

#### STATE

##### State Planning and Zoning Laws

California Government Code section 65300 et seq. establishes the obligation of cities and counties to adopt and implement general plans. The general plan is a comprehensive, long-term, and general document that describes plans for the physical development of a city or county of any land outside its boundaries that, in the city's or county's judgment, bears relation to its planning. Cities typically identify a "sphere of influence" in their general plans; these are areas outside the city corporate boundaries that comprise the probable future boundary and service area of the city. The general plan addresses a broad range of topics, including at a minimum land use, circulation, housing, conservation, open space, noise, and safety. In addressing these topics, the general plan identifies the goals, objectives, policies, principles, standards, and plan proposals that support the city's or county's vision for the area.

The State Zoning Law (Government Code section 65800 et seq.) establishes that zoning ordinances, which are laws that define allowable land uses within a specific zone district, are required to be consistent with the general plan.

Local general plan policies and zoning ordinances developed consistent with state planning and zoning laws are summarized below as they relate to the project.

##### State Aeronautics Act

The State Aeronautics Act (Public Utilities Code section 21001) sets forth requirements for airport land use compatibility planning around public use airports. The California Airport Land Use Planning Handbook (Caltrans 2011) provides guidance for determining consistency between a general plan and an Airport Land Use Compatibility Plan (ALUCP). The ALUCP contains policies relating to airport noise, the height of structures, trees, and other objects near an airport that affect the use of that airport, and potential safety risks both to people on the ground and to the occupants of aircraft. General Plan amendments must be consistent with any applicable ALUCP unless a local governing body overrules the plan by a two-thirds vote

and makes specific findings. Prior to amendment of a general plan, a local agency must refer the proposed amendment to the Airport Land Use Commission (ALUC). The reader is referred to Section 3.9, “Hazards and Hazardous Materials,” and Section 3.12, “Noise and Vibration,” for further discussion of airports.

## LOCAL

### Mendocino County General Plan

The Mendocino County General Plan contains the following policies related to land use and planning that are applicable to the project (Mendocino County 2021a):

#### Chapter 3, “Development Element”

- ▶ **Policy DE-2:** “Land Use Map,” depicts the land use policy of the County of Mendocino. The standards shown or contained in this General Plan shall apply to the land use categories shown on the Land Use Map. All discretionary approvals shall be in conformance with these standards unless explicitly stated otherwise in this General Plan.
- ▶ **Policy DE-4:** Zoning shall be consistent with this General Plan. Table 3-I, “General Plan and Zoning Consistency,” shall be used to determine consistency for rezoning applications.
- ▶ **Policy DE-5:** Designate sufficient land to accommodate the projected commercial, industrial, residential, and infrastructure needs of each community, compatible with General Plan policies, site planning constraints, and local community objectives.

#### Chapter 6, “Community Specific Policies”

- ▶ **Policy CP-PV-7:** The County supports the expansion and diversification of agricultural operations, including orchards, grazing lands and vineyards.

### Mendocino County Code of Ordinances - Mendocino County Zoning Code

The Mendocino County Zoning Code was adopted to protect the public health, safety, morals, peace, comfort, convenience, prosperity and general welfare; and further, the purpose of this zoning code is to prescribe land use regulations and a zoning plan for the County of Mendocino deemed necessary to promote forestry and agriculture; to provide open space for light and air and to prevent and fight fires and other hazards; to prevent undue dispersion or concentration of population; to promote orderly community development; to lessen congestion of streets and highways; and to facilitate adequate provisions for community utilities such as transportation, schools, parks and other public requirements. The Mendocino County Zoning Code regulations are intended to apply to all properties within the unincorporated area of the County, exclusive of those areas known as the Coastal Zone.

Chapter 20.242 of the Mendocino County Zoning Code provides land use regulations for the County of Mendocino where cannabis may be cultivated, subject to the limitations established of this chapter and the provisions of Mendocino County Code Chapter 10A.17, the Mendocino Cannabis Cultivation Ordinance (MCC).

### Mendocino County Code of Ordinances - Mendocino County Cannabis Regulation

The Mendocino County Cannabis Regulation (MCCR) provides land use and development standards for commercial cannabis cultivation uses. This includes identification of the extent of commercial cannabis cultivation uses allowed in certain zones (Table 3.11-1) in the unincorporated area of the County contains the following requirements related to land use and planning.

**Table 3.11-1 Zoning Permit Requirement for New Commercial Cannabis Cultivation by Zoning District and Cannabis Cultivation Ordinance CCBL Type**

MCCO CCBL Type	C Small Outdoor	C-A Small Indoor, Artificial Light	C-A Small Indoor, Artificial Light	C-B Small, Mixed Light	1 Medium Outdoor	1-A Medium Indoor, Artificial Light	1-B Medium Mixed Light	2 Large Outdoor	2-A Large Indoor, Artificial Light	2-B Large Mixed Light	4 Nursery
Min Parcel Area (ac)	2	2	2	2	5	5	5	10	10	10	10
Cultivation Area Limit (sf)	2,500	500	501—2,500	2,500	2,501—5,000	2,501—5,000	2,501—5,000	5,001—10,000	5,001—10,000	5,001—10,000	22,000
Zoning District RR 5 <sup>*1</sup>	ZC	AP	UP	ZC	ZC	—	ZC	—	—	—	—
Zoning District RR 10	ZC	AP	UP	ZC	ZC	—	ZC	ZC	—	ZC	ZC
Zoning District AG	ZC	AP	UP	ZC	ZC	—	ZC	ZC	—	ZC	ZC
Zoning District UR	ZC	AP	UP	ZC	ZC	—	ZC	ZC	—	ZC	ZC
Zoning District I1 <sup>*2</sup>	ZC	ZC	ZC	ZC	—	ZC	ZC	—	ZC	ZC	ZC
Zoning District I2 <sup>*2</sup>	ZC	ZC	ZC	ZC	—	ZC	ZC	—	ZC	ZC	ZC
Zoning District P1 <sup>*2</sup>	ZC	ZC	ZC	ZC	—	ZC	ZC	—	ZC	ZC	ZC

Notes: — = Not Allowed, ZC = Zoning Clearance, AP = Administrative Permit, UP = Minor Use Permit

<sup>\*1</sup> Parcels in the RR-5 zoning district must have a minimum parcel size of 5 acres.

<sup>\*2</sup> Parcels in Industrial zoning districts are not subject to a minimum parcel area.

Source: Mendocino County 2018, Table 2.

### Section 10A.17.040 General Limitations on Cultivation of Cannabis

The following limitations shall apply to all cultivation of cannabis in Mendocino County, including but not limited to cultivation pursuant to a Permit issued under this Chapter or an exemption provided for Section 10A.17.030. Cultivation of cannabis shall also be subject to all applicable restrictions of Mendocino County Code Chapter 20.242.

- (6) Any indoor cultivation sites that comply with paragraph (A)(1) shall also be subject to the following:
  - (a) Indoor cultivation sites shall comply with the building property line setback established by the zoning district in which the cultivation site is located.
  - (b) The cultivation of cannabis within an accessory structure shall be allowed subject to the development requirements of the zoning district in which it is located and to requirements of Chapter 20.164—Accessory Use Regulations except, notwithstanding Section 20.164.010: (a) the cultivation of cannabis in an accessory structure is not permitted prior to the construction of the legal dwelling unit on the parcel, if a legal dwelling unit is required by this Chapter, and (b) cultivation of cannabis shall only be allowed on the same parcel as the dwelling unit, if required.

### Section 10A.17.070 Requirements for All CCBL's [Cannabis Cultivation Business Licenses]

Unless specifically exempted, in addition to compliance with all other requirements of this Chapter, all CCBL Holder's shall comply with the requirements of this Section.

- (A) Zoning Districts. Cultivation of cannabis shall only be permitted on legal parcels that comply with the applicable zoning districts and parcel sizes as provided in Chapter 20.242.
- (E) Dwelling Unit Requirement. Legal parcels with a cultivation site are also required to have a dwelling unit; provided, however, that this requirement shall not apply to legal parcels within the following zoning districts: Upland Residential (U-R), Agricultural (A-G), Rangeland (R-L), Forest Land (F-L), Timberland Production (TPZ), Limited Industrial (1-1), General Industrial (1-2) Pinoleville Industrial (P-1). In addition, legal conforming parcels in Rural Residential, lot size ten (10) acres (R-R:L-10), shall also be exempt from the dwelling unit requirement of this paragraph, upon issuance of an administrative permit pursuant to Chapter 20.242.

### Mendocino County Airport Comprehensive Land Use Plan

The Mendocino County Airport Comprehensive Land Use Plan (MCALUCP) sets forth the criteria and policies which the Mendocino County ALUC will use in assessing the compatibility between the public-use airports in Mendocino County and proposed land use development in the areas surrounding them. The emphasis of the Plan is on review of local general and specific plans, zoning ordinances, and other land use documents covering broad geographic areas. Certain individual land use development proposals also may be reviewed by the Commission as provided for in the policies enumerated. The Commission does not have authority over existing incompatible land uses or the operation of any airport. Additionally, the Plan provides guidance for Commission review of new airports and heliports proposed for construction in the County (Mendocino County 1996). The reader is referred to Section 3.9, "Hazards and Hazardous Materials," and Section 3.12, "Noise and Vibration," for further discussion of airports.

### Ukiah Municipal Airport Land Use Comprehensive Plan

The Ukiah Municipal Airport Land Use Comprehensive Plan (UKIALUCP) replaces the compatibility plan for Ukiah Municipal Airport adopted by the Mendocino County ALUC in 1996 as part of the countywide MCALUCP. The UKIALUCP is wholly self-contained and does not rely upon any policies or other content contained in the MCALUCP. The MCALUCP remains in



effect for other airports in Mendocino County. The basic function of this UKIALUCP is to promote compatibility between the airport and surrounding land uses. As adopted by the ALUC, the plan serves as a tool for use by the Commission in fulfilling its duty to review certain airport and adjacent land use proposals. Additionally, the plan sets compatibility criteria applicable to local agencies in their preparation or amendment of land use plans and ordinances and to landowners in their design of new development. The Ukiah Municipal Airport is located in the southeastern portion of Mendocino County. The influence area for the Ukiah Municipal Airport, as defined herein, extends 2.7 miles from the airport's runway. Additionally, any city, special district, community college district, or school district that exists or may be established or expanded into the Airport Influence Area defined by this UKIALUCP is also subject to the provisions of the plan. The authority of the ALUC does not extend to state, federal, or tribal lands (Mendocino County 2021b). The reader is referred to Section 3.9, "Hazards and Hazardous Materials," and Section 3.12, "Noise and Vibration," for further discussion of airports.

### 3.11.2 Environmental Setting

Mendocino County is bounded by Humboldt and Trinity Counties to the north, Tehama, Glenn, and Lake Counties to the east, Sonoma County to the south and the Pacific Ocean to the west. Incorporated cities within the County are Willits, Ukiah, Fort Bragg, and Point Arena. The County is about 90 miles north of San Francisco, 80 miles south of Eureka, and approximately 165 miles south of the Oregon border.

According to the Mendocino County General Plan Development Element, with data derived from 2007 data from the Bureau of Land Management and U.S. Forest Service, the 2002-2003 Assessment Year from the Mendocino County Assessor's Office, and the 2002 Potential Development Reports from the Mendocino Department of County Planning and Building Services, Mendocino County contains 2,246,000 acres, or 3,510 square miles, and is the 15th largest county in California in terms of land area. Table 3.11-2 shows a breakdown of land ownership in the County.

Mendocino County is predominantly rural in nature, with a majority of land consisting of forest and agricultural land. Developed areas primarily consist of residential and commercial uses. Urban uses in the County are mainly focused around unincorporated community areas. Figure 3.11-1 identifies General Plan land use designations for the County.

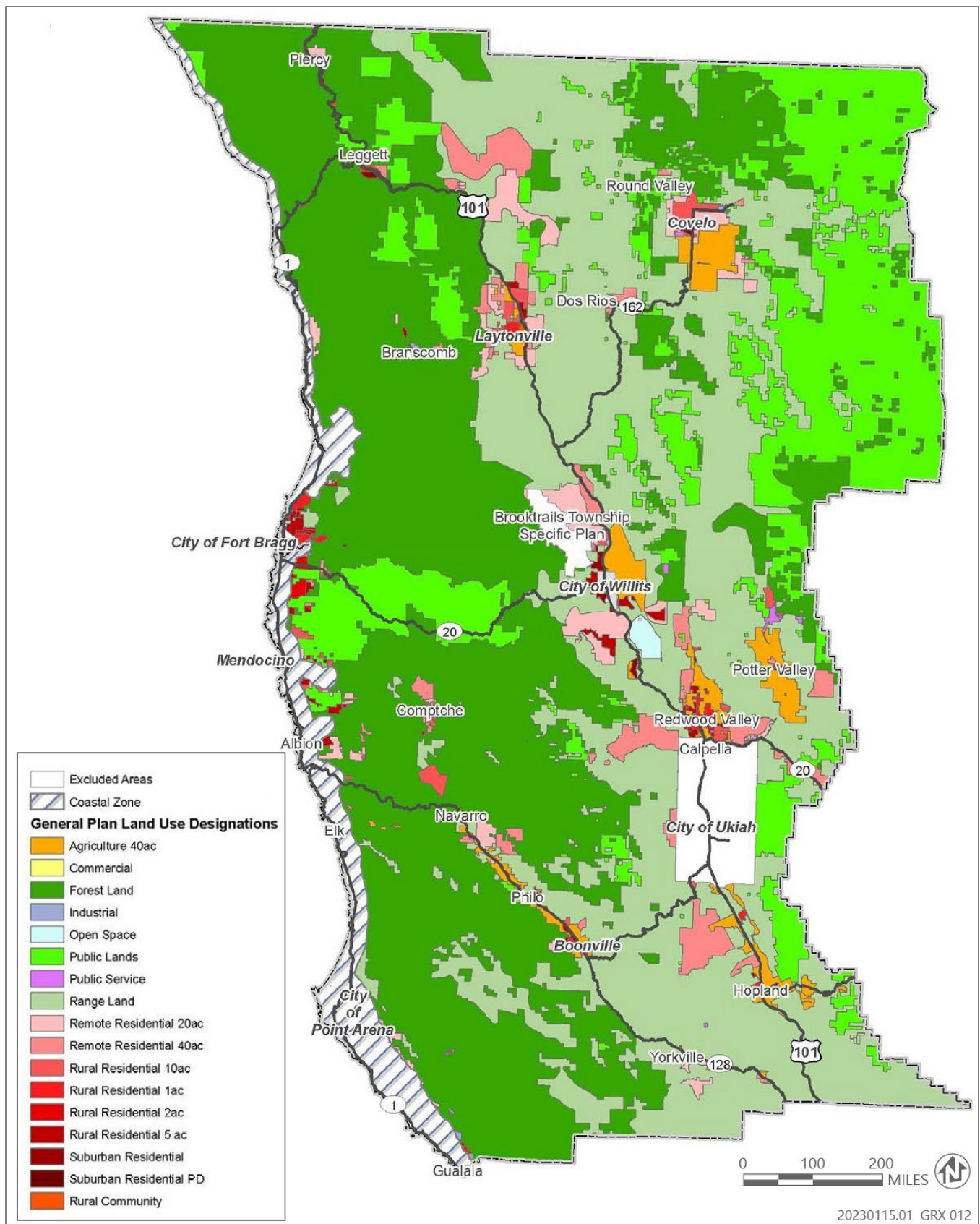
According to the 2021 Development Element of the Mendocino County General Plan, Mendocino County's diverse geographic regions have affected land use and settlement patterns. The coastal terrace and inland river valleys contain the major population centers, rural residential settlements, and agricultural uses. Timber, grazing, and rural residential development characterize the Coast Range. Other inland areas are largely mountainous and forested with limited population centers. Mendocino County remains mostly rural, with approximately 69 percent of the population living outside of incorporated cities. The remaining population lives in the four incorporated cities in the County; of these, Ukiah is the largest, with a population of approximately 15,929 citizens, larger than the other three cities combined. Fort Bragg has a population of approximately 7,014 citizens, Point Arena has a population of approximately 439 citizens, and Willits has a population of approximately 4,858 citizens (California Department of Finance 2023).

**Table 3.11-2 Land Ownership in Mendocino County**

<b>Ownership agency</b>	<b>Acres</b>	<b>Percentage of Total</b>
<b>Federal</b>	<b>360,597</b>	<b>16.1</b>
U.S. Forest Service	174,000	7.7
Bureau of Land Management	120,730	5.4
Native American	22,297	1.0
Other	43,570	1.9
<b>State, County, and Cities</b>	<b>102,000</b>	<b>4.5</b>
Incorporated Cities	7,394	0.3
State Parks	30,336	1.4
County Parks	567	0.1
Other	48,497	2.7
<b>Private</b>	<b>1,783,403</b>	<b>79.4</b>
Agricultural Preserves	497,143	22.1
Timber Production Zones	854,383	38.0
Other	431,877	19.2
<b>Total All Land</b>	<b>2,246,000</b>	<b>100.0</b>

Source: Mendocino County General Plan Chapter 3, "Development Element."

Due to the rural nature of the County, urban uses in the County are focused around unincorporated community areas. These community areas include Anderson Valley/Boonville Area, Round Valley/Covelo Area, Fort Bragg Area, Hopland/Sanel Valley, Laytonville, Potter Valley, Redwood Valley, Little Lake Valley, and the Ukiah Valley Area. Each of these community areas has specific needs and characteristics that require differing land use designations. These communities are within the unincorporated County and therefore are prescribed land use designations by the County. The coastal zone extends 1,000 yards inland from the coast of the County's western border along the Pacific Ocean. The coastal zone is divided into 13 areas, each containing specified land use designation maps. These planning areas include the Lost Coast, Rockport to Little Valley Road, North Fort Bragg, South Fort Bragg Area, Jug Handle Creek, Big River, Little River, Albion, Greenwood/Elk, Iverson Road, Anchor Bay – Gualala Iverson Road South, Big River, and Gualala and vicinity. The County prohibits commercial cannabis cultivation within the coastal zone.



Source: Mendocino County 2021a

**Figure 3.11-1 Mendocino County General Plan Land Use Designations**

### 3.11.3 Environmental Impacts and Mitigation Measures

#### METHODOLOGY

Evaluation of potential land use impacts of the project is based on review of County's planning documents pertaining to the project area, including the General Plan Development Element and specific area plans. For the purpose of this impact discussion, the analysis focuses on the potential impacts across the unincorporated County associated with the annual licensing of existing and new cultivation sites.

#### THRESHOLDS OF SIGNIFICANCE

A land use impact is considered significant if implementation of the project would do any of the following:

- ▶ Physically divide an established community; and/or
- ▶ Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

#### ISSUES NOT DISCUSSED FURTHER

##### Physically Divide an Established Community

Implementation of the project would not result in or require any change in land use designations. Both existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would be required to be located in zoning districts where commercial cannabis cultivation sites are an allowable use, as identified in Table 2 of the MCCR, and described in Section 3.11.1, "Regulatory Setting," above. Additionally, operation of commercial cannabis cultivation facilities within the unincorporated County would not introduce any major infrastructure (e.g., new freeways, bridges, train routes, etc.) or other uses that would result in the physical division of established communities. Therefore, this issue is not discussed further.

#### ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

##### Impact 3.11-1: Conflict with Any Land Use Plan, Policy, or Regulation Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect

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Potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would be required to comply with the MCCR, which defines allowable County zoning designations within which commercial cannabis uses may occur. In addition, such licensees would also need to comply with the Mendocino County Zoning Code, the Mendocino County General Plan and , and state commercial cannabis cultivation licensing requirements, which includes protection of environmental resources. As a result, no conflicts with applicable land use plans, policies, or regulations would occur. This impact would be **less than significant**.

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Existing and future new licensed commercial cannabis cultivation sites and associated processing and distribution transport-only operations would be required to comply with the

MCCR; state commercial cannabis cultivation licensing requirements under CCR, title 4, division 19; and Attachment A (Section 1, General Requirements and Prohibitions) of the SWRCB Order WQ 2023-000102-DWQ, which address environmental issues. Because the commercial cannabis cultivation applicants would be required to obtain necessary local approvals, the County would have a mechanism for control of land use changes.

The MCCR is the regulatory device for implementing commercial cannabis cultivation in a manner that is consistent with the General Plan and is also more specific than the General Plan in terms of allowed uses. The MCCR is intended to implement and be consistent with existing General Plan policy provisions. For example, under the MCCR, cultivation activities associated with commercial cannabis are similar to those of other agricultural crop production. Consequently, the MCCR allows commercial cannabis cultivation in agricultural zones. As described in Sections 3.1 through 3.17, compliance with these standards would implement environmental protection measures that are consistent with applicable Mendocino County and State regulations and policies.

#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only transitioning to annual licensure would not result in new impacts to land use policies or regulations, as operations are not anticipated to be altered through the annual licensing process. Existing licensed sites would be required to comply with the Mendocino County Zoning Code, specifically Chapter 20.242, which provides land use and development standards for commercial cannabis cultivation uses, MCCR sections 10A.17.040(6), 10A.17.070(A), and 10A.17.070(E), which would require commercial cannabis cultivation sites to adhere to zoning district regulations (consistent with the Mendocino County General Plan Policy DE-4), as well as State licensing requirements that provide environmental protections. As described in Sections 3.1 through 3.17, compliance with these standards would implement environmental protection measures that are consistent with applicable Mendocino County and State regulations and policies. Therefore, there would be no impact from existing provisionally licensed sites because they would retain the extent of their existing licensed commercial cannabis cultivation.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation operations would still be required to comply with Chapter 20.242, which provides land use and development standards for commercial cannabis cultivation uses. MCCR sections 10A.17.040(6), 10A.17.070(A), and 10A.17.070(E) require commercial cannabis cultivation sites to adhere to zoning district regulations that are required to be consistent with the Mendocino County General Plan (General Plan Policy DE-4), as well as State licensing requirements that provide environmental protections. For these reasons, this impact would be less than significant.

#### Future Licensed Sites

As part of licensing requirements, new commercial cannabis cultivation and associated processing and/or distribution transport-only operations would be required to comply with the MCCR and SWRCB's commercial cannabis cultivation policies for cultivation activities. Attachment A (Section 1, General Requirements and Prohibitions) of the SWRCB General Order (Order WQ 2023-000102-DWQ) includes terms that provide environmental protections for natural and cultural resources. Additionally, new licensed commercial cannabis cultivation

sites would be required to comply with Chapter 20.242, which provides land use and development standards for commercial cannabis cultivation uses. MCCR sections 10A.17.040(6), 10A.17.070(A), and 10A.17.070(E) require commercial cannabis cultivation sites to adhere to zoning district regulations (consistent with the Mendocino County General Plan Policy DE-4), as well as State licensing requirements that provide environmental protections.. As described in Sections 3.1 through 3.17, compliance with these standards implement environmental protection measures that are consistent with Mendocino County and State regulations and policies. Therefore, impacts would be less than significant.

### Summary

As described above, existing provisionally licensed, potential expansion of existing provisionally licensed, and future licensed commercial cannabis cultivation sites would be required to comply with MCCR and Attachment A (Section 1, General Requirements and Prohibitions) of the SWRCB Order WQ 2023-000102-DWQ that address environmental issues consistent with Mendocino County and State environmental protection policies and regulations. Complying with these requirements would ensure impacts would be **less than significant**.

### Mitigation Measures

No mitigation is required for this impact.

## 3.12 NOISE AND VIBRATION

This section includes a summary of applicable regulations related to noise and vibration, a description of ambient-noise conditions in Mendocino County, and an analysis of potential short-term construction and long-term operational noise impacts associated with the project. Mitigation measures are recommended as necessary to reduce significant noise impacts. Additional data is provided in Appendix D, “Noise Measurement Data and Noise Modeling Calculations.”

Comments submitted in response to the notice of preparation (NOP) for this EIR expressed concerns regarding the potential for increased noise as a result of vehicle traffic and noise pollution from generators, dehumidifiers, fans, and water trucks. All comments received in response to the NOP are presented in Appendix A of this EIR.

### 3.12.1 Regulatory Setting

#### FEDERAL

##### US Environmental Protection Agency Office of Noise Abatement and Control

The US Environmental Protection Agency (EPA) Office of Noise Abatement and Control was originally established to coordinate Federal noise control activities. In 1981, EPA administrators determined that subjective issues such as noise would be better addressed at more local levels of government. Consequently, in 1982 responsibilities for regulating noise control policies were transferred to state and local governments. However, documents and research completed by the EPA Office of Noise Abatement and Control continue to provide value in the analysis of noise effects.

##### Federal Transit Administration

To address the human response to ground vibration, the Federal Transit Administration (FTA) has set forth guidelines for maximum-acceptable vibration criteria for different types of land uses. These guidelines are presented in Table 3.12-1.

**Table 3.12-1 Ground-Borne Vibration (GBV) Impact Criteria for General Assessment**

Land Use Category	GBV Impact Levels re 1 micro- (VdE inch/second)		
	Frequent Events <sup>1</sup>	Occasional Events <sup>2</sup>	Infrequent Events <sup>3</sup>
<i>Category 1:</i> Buildings where vibration would interfere with interior operations.	65 <sup>4</sup>	65 <sup>4</sup>	65 <sup>4</sup>
<i>Category 2:</i> Residences and buildings where people normally sleep.	72	75	80
<i>Category 3:</i> Institutional land uses with primarily daytime uses.	75	78	83

Notes: VdB = vibration decibels referenced to 1  $\mu$  inch/second and based on the root mean square (RMS) velocity amplitude.

- 1 “Frequent Events” is defined as more than 70 vibration events of the same source per day.
- 2 “Occasional Events” is defined as between 30 and 70 vibration events of the same source per day.
- 3 “Infrequent Events” is defined as fewer than 30 vibration events of the same source per day.
- 4 This criterion is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research would require detailed evaluation to define acceptable vibration levels.

Source: FTA 2018.

## STATE

### California Department of Transportation

In 2020, Caltrans published the Transportation and Construction Vibration Manual (Caltrans 2020). The manual provides general guidance on vibration issues associated with construction and operation of projects in relation to human perception and structural damage. Table 3.12-2 presents recommendations for levels of vibration that could result in damage to structures exposed to continuous vibration.

**Table 3.12-2 Caltrans Recommendations Regarding Levels of Vibration Exposure**

PPV (in/sec)	Effect on Buildings
0.4-0.6	Architectural damage and possible minor structural damage
0.2	Risk of architectural damage to normal dwelling houses
0.1	Virtually no risk of architectural damage to normal buildings
0.08	Recommended upper limit of vibration to which ruins and ancient monuments should be subjected
0.006-0.019	Vibration unlikely to cause damage of any type

Notes: PPV= Peak Particle Velocity; in/sec = inches per second

Source: Caltrans 2020.

## LOCAL

### Mendocino County General Plan

The Development Element of the Mendocino County General Plan contains the following standards regarding noise that may be applicable to the project (Mendocino County 2021):

- ▶ **Policy DE-98:** The County will protect residential areas and other noise-sensitive uses from excessive noise by doing the following:
  - 1) Requiring that new land uses, new roadways, and other new noise sources do not create unacceptable noise levels on adjacent parcels.
  - 2) Allowing homes or noise-sensitive uses to be developed only in places where existing and projected noise levels would meet the exterior noise guidelines and standards shown in Policies DE-100 and DE-101.
  - 3) Requiring that County decisions that would cause or allow an increase in the noise created by stationary or mobile sources (such as the development of noise-generating land uses or the construction of new or wider roadways) be informed by noise analysis and accompanied by noise reduction measures to keep noise at acceptable levels.
- ▶ **Policy DE-99:** To implement Policy DE-99, the following shall apply:
  - 1) No new use regulated by the County shall be permitted to generate noise that would cause the ambient noise on any adjacent parcel to exceed the “completely compatible” 24-hour guidelines shown in Policy DE-101 or the 30-minute noise standards in Policy DE-100.
  - 2) The County shall ensure that noise mitigation to achieve a “completely compatible” 24-hour exterior noise level and conformance with the 30-minute exterior noise standard is provided in conjunction with any decision it makes that would cause a violation of item 1) above.



- 3) [Item 3 does not apply to the noise analysis.]
  - 4) The County shall ensure that roadway projects include mitigation measures to maintain at least “tentatively compatible” noise levels, as shown in Policy DE-101. Mitigation for roadway noise may be deferred where “tentatively compatible” noise guidelines would be exceeded on vacant lands but shall be installed as part of the roadway project where the noise would affect existing homes. Deferred mitigation shall be the responsibility of the project which places residential units on vacant lands.
  - 5) Developers of new noise-creating uses shall be responsible for implementing noise reduction techniques either at the source or at the residential use to achieve acceptable exterior and interior noise levels.
  - 6) The County shall be responsible for providing noise mitigation required as the result of County decisions to increase transportation noise standards.
  - 7) The County shall seek to obtain noise mitigation from other agencies (including the State of California) required to address the noise impacts of those agencies' decisions (including, but not limited to, roadway widenings).
- **Policy DE-100:** The following are the County’s standards for maximum exterior noise levels for residential land uses [presented in Table 3.12-3].

**Table 3.12-3 Development Element Table 3-J: Exterior Noise Level Standards (Levels Not to Be Exceeded More Than 30 Minutes in Any Hour)**

Land Use Type	Time Period	Maximum Noise Level (dB)
Single-Family Homes and Duplexes	10:00 p.m. to 7:00 a.m.	50
	7:00 a.m. to 10:00 p.m.	60
Multiple Residential 3 or More Units Per Building (Triplex +)	10:00 p.m. to 7:00 a.m.	55
	7:00 a.m. to 10:00 p.m.	60

Source: Mendocino County 2021.

- Where existing ambient noise levels exceed these standards, the ambient noise level shall be the highest allowable noise level measured in dB  $L_{eq}$  (30 minutes).
  - The noise levels specified above shall be lowered by 5 dB for simple tonal noises (such as humming sounds), noises consisting primarily of speech or music, or for recurring impulsive noises (such as pile drivers, punch presses, and similar machinery).
  - The County may impose exterior noise standards which are less restrictive than those specified above, provided that:
    - (1) The noise impact on the residential or other noise-sensitive use is addressed in an environmental analysis,
    - (2) A finding is made by the approving body stating the reasons for accepting a higher exterior noise standard, and
    - (3) Interior noise standards will comply with those identified in Policy DE-103.
- **Policy DE-101:** The following are noise compatibility guidelines for use in determining the general compatibility of planned land uses:

**Table 3.12-4 Development Element Table 3K: Noise Compatibility Guidelines (Expressed as a 24-Hour Day-Night Average or L<sub>dn</sub>)**

Land Use	Completely Compatible	Tentatively Compatible	Normally Incompatible	Completely Incompatible
Residential	Less than 55 dB	55-60 dB	60-75 dB	Greater than 75 dB
Commercial	Less than 65 dB	65-75 dB	75-80 dB	Greater than 80 dB
Industrial	Less than 70 dB	70-80 dB	80-85 dB	Greater than 85 dB

Source: Mendocino County 2021.

- These guidelines apply to land designated by this General Plan for these uses. Residential, retail, or public parks that have been developed on land designated for other uses shall be subject to the exterior noise guidelines for the land on which they are located.
  - Non-residential uses located on residentially designated land shall be subject to the exterior noise guidelines for residential lands.
  - All uses on commercial lands, including non-commercial uses, shall be subject to commercial land standards. Land use designations not listed above do not have exterior noise compatibility standards. Land use designations with no exterior noise compatibility standard include office and industrial.
  - Standards for public schools are set and enforced by the State of California and are not regulated by the County. Therefore, no standards for public schools are shown in Table 3-K [presented as Table 3.12-4 above].
- ▶ **Policy DE-102:** The following definitions shall be used in combination with the standards in the Noise Compatibility Guidelines shown above.
- “Transportation Noise” consists of noise generated by motor vehicles, trains, and airports.
  - “Completely Compatible” means that the specified land use is satisfactory, and both the indoor and outdoor environments are pleasant.
  - “Tentatively Compatible” means that noise exposure may be of concern, but common building construction practices will make the indoor living environment acceptable, even for sleeping quarters, and the outdoor environment will be reasonably pleasant.
  - “Normally Incompatible” means that noise exposure warrants special attention, and new construction or development should generally be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features are included in the design. Careful site planning or exterior barriers may be needed to make the outdoor environment tolerable.
  - “Completely Incompatible” means that noise exposure is so severe that new construction or development should generally not be undertaken.
- ▶ **Policy DE-103:** The following are the County’s standards for acceptable indoor intermittent noise levels for various types of land uses. These standards should receive special attention when projects are considered in “Tentatively Compatible” or “Normally Incompatible” areas, and new uses shall incorporate design features to ensure that these standards are met [presented in Table 3.12-5].

**Table 3.12-5 Development Element Table 3-L: Maximum Acceptable Interior Noise Levels Created by Exterior Noise Sources**

Land Use Type	Acceptable Noise Level (dB L <sub>dn</sub> or CNEL)
Residential Living and Sleeping Areas, Daytime	45 dB
Private School Classrooms	55 dB
Commercial, Educational, Office, Light and Heavy Industrial, Warehousing	Conform with applicable state and federal workplace safety standards

Source: Mendocino County 2021.

- Standards for public schools are set and enforced by the State of California and are not regulated by the County.
- The noise created inside a residential home, classroom, or library shall not count toward the acceptable noise levels to be maintained in accordance with this policy.
- ▶ **Policy DE-104:** New or expanded uses shall comply with adopted noise standards to ensure minimal impact on established noise-sensitive uses.
- ▶ **Policy DE-105:** A 5 dB increase in CNEL or L<sub>dn</sub> noise levels shall be normally considered to be a significant increase in noise.
- ▶ **Policy DE-107:** Distance and landscaping are the preferred methods for addressing noise created by roadways, railways, and similar sources.
- ▶ **Policy DE-108:** Noise barriers should be considered only if proven effective by accompanying noise studies.
- ▶ **Policy DE-109:** Noise barriers should be visually attractive, complement the surroundings, and require a minimum of maintenance.
- ▶ **Policy DE-110:** Noise barriers along major roadways are generally discouraged to avoid the appearance of “walled” roadways.

#### Mendocino County Code of Ordinances

Appendix C of the County’s Code of Ordinances, Title 20, “Zoning Ordinance,” Chapter 20.243, “Cannabis Facilities,” identifies the following exterior noise limit standards [presented in Table 3.12-6]:

**Table 3.12-6 Exterior Noise Limit Standards**

Receiving Land Use Category <sup>3,4</sup>	Time Period	Noise Level Standards (dB) <sup>1,2</sup>	
		Rural/Suburban	Urban/Highways <sup>5</sup>
One and Two Family	10:00 p.m.—7:00 a.m.	40	50
Residential	7:00 a.m.—10:00 p.m.	50	60
Multifamily	10:00 p.m.—7:00 a.m.	45	55
Public Spaces	7:00 a.m.—7:00 p.m.	50	60
Limited Commercial	10:00 p.m.—7:00 a.m.	55	
Some Multifamily	7:00 a.m.—10:00 p.m.	60	
Commercial	10:00 p.m.—7:00 a.m.	60	
	7:00 a.m.—10:00 p.m.	65	
Light Industrial	Any time	70	
Heavy Industrial	Any time	75	
<b>Adjustments to Noise Level Standard</b>			
<b>Duration</b>			
L <sub>50</sub>	30 minutes per hour	Standard	
L <sub>25</sub>	15 minutes per hour	Standard + 5 dB	
L <sub>0</sub>	Maximum permissible level	Standard + 20 dB	
Character	Tone, whine, screech, hum, or impulsive, hammering, riveting, or music or speech	Standard + 5 dB	
Ambient Level <sup>1</sup>	Existing ambient L <sub>50</sub> , L <sub>25</sub>	Standard + 5 dB	
	Existing ambient L <sub>0</sub>	Existing maximum	

Notes: Levels not to be exceeded more than thirty (30) minutes in any hour

<sup>1</sup> When an acoustical study demonstrates that ambient levels exceed the noise standard, then the ambient levels become the standard.

<sup>2</sup> Higher noise levels may be permitted for temporary, short-term or intermittent activities when no sensitive or residential uses will be affected.

<sup>3</sup> County staff shall recommend which receiving land use category applies to a particular project, based on the mix of uses and community noise levels. Industrial noise limits intended to be applied at the boundary of industrial zones, rather than within industrial areas.

<sup>4</sup> The "rural/suburban" standard should be applied adjacent to noise sensitive uses such as hospitals or convalescent homes.

<sup>5</sup> "Highways" apply to roads and highways where average daily traffic exceeds ten thousand (10,000).

Source: Mendocino County 1998.

### Mendocino County Cannabis Regulation

Section 10A.17.040 of the Mendocino County Cannabis Regulation (MCCR) includes the following requirements that address noise:

- (A) The cultivation of commercial cannabis in Mendocino County, in any amount or quantity by any entity, shall not be allowed in the following areas:
- 1) Within one thousand (1,000) feet of a youth-oriented facility, a school, or a park, or any church or residential treatment facility as defined herein that is in existence at the time a CCBL is initially applied for.
  - 2) Outdoors or using mixed light within one hundred (100) feet of any occupied legal residential structure located on a separate legal parcel; provided, however, that on January 1, 2020, this setback shall be increased to two hundred (200) feet for all CCBL applications but shall not apply to renewals of CCBL's originally issued before that date.

- 3) Outdoors or using mixed light in a mobile home park as defined in Health and Safety Code section 18214.1 within one hundred (100) feet of an occupied mobile home that is under separate ownership.
- 4) Intentionally omitted.
- 5) Outdoors or using mixed light within fifty (50) feet from any adjoining legal parcel under separate ownership or access easement (whichever is most restrictive); provided, however, that on January 1, 2020, this setback shall be increased to one hundred (100) feet for all CCBL applications but shall not apply to renewals of CCBL's originally issued before that date.
- 6) Any indoor cultivation sites that comply with paragraph (A)(1) shall also be subject to the following:
  - (a) Indoor cultivation sites shall comply with the building property line setback established by the zoning district in which the cultivation site is located.
  - (b) [Item b does not apply to the noise analysis.]
  - (c) [Item c does not apply to the noise analysis.]
- (B) The distance between the listed uses in the above paragraph (A)(1) and cannabis that is being cultivated shall be measured in a straight line from the nearest point of the fence required in section 10A.17.040(H), or if the cannabis is cultivated indoors, from the nearest exterior wall of the building in which the cannabis is cultivated to the nearest point of the exterior wall of the facility, building, or structure, or portion of the facility, building, or structure in which the above-listed use occurs or to the nearest point of any fenced, maintained or improved area where the users of the facility are typically present during normal hours of operation, whichever is closest. The distance in paragraphs (A)(2) and (A)(3) to any residential structure shall be measured from the fence required in section 10A.17.040(H) to the nearest exterior wall of the residential structure. The distance in paragraph (A)(5) shall be measured from the fence required in section 10A.17.040(H) to the boundary line of a legal parcel or access easement.

Applicants may seek a reduction in the setback described in paragraphs (A)(1) and (A)(5) upon issuance of an administrative permit pursuant to Chapter 20.242. See also sections 20.242.060(D) and 20.118.040(D), (E) and (F) for further exceptions to setback regulations.

- (C) [Item C does not apply to the noise analysis.]
- (D) The indoor or mixed-light cultivation of cannabis shall rely on the electrical grid or some form of alternative energy source. The indoor or mixed-light cultivation cannabis shall not rely on a generator as a primary source of power.
- (E) [Item E does not apply to the noise analysis.]
- (F) All activities associated with the cultivation of cannabis shall not exceed the noise level standards as set forth in the County General Plan Policies DE100, 101 and 103.

The following additional standards related to noise are provided in Section 10A.17.070 of the MCCR:

- (F) Generators. The indoor or mixed-light cultivation of cannabis shall not rely on a generator as a primary source of power.
  - (1) If no grid power source is available and there is not an alternative power source supporting both any required legal dwelling unit and the indoor or mixed-light CCBL operations, a generator may be used only under the following conditions: (1) the CCBL Holder shall install

an alternative power source that will meet at least one-half ( $\frac{1}{2}$ ) of the combined power requirements by the expiration of four (4) years from the date of initial application for a CCBL pursuant to this Chapter and (2) it will be a condition of the renewal of a CCBL at the end of such four (4) year period that the cultivator commit, in writing, to expand their alternative power source to fully meet the combined needs of the cultivation operations and any required legal dwelling unit within two years. If a generator is being used pursuant to the conditions set forth in this paragraph, CCBL Holder shall have conducted an analysis of the noise levels produced by the generator at full operational speed, showing compliance with Mendocino County General Plan Policies DE100, 101 and 103. This analysis shall be performed by an accredited acoustical engineer or using some other mechanism or device as provided for on a list to be prepared and published by the Department. All generators shall be, at a minimum, equipped with the manufacturer's specified muffler; if compliance with Policies DE100, 101 and 103 requires additional measures, the generator shall be equipped with such measures, which may include a hospital-grade muffler and/or a structure to enclose the generator designed for sound suppression.

- (2) If a generator is used to support any aspect of a cultivation operation with a CCBL, (excluding the conditions set forth in paragraph (1) above), it shall be as a secondary or back-up power source. The use of the generator shall only be allowed when the primary alternative power source is unable to provide its normal output and generate sufficient power to meet the needs of the cultivation operation and the legal dwelling unit. The Owner's Manual and/or Operation Manual (or operational fact sheet) providing the operational characteristics and maintenance schedule for the generator shall be on-site and available for review.

Section 10A.17.090 includes the following requirements for cultivation permit application and zoning review.

- (E)(2) If a generator is used to support any aspect of a cultivation operation with a CCBL, (excluding the conditions set forth in paragraph (1) above), it shall be as a secondary or back-up power source. The use of the generator shall only be allowed when the primary alternative power source is unable to provide its normal output and generate sufficient power to meet the needs of the cultivation operation and the legal dwelling unit. The Owner's Manual and/or Operation Manual (or operational fact sheet) providing the operational characteristics and maintenance schedule for the generator shall be on-site and available for review.

If a generator is being used pursuant to the conditions set forth in section 10A.17.070(F) of the MCCR, the Permit shall be conditioned on the conducting of an analysis of the noise levels produced by the generator at full operational speed, performed by an accredited acoustical engineer, and such analysis shall show compliance with Mendocino County General Plan Policies DE100, 101 and 103. All generators shall be, at a minimum, equipped with the manufacturer's specified muffler; if compliance with Policies DE100, 101 and 103 requires additional measures, the generator shall be equipped with such measures, which may include a hospital-grade muffler and/or a structure to enclose the generator designed for sound suppression.

#### Mendocino County Airport Land Use Compatibility Plan

The Mendocino County Airport Comprehensive Land Use Plan (ACLUP) sets forth the criteria and policies that the Airport Land Use Commission (ALUC) uses in assessing the compatibility between the public use airports and land use development and activities in the areas

surrounding them (Mendocino County 1996). State law requires that the County, because of its authority over land uses within the ALUC planning area, modify the general plan and any affected specific plans to be consistent with the ALUCP.

## 3.12.2 Environmental Setting

### ACOUSTIC FUNDAMENTALS

Prior to discussing the noise setting for the project, background information about sound, noise, vibration, and common noise descriptors is needed to provide context and a better understanding of the technical terms referenced throughout this section.

#### Sound, Noise, and Acoustics

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a human ear. Noise is defined as loud, unexpected, annoying, or unwanted sound.

In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receiver, and the propagation path between the two. The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receiver determines the sound level and characteristics of the noise perceived by the receiver. The field of acoustics deals primarily with the propagation and control of sound.

#### Frequency

Continuous sound can be described by frequency (pitch) and amplitude (loudness). A low-frequency sound is perceived as low in pitch. Frequency is expressed in terms of cycles per second, or hertz (Hz) (e.g., a frequency of 250 cycles per second is referred to as 250 Hz). High frequencies are sometimes more conveniently expressed in kilohertz, or thousands of hertz. The audible frequency range for humans is generally between 20 Hz and 20,000 Hz.

#### Sound Pressure Levels and Decibels

The amplitude of pressure waves generated by a sound source determines the loudness of that source. Sound pressure amplitude is measured in micro-Pascals (mPa). One mPa is approximately one hundred billionth (0.0000000001) of normal atmospheric pressure. Sound pressure amplitudes for different kinds of noise environments can range from less than 100 to 100,000,000 mPa. Because of this large range of values, sound is rarely expressed in terms of mPa. Instead, a logarithmic scale is used to describe sound pressure level (SPL) in terms of decibels (dB).

#### Addition of Decibels

Because decibels are logarithmic units, SPLs cannot be added or subtracted through ordinary arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3-dB increase. In other words, when two identical sources are each producing sound of the same loudness at the same time, the resulting sound level at a given distance would be 3 dB higher than if only one of the sound sources was producing sound under the same conditions. For example, if one idling truck generates an SPL of 70 dB, two trucks idling simultaneously would not produce 140 dB; rather, they would combine to produce 73 dB. Under the decibel scale, three sources of equal loudness together produce a sound level approximately 5 dB louder than one source.

## A-Weighted Decibels

The decibel scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by the characteristics of the human ear.

Human hearing is limited in the range of audible frequencies as well as in the way it perceives the SPL in that range. In general, people are most sensitive to the frequency range of 1,000–8,000 Hz and perceive sounds within this range better than sounds of the same amplitude with frequencies outside of this range. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, depending on the human sensitivity to those frequencies. Then, an “A-weighted” sound level (expressed in units of A-weighted decibels) can be computed based on this information.

The A-weighting network approximates the frequency response of the average young ear when listening to most ordinary sounds. When people make judgments of the relative loudness or annoyance of a sound, their judgment correlates well with the A-scale sound levels of those sounds. Thus, noise levels are typically reported in terms of A-weighted decibels. All sound levels discussed in this section are expressed in A-weighted decibels. Table 3.12-7 describes typical A-weighted noise levels for various noise sources.

**Table 3.12-7 Typical A-Weighted Noise Levels**

Common Outdoor Activities	Noise Level (dB)	Common Indoor Activities
	— 110 —	Rock band
Jet fly-over at 1,000 feet	— 100 —	
Gas lawn mower at 3 feet	— 90 —	
Diesel truck at 50 feet at 50 miles per hour	— 80 —	Food blender at 3 feet, Garbage disposal at 3 feet
Noisy urban area, daytime, Gas lawn mower at 100 feet	— 70 —	Vacuum cleaner at 10 feet, Normal speech at 3 feet
Commercial area, Heavy traffic at 300 feet	— 60 —	
Quiet urban daytime	— 50 —	Large business office, Dishwasher next room
Quiet urban nighttime	— 40 —	Theater, large conference room (background)
Quiet suburban nighttime	— 30 —	Library, Bedroom at night
Quiet rural nighttime	— 20 —	
	— 10 —	Broadcast/recording studio
Lowest threshold of human hearing	— 0 —	Lowest threshold of human hearing

Source: Caltrans 2013: Table 2-5

## Human Response to Changes in Noise Levels

As described above, the doubling of sound energy results in a 3-dB increase in the sound level. However, given a sound level change measured with precise instrumentation, the subjective human perception of a doubling of loudness will usually be different from what is measured.

Under controlled conditions in an acoustical laboratory, the trained, healthy human ear can discern 1-dB changes in sound levels when exposed to steady, single-frequency (“pure-tone”) signals in the mid-frequency (1,000–8,000 Hz) range. In general, the healthy human ear is most sensitive to sounds between 1,000 and 5,000 Hz and perceives both higher and lower frequency sounds of the same magnitude with less intensity (Caltrans 2013). In typical noisy environments, changes in noise of 1–2 dB are generally not perceptible. However, it is widely



accepted that people can begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5-dB increase is generally perceived as a distinctly noticeable increase, and a 10-dB increase is generally perceived as a doubling of loudness (Caltrans 2013). Therefore, a doubling of sound energy (e.g., doubling the volume of traffic on a highway) that would result in a 3-dB increase in sound would generally be perceived as barely detectable.

### Ground Vibration

Vibration is the periodic oscillation of a medium or object with respect to a given reference point. Sources of vibration include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) and those introduced by human activity (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, (e.g., operating factory machinery) or transient in nature (e.g., explosions). Vibration levels can be depicted in terms of amplitude and frequency, relative to displacement, velocity, or acceleration.

Vibration amplitudes are commonly expressed in peak particle velocity (PPV) or root-mean-square (RMS) vibration velocity. PPV and RMS vibration velocity are normally described in inches per second (in/sec) or in millimeters per second. PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is typically used in the monitoring of transient and impact vibration and has been found to correlate well to the stresses experienced by buildings (FTA 2018; Caltrans 2013).

Although PPV is appropriate for evaluating the potential for building damage, it is not always suitable for evaluating human response. It takes some time for the human body to respond to vibration signals. In a sense, the human body responds to average vibration amplitude. The RMS of a signal is the average of the squared amplitude of the signal, typically calculated over a 1-second period. As with airborne sound, the RMS velocity is often expressed in decibel notation as vibration decibels (VdB), which serves to compress the range of numbers required to describe vibration (FTA 2018; Caltrans 2020). This is based on a reference value of 1 micro inch per second.

The typical background vibration-velocity level in residential areas is approximately 50 VdB. Ground vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels (FTA 2018; Caltrans 2020).

Table 3.12-8 summarizes the general human response to different ground vibration-velocity levels.

**Table 3.12-8 Human Response to Different Levels of Ground Noise and Vibration**

Vibration-Velocity Level	Human Reaction
65 VdB	Approximate threshold of perception.
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is unacceptable.
85 VdB	Vibration acceptable only if there are an infrequent number of events per day.

Notes: VdB = vibration decibels referenced to 1  $\mu$  inch/second and based on the root mean square (RMS) velocity amplitude.

Source: FTA 2018.

Typical outdoor sources of perceptible ground vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground vibration is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical

background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur to fragile buildings. Construction activities can generate sufficient ground vibrations to pose a risk to nearby structures. Constant or transient vibrations can weaken structures, crack facades, and disturb occupants (FTA 2018).

Ground vibration levels generated by construction activity can be transient, random, or continuous. Transient construction vibrations are generated by blasting, impact pile driving, and wrecking balls. Random vibration can result from jackhammers, pavement breakers, and heavy construction equipment. Continuous vibrations are generated by vibratory pile drivers, large pumps, and compressors.

### Common Noise Descriptors

Noise in our daily environment fluctuates over time. Various noise descriptors have been developed to describe time-varying noise levels. The following are the noise descriptors used throughout this section.

- ▶ **Equivalent Continuous Sound Level ( $L_{eq}$ ):**  $L_{eq}$  represents an average of the sound energy occurring over a specified period. In effect,  $L_{eq}$  is the steady-state sound level containing the same acoustical energy as the time-varying sound level that occurs during the same period (Caltrans 2013). For instance, the 1-hour equivalent sound level, also referred to as the hourly  $L_{eq}$ , is the energy average of sound levels occurring during a 1-hour period and is the basis for noise abatement criteria used by Caltrans and FTA (Caltrans 2013; FTA 2018).
- ▶ **Maximum Sound Level ( $L_{max}$ ):**  $L_{max}$  is the highest instantaneous sound level measured during a specified time period (Caltrans 2013; FTA 2018).
- ▶ **Day-Night Level ( $L_{dn}$ ):**  $L_{dn}$  is the energy average of A-weighted sound levels occurring over a 24-hour period, with a 10-dB “penalty” applied to sound levels occurring during nighttime hours between 10 p.m. and 7 a.m. (Caltrans 2013; FTA 2018).
- ▶ **Community Noise Equivalent Level (CNEL):** CNEL is the energy average of the A-weighted sound levels occurring over a 24-hour period, with a 10-dB penalty applied to sound levels occurring during the nighttime hours between 10 p.m. and 7 a.m. and a 5-dB penalty applied to the sound levels occurring during evening hours between 7 p.m. and 10 p.m. (Caltrans 2013).

### Sound Propagation

When sound propagates over a distance, it changes in level and frequency content. The manner in which a noise level decreases with distance depends on geometric spreading, ground absorption, atmospheric effects, and shielding by natural or human-made features, described in detail below:

#### Geometric Spreading

Sound from a localized source (i.e., a point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Roads and highways consist of several localized noise sources on a defined path and hence can be treated as a line source, which approximates the effect of several point sources, thus propagating at a slower rate in comparison to a point source. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source.

### Ground Absorption

The propagation path of noise from a source to a receiver is usually very close to the ground. Noise attenuation from ground absorption and reflective-wave canceling provides additional attenuation associated with geometric spreading. Traditionally, this additional attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is usually sufficiently accurate for distances of less than 200 feet. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receiver, such as a parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receiver, such as soft dirt, grass, or scattered bushes and trees), additional ground-attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the attenuate rate associated with cylindrical spreading, the additional ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance. This would hold true for point sources, resulting in an overall drop-off rate of up to 7.5 dB per doubling of distance.

### Atmospheric Effects

Receivers located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels, as wind can carry sound. Sound levels can be increased over large distances (e.g., more than 500 feet) from the source because of atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence can also affect sound attenuation.

### Shielding by Natural or Human-Made Features

A large object or barrier in the path between a noise source and a receiver attenuate noise levels at the receiver. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Natural terrain features (e.g., hills and dense woods) and human-made features (e.g., buildings and walls) can substantially reduce noise levels. A barrier that breaks the line of sight between a source and a receiver will typically result in at least 5 dB of noise reduction (Caltrans 2013; FTA 2018). Barriers higher than the line of sight provide increased noise reduction (FTA 2018). Vegetation between the source and receiver is rarely effective in reducing noise because it does not create a solid barrier unless there are multiple rows of vegetation (FTA 2018).

## EXISTING NOISE ENVIRONMENT

### Existing Noise- and Vibration-Sensitive Land Uses

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels, and because of the potential for nighttime noise to result in sleep disruption. Additional land uses, such as parks, schools, historic sites, cemeteries, sensitive habitats, and recreation areas, are also generally considered sensitive to increases in exterior noise levels. Places of worship, hotels and transient lodging, libraries, and other places where low interior noise levels are desirable are also considered noise sensitive. These noise-sensitive uses are also considered vibration-sensitive land uses in addition to commercial and industrial buildings where vibration would interfere with operations within the building, including levels that may be well below those associated with human annoyance.

### Existing Noise Sources and Ambient Levels

The predominant noise sources within the County of Mendocino are mobile sources, including motor vehicles on roadways, rail, and aircraft. Stationary sources include industrial and commercial uses. There are numerous stationary noise sources (e.g., quarry operations, lumber mills, industrial facilities) dispersed throughout the County (Mendocino County 2008). Some are located in urban settings and others, such as quarry operations, are sited in more rural locations. Other stationary noise sources in the County include material recovery facilities/transfer stations, loading docks, landfills, recycling centers, portable batch plants, and general farming-related activities.

## 3.12.3 Environmental Impacts and Mitigation Measures

### METHODOLOGY

The environmental analysis in this EIR is general in nature and does not evaluate noise impacts of specific commercial cannabis cultivation site construction and operation. Instead, the analysis focuses on the worst-case noise-related impact that could occur from construction and operation of commercial cannabis operations. Thus, attention is given to the limitations and restrictions imposed by the existing requirements outlined in local regulations regarding the types, location, and intensity of noise-generating activity. The analysis considers the use of construction equipment, generators, air filtration and ventilation equipment; transportation noise; and loading activity.

#### Construction Noise

To assess potential short-term (construction related) noise impacts, sensitive receptors and their relative exposure were identified. Project-generated construction noise levels were determined based on methodologies, reference emission levels, and usage factors from FTA's Transit Noise and Vibration Impact Assessment Manual (FTA 2018) and FHWA's Roadway Construction Noise Model User's Guide (FHWA 2006). Reference levels for noise and vibration emissions for specific equipment or activity types are well documented and the usage thereof is common practice in the field of acoustics.

Specific equipment, techniques, locations, timing, and other project-specific construction activity details associated with future licensing of new commercial cannabis cultivation sites and associated processing and/or distribution transport-only uses are not available at this time. Continued operation of existing provisional licensed commercial cannabis cultivation sites transitioning to annual licensure that would retain the extent of their existing licensed commercial cannabis cultivation are not anticipated to be substantially altered through the annual licensing process, so no construction noise impacts are expected. However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites would seek to expand their operations. Therefore, to evaluate potential construction noise impacts, reference noise levels associated with construction equipment used for common construction activities that would occur with typical construction activities for new commercial cannabis cultivation sites and existing provisional licensed commercial cannabis cultivation sites were analyzed. To remain conservative, construction noise was modeled for the construction phase that typically uses the loudest equipment (e.g., site preparation). The site preparation phase typically generates the most substantial noise levels because on-site equipment associated with grading, compacting, and excavation are the noisiest. Site preparation equipment and activities include backhoes, bulldozers, loaders, and excavation

equipment (e.g., graders and scrapers). Noise levels for common construction equipment and activities at 50 feet are shown in Table 3.12-9. Although a detailed construction equipment list for the project is not currently available, based on the types of construction activities anticipated under the project (e.g., earthwork, grading), it is expected that the primary sources of noise would include a bulldozer, excavator, and grader. To provide a conservative estimate of construction noise, it is assumed that these three pieces of construction equipment would be used at one time.

### Construction Vibration

To assess potential short-term construction-related vibration impacts, sensitive receivers and their relative exposure to construction vibration were identified. Construction vibration levels were determined based on methodologies, reference emission levels, and usage factors from FTA's Transit Noise and Vibration Impact Assessment Manual (FTA 2018). Reference levels for vibration emissions for specific equipment types are well documented and the usage thereof common practice in the field of acoustics.

Construction activities have the potential to expose nearby buildings to levels of ground vibration that could result in structural damage and/or negative human response. These types of activities were assessed based on the types of construction equipment that would be used, the levels of ground vibration typically generated by these types of equipment, and the proximity of construction activity to existing nearby buildings. Referenced ground vibration levels for typical construction equipment are provided by the FTA Transit Noise and Vibration Impact Assessment Manual (FTA 2018). Construction vibration levels and contour distances were calculated based on reference vibration levels for construction equipment that could be used and would generate the greatest levels of ground vibration (e.g., vibratory roller).

### Operational Noise

#### Stationary Noise

With respect to non-transportation noise sources (e.g., stationary noise sources) associated with the operation of new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only uses, the assessment of long-term (operational-related) impacts was based on reference noise emission levels, measured noise levels for activities and equipment typically associated with project operation (e.g., heating, ventilation, and air conditioning (HVAC) units, delivery activities for supplies), and standard attenuation rates and modeling techniques.

#### Transportation Noise

The exact location of individual future licensed commercial cannabis cultivation sites and associated processing or distribution transport-only uses within the unincorporated County are not known at this time; thus, the roadways upon which project-generated trips would travel cannot be known. Therefore, potential long-term (operation-related) noise impacts attributable to project-generated increases in traffic is assessed qualitatively.

## THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the State CEQA Guidelines and County noise standards, a noise impact is considered significant if implementation of the project would:

- ▶ Generate a substantial temporary increase in noise levels at noise-sensitive land uses in excess of the following standards:

- Daytime construction generated noise levels exceeding the FTA daytime criterion of 90 dB  $L_{eq}$  between the hours of 7:00 a.m. and 8:00 p.m., or 80 dB  $L_{eq}$  between the hours of 6:00 a.m. and 10:00 p.m. at an adjacent residential property line.
- ▶ Generate short-term construction vibration or expose sensitive land uses to long-term operational vibration sources that exceed the following Caltrans and FTA guidance for vibration impacts related to structural damage and human response, respectively:
  - Structural damage: 0.2 PPV in/sec (Table 3.12-2)
  - Human response (Table 3.12-1):
    - For frequent events (i.e., more than 70 events per day): 65 VdB,
    - For occasional events (i.e., 30-70 events): 75 VdB, or
    - For infrequent (i.e., fewer than 30 events per day): 80 VdB.
- ▶ Result in substantial increases in traffic noise of at least 3 dB;
- ▶ Generate a substantial permanent increase in stationary noise at noise-sensitive uses in excess of the following standards established by the County:
  - General Plan Policy DE-100, Exterior Noise Level Standards (Table 3.12-3)
  - General Plan Policy DE-101, Noise Compatibility Guidelines (Table 3.12-4)
  - General Plan Policy DE-103, Maximum Acceptable Interior Noise Levels Created by Exterior Noise Sources (Table 3.12-5)
  - General Plan Policy DE-105, Operational stationary noise would result in a substantial impact if it were to result in a noise increase of +5 dB CNEL or  $L_{dn}$
  - MCCR section 10A.17.070
- ▶ For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.

## ISSUES NOT DISCUSSED FURTHER

### Operational Vibration

The licensing of new or expanded commercial cannabis cultivation sites and associated processing and/or distribution transport-only uses would not result in the development of any major sources of ground vibration such as commercial railways or passenger rail transit lines. Therefore, long-term operational activities associated with new or expanded licensed commercial cannabis cultivation sites are not anticipated to result in permanent or substantial levels of ground vibration. This impact is not discussed further.

### Airport Noise

The project would not result in the development of new residential land uses or other noise sensitive land uses near private air strips or public commercial airports in Mendocino County. Additionally, existing provisional licensed commercial cannabis cultivation sites in Mendocino County have already been sited and have been subject to the ACLUP, whereas new or expanded licensed commercial cannabis cultivation sites would be required by Mendocino County to comply with ACLUP policies and criteria. Compliance with these regulations would only allow for future licensed commercial cannabis cultivation sites to occur within proper

zoning areas and would ensure that people working within an ACLUP area would not be exposed to excessive airport noise. Thus, this impact is not discussed further.

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Impact 3.12-1: Create Substantial Temporary, Construction Noise

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Construction of new or expanded licensed commercial cannabis cultivation operations could involve the use of heavy off-road equipment. The use of construction equipment could result in temporary noise increases at surrounding land uses; however, construction noise modeling identified that noise levels would not exceed FTA construction daytime or nighttime noise standards at nearby sensitive receptors due to the required setback distances established in section 10A.17.040(A) of the MCCR(see Appendix D). Simultaneous operation of three pieces of construction equipment (i.e., bulldozer, excavator, and grader) would generate a combined noise level up to 84.8 dB  $L_{eq}$  and 88.8 dB  $L_{max}$  at 50 feet from the source. Through the required setback distance requirements alone, the noise level generated by the construction equipment would attenuate to approximately 72.8 dB  $L_{eq}$  and 76.8 dB  $L_{max}$  at 200 feet and 58.8 dB  $L_{eq}$  and 62.8 dB  $L_{max}$  at 1,000 feet, which are below FTA's daytime and nighttime construction noise thresholds (i.e., 90 dB  $L_{eq}$  and 80 dB  $L_{eq}$ , respectively). Therefore, this impact would be **less than significant**.

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Construction of new or expanded licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could require earthwork and the use of heavy equipment, which has the potential to result in a temporary increase in noise levels in the vicinity of future sites. Generally, the intensity of construction activity for new commercial cannabis cultivation sites would be similar to that of agricultural development, residential renovation, or a building addition project. Establishment of new cultivation sites could involve the use of off-road construction equipment for vegetation removal, breaking ground, initial plowing, or grading to establish a foundation, and lifting supplies and building materials. The County has not adopted construction-specific noise standards. Thus, the FTA construction noise standards are used to assess construction noise impacts. FTA has a daytime construction noise standard of 90 dB  $L_{eq}$  for residential uses and 100 dB  $L_{eq}$  for commercial/industrial uses and a nighttime construction noise standard of 80 dB  $L_{eq}$  for residential uses and 100 dB  $L_{eq}$  for commercial/industrial uses (FTA 2018).

#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites transitioning to annual licensure are not anticipated to be altered through the annual licensing process, so no construction noise impacts are expected. Therefore, there would be no impact from construction noise for existing provisionally licensed sites that would retain the extent of their existing licensed commercial cannabis cultivation.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. Construction noise would be temporary in nature and vary depending on the type of construction activities occurring on any given day; noise levels generated by those activities; distances to sensitive receptors; potential noise attenuating features such as topography and existing structures; and the existing ambient noise environment in any one location. Noise generated during construction of buildings and related structures is typically associated with

the operation of off-road equipment, with the loudest phases being grading, excavation, and demolition. Reference noise levels for typical construction equipment that could be used during construction activities are summarized in Table 3.12-9.

**Table 3.12-9 Noise Emission Levels from Construction Equipment**

Equipment Type	Typical Noise Level ( $L_{eq}$ dB) at 50 feet
Backhoe	80
Compactor	82
Concrete mixer	85
Concrete pump	82
Bulldozer	85
Excavator	85
Generator	82
Grader	85
Loader	80
Paver	85
Pneumatic tool	85
Roller	85
Saw	76
Scraper	85
Truck	84

Notes: dB = A-weighted decibels;  $L_{eq}$  = Equivalent Continuous Sound Level

Assumes all equipment is fitted with a properly maintained and operational noise control device, per manufacturer specifications. Noise levels listed are manufacturer-specified noise levels for each piece of heavy construction equipment.

Source: FTA 2018.

Modeling for on-site construction noise conservatively assumed simultaneous operation of three pieces of heavy equipment (bulldozer, excavator, and grader) and does not account for any existing intervening topography or structures; thus, it represents the worst-case noise level generation when all equipment at each location is in operation. (See Appendix D for construction modeling details.) Noise levels are presented as instantaneous maximum ( $L_{max}$ ) levels and hourly average ( $L_{eq}$ ). Consistent with FTA guidance, the  $L_{eq}$  value is used for this analysis because it more accurately correlates with the fluctuating noise levels associated with construction activities.

These three pieces of equipment (bulldozer, excavator, and grader) would generate a combined noise level up to 84.8 dB  $L_{eq}$  and 88.8 dB  $L_{max}$  at 50 feet from the source. Several cities and counties in California exempt construction noise from local noise standards if the noise-generating construction activity is performed during daytime hours; however, the County of Mendocino does not formally exempt construction-generated noise from applicable standards. Additionally, due to the programmatic nature of this analysis, the hours during which construction equipment would operate for individual projects is unknown at this time; thus, it is conservatively assumed that construction could occur throughout the daytime and nighttime hours, potentially resulting in sleep disturbance at nearby residential land uses.

Section 10A.17.040(A) of the MCCR requires that future commercial cannabis cultivation operations outdoors or using mixed light adhere to a setback of 200 feet from any occupied legal residential structure located on a separate legal parcel; 1,000 feet of a youth-oriented



facility, a school, or a park; and that indoor cultivation sites comply with the building property line setback established by the zoning district in which the cultivation site is located. Through the required setback distance requirements alone, the noise level generated by the construction equipment would attenuate to approximately 72.8 dB  $L_{eq}$  and 76.8 dB  $L_{max}$  at 200 feet and 58.8 dB  $L_{eq}$  and 62.8 dB  $L_{max}$  at 1,000 feet. Additional noise reduction could be provided by any intervening topography, dense stands of trees, or human-made structures located between the cultivation site and off-site receptors.

Therefore, if existing provisionally licensed commercial cannabis cultivation sites expand their facilities requiring construction, it is reasonable to conclude that receptors would not be exposed to construction noise levels that exceed FTA standards (i.e. 90 dB  $L_{eq}$  for residential uses and 100 dB  $L_{eq}$  for commercial/industrial uses during the day and 80 dB  $L_{eq}$  for residential uses and 100 dB  $L_{eq}$  for commercial/industrial uses during the night). Therefore, the impact from construction noise would be less than significant. For these reasons, this impact from construction noise would be less than significant.

### Future Licensed Sites

Development of future licensed commercial cannabis cultivation sites could include the construction of new facilities (e.g., greenhouses, hoop houses, accessory structures for equipment, fuel, or fertilizer storage) for commercial cannabis cultivation and associated processing and/or distribution transport-only operations. Construction activities could also include clearing, grading, and excavation for these new facilities or the expansion of existing facilities. As detailed above, construction noise would be temporary in nature and vary depending on the type of construction activities occurring on any given day; noise levels generated by those activities; distances to sensitive receptors; potential noise attenuating features such as topography and existing structures; and the existing ambient noise environment in any one location.

Modeling for on-site construction noise conservatively assumed simultaneous operation of three pieces of heavy equipment (bulldozer, excavator, and grader) and does not account for any existing intervening topography or structures; thus, it represents the worst-case noise level generation when all equipment at each location is in operation. As detailed above under the analysis for existing provisionally licensed sites, construction noise would generate a combined noise level up to 84.8 dB  $L_{eq}$  and 88.8 dB  $L_{max}$  at 50 feet from the source. (See Appendix D for construction modeling details.)

Although project specific details of individual future licensed commercial cannabis cultivation sites and supporting processing or distribution transport-only uses are not known at this time, such as the location of future sites and their distance to sensitive receptors, section 10A.17.040(A) of the MCCR requires that future commercial cannabis cultivation operations outdoors or using mixed light adhere to a setback of 200 feet from any occupied legal residential structure located on a separate legal parcel; 1,000 feet of a youth-oriented facility, a school, or a park; and that indoor cultivation sites comply with the building property line setback established by the zoning district in which the cultivation site is located. Through the required setback distance requirements alone, the noise level generated by the construction equipment would attenuate to approximately 72.8 dB  $L_{eq}$  and 76.8 dB  $L_{max}$  at 200 feet and 58.8 dB  $L_{eq}$  and 62.8 dB  $L_{max}$  at 1,000 feet. Additional noise reduction could be provided by any intervening topography, dense stands of trees, or human-made structures located between the cultivation site and off-site receptors.

Therefore, it is reasonable to conclude that receptors would not be exposed to construction noise levels that exceed FTA standards (i.e. 90 dB  $L_{eq}$  for residential uses and 100 dB  $L_{eq}$  for commercial/industrial uses during the day and 80 dB  $L_{eq}$  for residential uses and 100 dB  $L_{eq}$  for commercial/industrial uses during the night). Therefore, the impact from construction noise would be less than significant.

### Summary

There would be no construction noise exposure generated by existing provisionally licensed sites that would retain the extent of their existing licensed commercial cannabis cultivation because such sites are not anticipated to be altered through the annual licensing process. However, some of the existing provisionally licensed commercial cannabis cultivation sites and future commercial cannabis cultivation sites seeking licensing may require construction of new or improved facilities. Due to the required setbacks established in section 10A.17.040(A) of the MCCR, it is not anticipated that construction noise during the day or night would exceed FTA construction noise standards and result in public health effects (e.g., sleep disturbance). Therefore, the impact from construction noise would be **less than significant**.

### Mitigation Measures

No mitigation is required for this impact.

### Impact 3.12-2: Create Substantial Temporary, Construction Vibration

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The use of heavy-duty construction equipment can generate increased vibration levels. According to the FTA, vibratory rollers generate ground vibration levels of 0.21 in/sec PPV at 25 feet. Based on modeling conducted, vibration levels from the use of a vibratory roller could exceed the threshold of significance of 0.2 in/sec PPV for structural damage within 26 feet of any vibratory roller activities (see Appendix D for modeling details.) New and expanded licensed commercial cannabis cultivation sites would be required to comply with the applicable setback standards and would be subject to review to ensure that the site is compliant with all applicable zoning and design standards. Although, it is not anticipated that construction vibration levels would exceed FTA standards for structural damage, it cannot be guaranteed at this time that construction of indoor cultivation facilities would be located far enough from sensitive receptors so that adverse effects to humans does not occur. This impact would be **potentially significant**.

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Construction activities generate varying degrees of temporary ground vibration, depending on the specific construction equipment used and activities involved. Ground vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increased distance. The effects of ground vibration from construction activity may be imperceptible at the lowest levels, result in a detectable low rumbling sound and detectable vibrations at moderate levels, and at the highest levels, can cause annoyance, sleep disturbance, or damage to nearby structures.

The County of Mendocino does not have established thresholds for vibration impacts. Therefore, in the absence of local vibration standards, the Caltrans threshold for structural building damage of 0.20 PPV in/sec and the FTA thresholds for human response are used.

### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual

licensure are not anticipated to be altered through the annual licensing process, so no construction vibration impacts are expected. Therefore, there would be no impact from existing provisionally licensed sites that would retain the extent of their existing licensed commercial cannabis cultivation.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. Table 3.12-10 provides a list of vibration levels for pieces of typical equipment that could be used during individual project construction if an existing provisionally licensed commercial cannabis cultivation site seeks to expand their facilities.

**Table 3.12-10 Vibration Reference Levels for Construction Equipment**

Equipment	PPV at 25 feet, in/sec	Approximate VdB at 25 feet
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large Bulldozer	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58

Notes: VdB = vibration decibels; in/sec = inches per second  
Source: FTA 2018.

Based on reference vibration levels for typical construction equipment shown in Table 3.12-10, a vibratory roller could generate the greatest level of ground vibration at 0.210 PPV in/sec and 94 VdB at 25 feet (FTA 2018). Based on FTA recommended procedure for applying a propagation adjustment to reference levels, vibration levels from the use of a vibratory roller could exceed the threshold of significance of 0.2 in/sec PPV for structural damage within 26 feet of vibratory roller activities. (See Appendix D for vibration modeling details.)

Existing provisionally licensed commercial cannabis cultivation sites seeking annual licensure would be required to comply with the MCCR including setback regulations. As detailed under Impact 3.12-1, per section 10A.17.040(A) of the MCCR, cultivation sites that are outdoors or using mixed light need to be located at least 100 feet from any adjoining legal parcel under separate ownership or access easement and at least 200 feet from any occupied legal residential structure located on a separate legal parcel. Therefore, vibration generated from the expansion of existing outdoor or mixed-light facilities would not exceed the Caltrans criteria of 0.2 PPV in/sec for structural damage. Small indoor, artificial light cultivation sites are allowed in Rural Residential and Upland Residential zoning districts with an approved Administrative or Minor Use Permit. Per section 20.242.060(D) of the County Code, a setback reduction may be allowed with an Administrative Permit provided that the approved setback reduction is 50 feet or greater from an adjoining property under separate ownership or access easement. Therefore, even with a setback reduction, indoor commercial cannabis cultivation operations would be required to be at least 50 feet from a neighboring property. Therefore, vibration generated from the expansion of existing indoor provisionally licensed sites would not exceed the Caltrans criteria of 0.2 PPV in/sec for structural damage.

Vibration levels can also result in interference or annoyance impacts for residences or other land uses where people sleep such as hotels and hospitals. FTA criteria for human response to vibration sources depends on the frequency of vibration events. When vibration events

occur from the same source between 30 and 70 times per day, they are considered “occasional events.” Occasional events that exceed 75 VdB are considered to result in a significant vibration impact for residences and buildings where people normally sleep (FTA 2018). Based on FTA recommended procedure for applying propagation adjustments to these reference levels, vibration levels from the use of a vibratory roller could exceed the threshold of significance for “occasional events” within 110 feet of a sensitive land use. (See Appendix D for modeling inputs and outputs.) However, as detailed above, all outdoor or mixed-light cultivation sites, and the expansion of an existing provisionally licensed site, would not be permitted within 200 feet of an occupied legal residential structure located on a separate legal parcel. Thus, construction associated with the expansion of outdoor or mixed-light cultivation sites would not result in substantial vibration levels at nearby sensitive receptors.

Existing provisionally licensed indoor cultivation sites that are located in zoning districts with residential uses would be required to obtain an administrative or minor use permit and comply with all standards and regulations, including setback requirements. Existing provisionally licensed sites could apply for a setback reduction; however, indoor cultivation sites seeking to expand their facilities would be required to be located at least 50 feet away from the nearest neighboring property. Even so, if the expansion of an indoor cultivation site is not located at least 110 feet from the nearest sensitive receptor, the project could result in levels of vibration that would exceed the FTA vibration threshold for human annoyance. Because it is not known exactly where construction activities associated with the expansion of existing facilities would occur for individual commercial cannabis cultivation sites, it cannot be guaranteed that construction activities would not result in substantial vibration levels that would adversely affect humans. Therefore, this impact would be potentially significant.

#### Future Licensed Sites

Future licensing of new commercial cannabis cultivation and associated processing and/or distribution transport-only operations could include construction and installation of accessory structures, on-site grading, new or improved access roads and/or crossings to cultivation sites, and installation of electricity sources (e.g., solar panels). The vibration impact analysis provided above for existing provisionally licensed sites applies to future licensed sites as well. Therefore, based on FTA recommended procedure for applying a propagation adjustment to reference levels, vibration levels from the use of a vibratory roller could exceed the threshold of significance of 0.2 in/sec PPV for structural damage within 26 feet of vibratory roller activities. (See Appendix D for vibration modeling details.)

As detailed above, per section 10A.17.040(A) of the MCCR, all future licensed cultivation sites that are outdoors or using mixed light would need to be located at least 100 feet from any adjoining legal parcel under separate ownership or access easement and at least 200 feet from any occupied legal residential structure located on a separate legal parcel. Therefore, vibration generated from the construction of future licensed outdoor or mixed-light facilities would not exceed the Caltrans criteria of 0.2 PPV in/sec for structural damage. Additionally, Small indoor, artificial light cultivation sites are allowed in Rural Residential and Upland Residential zoning districts with an approved Administrative or Minor Use Permit. Per section 20.242.060(D) of the County Code, a setback reduction may be allowed with an Administrative Permit provided that the approved setback reduction is 50 feet or greater from an adjoining property under separate ownership or access easement. Therefore, even with a setback reduction, indoor commercial cannabis cultivation operations would be required to be at least 50 feet from a neighboring property. Therefore, vibration generated from the construction of future indoor licensed sites would not exceed the Caltrans criteria of 0.2 PPV in/sec for structural damage.

Vibration levels can also result in interference or annoyance impacts for residences or other land uses where people sleep such as hotels and hospitals. FTA criteria for human response to vibration sources depends on the frequency of vibration events. When vibration events occur from the same source between 30 and 70 times per day, they are considered “occasional events.” Occasional events that exceed 75 VdB are considered to result in a significant vibration impact for residences and buildings where people normally sleep (FTA 2018). Based on FTA recommended procedure for applying propagation adjustments to these reference levels, vibration levels from the use of a vibratory roller could exceed the threshold of significance for “occasional events” within 110 feet of a sensitive land use. (See Appendix D for modeling inputs and outputs.) However, as detailed above, all outdoor or mixed-light cultivation sites would not be permitted within 200 feet of an occupied legal residential structure located on a separate legal parcel. Thus, construction associated with outdoor or mixed-light cultivation sites would not result in substantial vibration levels at nearby sensitive receptors.

Indoor cultivation sites that would be located in zoning districts with residential uses would be required to obtain an administrative or minor use permit and comply with all standards and regulations, including setback requirements. Future licensed sites could apply for a setback reduction; however, indoor cultivation sites would be required to be located at least 50 feet away from the nearest neighboring property. Even so, if the construction of an indoor cultivation site is not located at least 110 feet from the nearest sensitive receptor, the project could result in levels of vibration that would exceed the FTA vibration threshold for human annoyance. Because it is not known exactly where construction activities would occur for future individual commercial cannabis cultivation sites, it cannot be guaranteed that construction activities would not result in substantial vibration levels that would adversely affect humans. Therefore, this impact would be potentially significant.

### Summary

There would be no construction vibration exposure generated by existing provisionally licensed sites that would retain the extent of their existing licensed commercial cannabis cultivation because no construction activity would occur. However, some of the existing provisionally licensed commercial cannabis cultivation sites and future commercial cannabis cultivation sites seeking licensing may require construction of new or improved facilities. Due to the required setbacks established in section 10A.17.040(A) of the MCCR, it is not anticipated that construction vibration levels would exceed FTA standards for structural damage. However, it cannot be guaranteed at this time that construction of indoor cultivation facilities would be located far enough from sensitive receptors so that adverse effects to humans do not occur (e.g., sleep disturbance). Therefore, the impact from construction vibration would be **potentially significant**.

### Mitigation Measures

#### Mitigation Measure 3.12-2: Develop and Implement a Vibration Control Plan

DCC shall require provisionally licensed commercial cannabis cultivation sites or new commercial cannabis cultivation applicants in Mendocino County to apply these requirements to construction activity for proposed expansion or construction of commercial cannabis cultivation sites within 110 feet of an offsite occupied residence or other sensitive receptor.

A vibration control plan shall be developed by the future project applicant (i.e., licensees) and their construction contractors to be submitted with license applications. The plan shall consider all potential vibration-inducing activities that would occur within the distance parameter

described above and include various measures, setback distances, precautions, monitoring programs, and alternative methods to vibration intensive activities with the potential to result in adverse impacts to sensitive receptors. The following vibration control measures (or other equally effective measures) shall be included in the plan:

- ▶ To prevent disturbance for sensitive land uses, minimum setback requirements for different types of ground vibration producing activities (e.g., vibratory roller) shall be established based on the proposed activities and locations, once determined. Established setback requirements can be breached only if a project-specific, site-specific, technically adequate ground vibration study indicates that the buildings would not be exposed to ground vibration levels in excess of 75 VdB, and ground vibration measurements performed during the construction activity confirm that the buildings are not being exposed to levels in excess of 75 VdB.
- ▶ Limit vibration-intensive activities to the daytime hours between 7:00 a.m. and 8:00 p.m. Monday through Friday and between 8:00 a.m. and 8:00 p.m. on Saturday and Sunday.
- ▶ Operate all vibration inducing impact equipment as far away from vibration-sensitive sites as reasonably possible from nearby structures.
- ▶ Phase high-impact activities so as not to occur simultaneously with other construction activities, to the extent feasible. The total vibration level produced could be significantly less when each vibration source is operated at separate times.

#### Significance after Mitigation

Implementation of Mitigation Measure 3.12-2 would serve to reduce potential vibration impacts from construction activities by requiring minimum setbacks to sensitive land uses, monitoring vibration levels during construction, use of alternative equipment when appropriate, and restrictions on hours of use to avoid impacts during more sensitive times of day. Through these measures, potential impacts on sensitive land uses from vibratory roller activity would be avoided. Therefore, this impact would be **less than significant** with mitigation incorporated.

#### Impact 3.12-3: Result in a Substantial Permanent Increase in Stationary Operational Noise

New or expanded licensed commercial cannabis cultivation sites in the County could generate increased noise levels from the use of specialized equipment and loading operations. However, noise from these activities would be temporary and periodic in nature, and adjacent land uses would not be exposed to noise levels that exceed noise standards in the Mendocino County Code of Ordinances. Therefore, this impact would be **less than significant**.

#### Existing Provisionally Licensed Sites

Continued operation of some of the existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual licensure are part of the existing baseline noise conditions and are not anticipated to be altered through the annual licensing process. Additionally, existing provisionally licensed sites would continue to be required to meet the standards established in section 10A.17.040(F) of the MCCR, which requires all activities associated with the cultivation of commercial cannabis to comply with the noise level standards set forth in County General Plan Policies DE-100, DE-101, and DE-103. Compliance with these provisions would ensure that operational noise levels from commercial cannabis operations do not exceed applicable noise level standards and regulations. Therefore, there would be no impact associated with operational noise from existing provisionally licensed sites.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation sites would still be subject to compliance with the noise standards identified above that would ensure that operational noise levels from expanded commercial cannabis operations do not exceed applicable noise level standards and requirements that protect public health effects from excessive noise (e.g., sleep disturbance).

### Future Licensed Sites

#### Mechanical Equipment Noise

Noise sources associated with the operation of new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could include off-road utility vehicles and mechanized trimming tools. Although it is anticipated that most trimming would be conducted by hand, motorized trimmers for trimming commercial cannabis plants could be used. A mechanized trimmer generates 81 dB at a distance of 3 feet (Berger, Neitzel, and Kladden 2015). This noise level is similar to that of landscape maintenance equipment typically used at residential land uses such as a lawn mower. Outdoor and mixed-light facilities would be required to be located at least 200 feet away from a residence on a neighboring property and indoor licensed facilities would be required to be located at least 50 feet from neighboring residences as established in section 10A.17.040 of the MCCR. At these distances, the exterior noise levels generated by a motorized trimmer would attenuate, through distance alone, to 44.5 dB and 56.6 dB, respectively. Therefore, these noise levels would not exceed the 60 dB  $L_{eq}$  exterior noise standard for residential uses identified in Mendocino County General Plan Policy DE-100. Therefore, this impact would be less than significant.

#### Generators

Section 10A.17.070 of the MCCR includes specific requirements related to the use of generators. Pursuant to section 10A.17.070(F) of the MCCR, indoor or mixed-light cultivation of commercial cannabis shall not rely on a generator as a primary source unless there is no grid power source available and there is not an alternative power source that supports both any required legal dwelling unit and the indoor or mixed-light CCBL (i.e., licensed) operations. In order to use a generator pursuant to these conditions, the license holder is required to have conducted an analysis of the noise levels produced by the generator at full operational speed to demonstrate compliance with the noise standards in County General Plan Policies DE-100, DE-101, and DE-103. Additionally, per section 10A.17.070(F) of the MCCR, this analysis is required to be performed by an accredited acoustical engineer. All generators are required to be equipped with a manufacturer's specific muffler and with other measures (e.g., hospital-grade muffler and/or structure to enclose the generator), if needed, in order to comply with General Plan Policies DE-100, DE-101, and DE-103. Any licensed site that requires the use of a generator would adhere to these regulations and, thus, would not exceed the applicable noise standards established in the County General Plan. Therefore, this impact would be less than significant.

#### Dehumidifiers and Refrigerated Storage

Noise sources associated with the operation of new commercial cannabis cultivation sites could include the use of refrigerated storage units with externally mounted air conditioning units and dehumidifiers to store fresh frozen commercial cannabis after harvest. These noise sources would generate similar noise levels to HVAC equipment. Noise levels from HVAC

equipment vary substantially depending on unit efficiency, size, and location. Noise levels from HVAC equipment range from 45 to 70 dB  $L_{eq}$  at 50 feet (EPA 1971). Using the highest noise level for HVAC equipment, sensitive receptors would exceed the County's 60 dB  $L_{eq}$  exterior noise standard for residential uses if they are located within 150 feet of the noise source. (See Appendix D for detailed calculations.)

Although project specific details of individual future licensed commercial cannabis cultivation facilities and supporting processing or distribution transport-only uses are not known at this time, such as the location of future sites and their distance to sensitive receptors, section 10A.17.040(A) of the MCCR requires that future commercial cannabis cultivation operations outdoors or using mixed light adhere to a setback of 200 feet from any occupied legal residential structure located on a separate legal parcel; 1,000 feet of a youth-oriented facility, a school, or a park; and that indoor cultivation sites comply with the building property line setback established by the zoning district in which the cultivation site is located. Through the required setback distance requirements alone, the noise level generated by dehumidifiers and refrigerated storage would not exceed the County's exterior noise standard for residential uses. However, small indoor, artificial light cultivation sites are allowed in Rural Residential and Upland Residential zoning districts with an approved Administrative or Minor Use Permit. Per section 20.242.060(D) of the County Code, a setback reduction may be allowed with an Administrative Permit provided that the approved setback reduction is 50 feet or greater from an adjoining property under separate ownership or access easement. Therefore, due to the programmatic nature of the project, it is not possible to guarantee at this time that a sensitive receptor would not be located within 150 feet of an indoor commercial cannabis cultivation facility.

General Plan Policy DE-98 states that County decisions that would allow an increase in noise created by stationary or mobile sources (such as the development of noise-generating land uses) must be informed by noise analysis and accompanied by noise reduction measures to keep noise at acceptable levels. Therefore, if proper noise reduction measures (i.e., locating equipment on rooftops or shielding equipment from direct line-of-sight of adjacent noise-sensitive land uses) are not implemented when necessary and projects within 150 feet of a sensitive receptor are still not able to meet the County's exterior noise standards during daytime and nighttime hours, the individual commercial cannabis cultivation facility would not be approved. Thus, this impact would be less than significant.

### Loading Activities

Truck deliveries generate noise as a result of truck arrivals and departures from unloading areas, trucks backing, air brakes, and other truck unloading-related noise. Based on a noise measurement conducted by Ascent on April 20, 2023, at a loading and unloading dock at an Anheuser-Bush facility, noise from delivery truck activity can reach noise levels of 59 dB  $L_{eq}$  at 100 feet. Activities requiring loading docks associated with the project would generally be related to larger mixed-light and outdoor facilities, which would be located at least 200 feet from the nearest residential land use, in accordance with section 10A.17.040(A) of the MCCR. Additionally, as detailed in MCCR section 10A.17.040(A), indoor cultivation sites would be required to with the building property line setback established by the zoning district in which the cultivation site is located. Per section 20.242.060(D) of the County Code, a setback reduction may be allowed with an Administrative Permit provided that the approved setback reduction is 50 feet or greater from an adjoining property under separate ownership or access easement. General Plan Policy DE-98 states that County decisions that would allow an increase in noise created by stationary or mobile sources (such as the development of noise-



generating land uses) must be informed by noise analysis and accompanied by noise reduction measures to keep noise at acceptable levels. Therefore, if proper noise reduction measures (i.e., locating loading docks away from direct line-of-sight of adjacent noise-sensitive land uses) are not implemented when necessary and projects are not able to meet the County's exterior noise standards during daytime and nighttime hours, the individual commercial cannabis cultivation facility would not be approved. Therefore, loading dock activity would not be permitted if it would exceed the County exterior noise standards of 60 dB L<sub>eq</sub> at nearby sensitive receptors. This impact would be less than significant.

### Summary

General Plan Policy DE-104 requires all new or expanded uses to comply with adopted noise standards in order to ensure minimal impact on established noise-sensitive uses. Additionally, per General Plan Policy DE-98, County decisions that would allow an increase in noise created by stationary or mobile sources (such as the development of noise-generating land uses) must be informed by noise analysis and accompanied by noise reduction measures to keep noise at acceptable levels. Additionally, section 10A.17.040(A) of the MCCR establishes setback distance requirements as well as provisions against the use of generators as a primary source. These policies and regulations would ensure that noise impacts related to stationary noise sources would be reduced to avoid public health effects (e.g., sleep disturbance) and that projects not able to meet applicable noise requirements would not be approved. Therefore, this impact would be **less than significant**.

### Mitigation Measures

No mitigation is required for this impact.

### Impact 3.12-4: Generate Long-Term, Traffic-Generated Noise

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New or expanded licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations would increase vehicle trips; however, at this time, it is not known which roadways would be affected by new trips and to what extent traffic noise would increase. Although future individual licenses would likely result in less than a doubling of trips on surrounding roadways and therefore would not substantially increase traffic noise during project-level environmental review, the uncertainty related to the location of each individual commercial cannabis cultivation site makes accurately quantifying the change in traffic noise associated with implementation of the project too speculative. For this reason, as allowed under State CEQA Guidelines, section 15145, it is too speculative to determine to what degree traffic noise would change as a result of implementation of the project. Therefore, no significance conclusion is provided.

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### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites obtaining annual licenses are part of the existing baseline traffic noise conditions and are not anticipated to be altered through the annual licensing process. For this reason, there would be no anticipated increase in new vehicle trips and thus, no impact to traffic noise from existing provisionally licensed sites.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation sites are not anticipated to

substantially increase vehicle trips along any one road, as commercial cannabis activities would be dispersed across a relatively wide area within the County. Given the vast area where commercial cannabis cultivation sites could be located and the uncertainty regarding the number of future licenses and operations, it is not possible to estimate potential traffic noise impacts to specific road segments at this time. Therefore, any estimate of traffic noise increases associated with expanded commercial cannabis cultivation sites would be too speculative. According to State CEQA Guidelines, section 15144, “drafting an EIR or preparing a Negative Declaration necessarily involves some degree of forecasting. While foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can.” Additionally, State CEQA Guidelines, section 15145 states that “if, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact.” As detailed above, the lack of reliable data, variety of possible scenarios and circumstances, and number of assumptions that would need to be made make it too speculative to determine the traffic noise impact of the project. Therefore, no significance conclusion is provided for this issue.

### Future Licensed Sites

Future new licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations have the potential to introduce new vehicle trips to County roadways which may result in increased noise levels associated with additional vehicle trips, but only for relatively short periods, particularly during harvesting and transport of commercial cannabis. As detailed in the Environmental Setting section above, it is widely accepted that people can begin to detect sound level increases of 3 dB in typical noisy environments which corresponds to a doubling of sound energy. Thus, regarding traffic noise specifically, a noticeable increase in traffic noise could occur with a doubling in the volume of traffic on a roadway.

The exact location of individual future commercial cannabis cultivation sites within the unincorporated County are not known at this time; thus, the roadways upon which project-generated trips would travel cannot be known. However, the project is not anticipated to substantially increase vehicle trips along any one road, as commercial cannabis activities would be dispersed across a relatively wide area within the County. Given the vast area where new commercial cannabis sites could be located and the uncertainty regarding the number of future licenses and operations, it is not possible to estimate potential traffic noise impacts to specific road segments at this time. Therefore, any estimate of traffic noise increases associated with the project would be too speculative.

New commercial cannabis cultivation license sites would be required to undergo project-specific environmental review in light of the analysis provided in this EIR, including an analysis of project generated traffic noise. It is likely that subsequent, individual commercial cannabis cultivation sites associated with the project would not double traffic volumes along the surrounding roadway network resulting in a substantial increase in traffic noise and would therefore result in a less than significant traffic noise impact. However, the uncertainty related to where each future commercial cannabis cultivation site would be located and how many vehicle trips would be generated by each project and on which roadway segments makes accurately quantifying the change in traffic noise associated with implementation of the project too speculative at the program level.

According to State CEQA Guidelines, section 15144, “drafting an EIR or preparing a Negative Declaration necessarily involves some degree of forecasting. While foreseeing the

unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can.” Additionally, State CEQA Guidelines, section 15145 states that “if, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact.” As detailed above, the lack of reliable data, variety of possible scenarios and circumstances, and number of assumptions that would need to be made make it too speculative to determine the traffic noise impact of the project. Therefore, no significance conclusion is provided for this issue.

### Summary

There would be no increase in traffic noise exposure generated by existing provisionally licensed sites as no change in operations is anticipated from this component of the project. New or expanded commercial cannabis cultivation sites could increase trips throughout the County (as detailed under Impact 3.16-2); however, it is not possible to identify which roadways would be affected, and to what extent, at this time as project-specific information is not known. Although it is unlikely that individual commercial cannabis cultivation sites would generate enough traffic to double the volumes on surrounding roadways, and therefore result in a noticeable increase in traffic noise, because the exact location of future individual licensed sites is not known at this time, any estimate of traffic noise generated on specific roadway segments associated with the project would be too speculative. For this reason, no significance conclusion is provided for this issue in compliance with State CEQA Guidelines, section 15145.

### Mitigation Measures

No mitigation is required for this impact.

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### 3.13 POPULATION, EMPLOYMENT, AND HOUSING

This section provides an overview of existing population, employment, and housing in Mendocino County and unincorporated Mendocino County. This section also analyzes the potential impacts of project implementation on population growth, employment opportunities, and the housing supply in the County. Potential growth-inducing impacts of the project are further addressed in Chapter 6, “Other CEQA Sections.”

Several population, employment, and housing–related comments were received in response to the notice of preparation (NOP). These comments express concerns related to changes to housing prices, the nature of existing housing units, and new population related to an increase in available jobs. All comments received in response to the NOP are presented in Appendix A of this EIR.

#### 3.13.1 Regulatory Setting

##### FEDERAL

No federal plans, policies, regulations, or laws related to population, employment, or housing are applicable to the project.

##### STATE

###### State CEQA Guidelines, Section 15131

State CEQA Guidelines, section 15131 provides that economic or social information may be included in an EIR but that economic and social effects shall not be considered significant effects on the environment. In an EIR, the lead agency is responsible for researching economic and social changes resulting from a project that may eventually lead to physical changes in the environment. These economic and social changes can be used to determine the significance of physical changes on the environment.

###### State Housing Element, Section 65580

State Housing Element, Section 65580 finds and declares:

- (a) The availability of housing is of vital statewide importance, and the early attainment of decent housing and a suitable living environment for every Californian, including farmworkers, is a priority of the highest order.
- (b) The early attainment of this goal requires the cooperative participation of government and the private sector in an effort to expand housing opportunities and accommodate the housing needs of Californians of all economic levels.
- (c) The provision of housing affordable to low- and moderate-income households requires the cooperation of all levels of government.
- (d) Local and state governments have a responsibility to use the powers vested in them to facilitate the improvement and development of housing to make adequate provision for the housing needs of all economic segments of the community.
- (e) The Legislature recognizes that in carrying out this responsibility, each local government also has the responsibility to consider economic, environmental, and fiscal factors and

community goals set forth in the general plan and to cooperate with other local governments and the state in addressing regional housing needs.

(f) Designating and maintaining a supply of land and adequate sites suitable, feasible, and available for the development of housing sufficient to meet the locality's housing need for all income levels is essential to achieving the state's housing goals and the purposes of this article.

## LOCAL

### Mendocino County General Plan

The Development Element of the Mendocino County General Plan contains the following policies related to population and housing (Mendocino County 2021):

- ▶ **Policy DE-26:** Allow increased and flexible land use density and intensity to implement the Housing Element.
- ▶ **Policy DE-27:** Until General Plan, zoning and other regulations are revised consistent with the Housing Element, regulations and decision making shall conform to Housing Element policies to the maximum extent possible.
- ▶ **Policy DE-49:** Expand economic opportunities that respect the individual character of each community area.

In addition to the policies listed above, the following policies from the Mendocino County General Plan 2020 Housing Element are relevant to the project (Mendocino County 2020):

- ▶ **Policy 2.1:** Conserve the housing stock through preservation, rehabilitation or replacement of existing units. Priority shall be given to affordable housing and those serving special needs populations.
- ▶ **Policy 4.3:** Encourage a range of housing types to address the housing needs of the County's special needs populations, such as seniors, single-parent families, large families, individuals with disabilities, the homeless, Native Americans, and farmworkers.

### Mendocino County Code of Ordinances - Mendocino County Cannabis Regulation

The Mendocino County Cannabis Regulation (MCCR) contains the following requirements related to the provision of housing for new commercial cannabis cultivation sites:

#### Section 10A.17.070: Requirements for All Cannabis Cultivation Business Licenses (CCBLs)

- ▶ (E) Dwelling Unit Requirement. Legal parcels with a cultivation site are also required to have a dwelling unit; provided, however, that this requirement shall not apply to legal parcels within the following zoning districts: Upland Residential (U-R), Agricultural (A-G), Rangeland (R-L), Forest Land (F-L), Timberland Production (TPZ), Limited Industrial (1-1), General Industrial (1-2) Pinoleville Industrial (P-1). In addition, legal conforming parcels in Rural Residential, lot size ten (10) acres (R-R:L-10), shall also be exempt from the dwelling unit requirement of this paragraph, upon issuance of an administrative permit pursuant to Chapter 20.242.

#### Section 10A.17.080: CCBL Phases and Requirements Specific to each Phase

- ▶ (B)(2)Zoning Districts; Exceptions. Existing cultivation sites not located in zoning districts where Chapter 20.242 specifically allows cultivation may be issued a Type C, Type C-A, or

Type C-B CCBL, subject to the following requirements, in addition to all other applicable requirements of this Chapter:

- a) The zoning district is one where a dwelling unit is a principally permitted use and a dwelling unit is present.
- b) Sunset Provision for Residential Districts. Cultivation sites on legal parcels located in the Single-Family Residential (R-1), Two-Family Residential (R-2), Multiple-Family Residential (R-3), Suburban Residential (S-R), Rural Community (R-C), and Rural Residential (lot sizes one (1) acre, two (2) acres and five (5) acres [legal non-conforming parcels to minimum zoning size][R-R: L-1, R- R:L-2, and R-R:L-5 {legal non-conforming to minimum zoning size}]), as well as cultivation sites in any other zoning district where a dwelling unit is a principally permitted use and the legal parcel is less than two (2) acres in size, are subject to the following requirements:
  - i. There is an occupied dwelling unit on the legal parcel with the cultivation site.
  - ii. A CCBL may be renewed and valid only until three (3) years following the effective date of the ordinance adopting this Chapter and any permits issued shall be void not later than three (3) years following said effective date; provided, however, that indoor cultivation sites (Types C-A, 1A or 2A) within two (2) miles of the Coastal Zone Boundary which, as of May 14, 2019, have been issued a CCBL (and 20 issued any permit pursuant to Chapter 20.242) or have applied for a CCBL and are under CCBL review (and applied for and are under review for any permit pursuant to Chapter 20.242), may be issued and/or renew a CCBL until June 30, 2022, subject to the modification of the existing administrative or use permit for the indoor cultivation site.  
  
The provisions of this subsection, however, shall not apply in areas designated as "CA" Cannabis Accommodation Combining District, nor shall they apply to parcels zoned Rural Residential (lot size five (5) acres [R-R:L-5]) that are between 3.5 and 4.99 acres and have been issued an administrative permit pursuant to Section 20.242.070(C).
- c) Cultivation sites on legal parcels located in the Rural Residential zoning district, lot size five (5) acres (conforming parcels of five (5) acres or more only)(R-R:L-5), are subject to the following additional requirement that there is an occupied dwelling unit on the legal parcel with the cultivation site.

**Section 20.242.070: Planning Approval Required to Cultivate Cannabis**

- ▶ (C)(6) An Administrative Permit may be applied for and granted for an exception to the dwelling unit requirement of Chapter 10A.17 for parcels in the Rural Residential, lot size ten (10) acres (R-R:L-10) zoning district with the additional finding that the applicant shall demonstrate that the cultivation site and any associated infrastructure (roads, buildings, water storage, etc.) does not preclude the development of the parcel with a residence in the future. For parcels that will need on-site sewage disposal systems to be developed, making this finding may require the identification of a primary and reserve leach field to be identified in order to issue the Administrative Permit.

### 3.13.2 Environmental Setting

#### POPULATION AND POPULATION GROWTH

According to the Mendocino County General Plan Development Element, the County has undergone cycles of population boom followed by periods of slower growth (Table 3.13-1). For example, the County experienced rapid growth during the 1950s, when population increased by approximately 25 percent between 1950 and 1960, but then growth slowed over the next decade, with minimal growth observed between 1960 and 1970. Following a similar trend, the County experienced another boom in growth between 1980 and 1990 in the form of a 20-percent increase throughout that decade. Again, a period of rapid growth was followed by a steep drop-off in the next decade. Between 1990 and 2000, the population of Mendocino County increased by 7.4 percent. In the 1990s, the unincorporated portions of the County saw growth trends similar to those in the County as a whole, with nearly identical growth rates observed in the unincorporated County (7.3 percent) and incorporated cities (7.5 percent). Population growth slowed further between 2000 and 2007, increasing only 4.6 percent. During this time, the unincorporated areas of the County experienced higher growth rates than the incorporated cities. The population of Ukiah, the County seat, grew by only 2.4 percent; similarly, Willits and Fort Bragg experienced slight declines in population (Mendocino County 2020).

**Table 3.13-1 Mendocino County Population Growth, 1970–2030**

Jurisdiction	1970	1980	1990	2000	2008	2020	2030
Fort Bragg	4,455	5,019	6,078	7,026	6,890	7,311	7,784
Point Arena	424	425	407	474	493	449	482
Ukiah	10,095	12,035	14,599	15,497	15,758	16,065	16,964
Willits	3,091	4,008	5,027	5,073	5,032	4,893	5,201
Total cities	18,065	21,487	26,111	28,070	28,173	28,718	30,430
Unincorporated	33,036	45,251	54,234	58,195	61,990	59,573	62,225
Total County	51,101	66,738	80,345	86,265	90,163	91,498	92,655

Source: Mendocino County 2020.

While the General Plan anticipates a total county population of approximately 92,655 citizens by 2030, a slow population growth trend is anticipated to continue in the County over the next few decades. The California Department of Finance estimates that Mendocino County will have a 2024 total population of approximately 88,782, and projects that the County's 2050 population will be approximately 89,697 (California Department of Finance 2022).

#### EMPLOYMENT AND EMPLOYMENT CENTERS

The County's employment base has become increasingly diversified over the last several decades as timber, fishery, and industrial employment has declined. The retail trade, service, and government sectors continue to gain as the major sources of employment in Mendocino County. Table 3.13-2 presents a summary of the occupations of the unincorporated County's residents based on 2012–2016 American Community Survey data. Managerial/professional occupations accounted for 34.3 percent of all jobs in the unincorporated County, followed by services at 24.6 percent, and sales and office jobs at 16.9 percent (Mendocino County 2020).



**Table 3.13-2 Occupation of Residents in the Unincorporated County, 2016**

Occupation	Number	Percent
Managerial/professional	8,654	34.3%
Services	6,198	24.6%
Sales and office	4,251	16.9%
Production/transportation	2,323	9.2%
Construction/maintenance	2,155	8.6%
Farming, forestry, and fishing	1,617	6.4%
<b>Total</b>	<b>25,198</b>	<b>100%</b>

Source: Mendocino County 2020.

The County's total employment rate is expected to grow at an average annual rate of 4.0 percent between 2018 and 2023, with the number of jobs in the agricultural industry growing the fastest. Agricultural industry-related jobs are expected to increase by 21.4 percent, from approximately 1,400 in 2018 to 1,700 in 2023. The Mendocino County Housing Element, adopted in 2020, indicates that between 2020 and 2030, total employment in Mendocino County is expected to grow by 5.9 percent, from 34,510 jobs to 36,160 jobs. The unemployment rate for the unincorporated County was higher toward the beginning of 2010 and has gradually decreased since then. In 2010, the annual average unemployment rate for the unincorporated County was 11.6 percent. By 2015, the rate had decreased by half (5.8 percent), and it was down to 4.5 percent as of 2017. As of January 2019, the unemployment rate for the unincorporated County was 5.3 percent (Mendocino County 2020). According to the California Employment Development Department, as of November 2023, Mendocino County has a labor force of 36,420, and the number of employed residents is 34,690, corresponding to an unemployment rate of approximately 4.8 percent (EDD 2023).

## HOUSING UNITS AND VACANCY

According to the Mendocino County 2020 General Plan Housing Element, between 2010 and 2019, the total number of households in the unincorporated County increased from 23,818 to 24,022, an increase of less than 1.0 percent. In contrast, the number of households in Mendocino County as a whole grew from 34,945 to 35,361, a 1.2-percent increase. In both 2010 and 2019, the average household size was 2.45 persons in the unincorporated County and 2.46 persons for Mendocino County as a whole. Household characteristics are important factors when analyzing housing demand, supply, and future needs. Household size, age, and composition affect the type of housing needed in a particular region. Farmworkers are a special needs population with several interrelated challenges. Mendocino County Department of Planning and Building Services has taken several steps to facilitate farmworker housing. The County conforms to state law by allowing farmworker housing for 5 to 12 farm employees and their families by right in all zoning districts where agriculture is a permitted use. Since farmworkers typically have low incomes, they are often at a disadvantage in the housing market. In addition, seasonal farmworkers often have different needs compared to those that live in the county year-round. Housing opportunities for seasonal farmworkers may include bunkhouses and other congregate living facilities as well as affordable multi-family or single-family rental units, and year-round farmworkers typically need affordable rental or ownership housing. The Mendocino County 2020 General Plan Housing Element states that in 2019, Mendocino County had 40,470 housing units, of which 28,589 housing units (70.6 percent) were located in the unincorporated County (Mendocino County 2020).

Table 3.13-3 shows the number of housing units in 2008, 2013, and 2019 in Mendocino County. The County as a whole had 39,563 units in 2008, which increased by 8 percent by 2013 and another 0.6 percent by 2019. During the same period, the number of housing units in the unincorporated County also grew—by 10 percent from 2008 to 2013 and by less than 1 percent from 2013 to 2019 (Mendocino County 2020).

**Table 3.13-3 Number of Housing Units in Mendocino County, 2008, 2013, and 2019**

Area	2008	2013	2019	Percent Change from 2008 to 2013	Percent Change from 2013 to 2019
Mendocino County	39,563	40,529	40,760	+8.0%	+0.6%
Unincorporated County	27,725	28,556	28,589	+10.0%	+0.1%

Source: Mendocino County 2020.

As shown in Table 3.13-3, there has been little growth in the County's housing supply between 2008 and 2019. The total number of housing units in the unincorporated County increased by just 33 units, or 0.1 percent, from 2013 to 2019. In terms of housing type, the number of single-family housing units also increased by a net total of 33, also a 0.1-percent increase. Some multifamily housing units appear to have been lost, because there was an overall decrease of these housing units of 0.4 percent, all from duplexes, triplexes, and quadraplexes. The number of mobile homes in the unincorporated County increased slightly, by 0.2 percent (Mendocino County 2020).

Vacancy rates indicate the general availability of housing in a specific area, as well as the degree to which available housing supply is meeting current housing market demand. Lower vacancy rates indicate that homebuyers or renters may have difficulty finding affordable housing that meets their needs, and higher vacancy rates suggest a surplus of housing units. Lower vacancy rates may be concurrent with higher market rate rents and/or overcrowding. In 2016, the homeowner vacancy rate in Mendocino County was 0.8 percent, and the rental vacancy rate was 3.9 percent (Table 3.13-4), which was a decrease from 2010, when rates were 2.2 percent and 5.3 percent, respectively. The vacancy rates in Mendocino County are low, in particular for homeowners, indicating that the supply of housing for sale may be low (Mendocino County 2020).

**Table 3.13-4 Vacancy Rates in Mendocino County, 2010 and 2016**

Housing Tenure	2010	2016
Homeowner vacancy rate	2.2%	0.8%
Rental vacancy rate	5.3%	3.9%

Source: Mendocino County 2020.

According to the Mendocino County 2020 General Plan Housing Element, the 2018 Regional Housing Needs Plan prepared by the Mendocino County of Governments (MCOG) determined that 73.12 percent of the future housing need is expected to be in the unincorporated area. The unincorporated County's share of the regional housing need is 1,349 units, with a total of 2,414 units needed across incorporated cities and the unincorporated County. Table 3.13-5 displays the regional housing need by income category, excluding the incorporated cities of Fort Bragg, Point Arena, Ukiah, and Willits. The County is responsible for identifying that an adequate amount of land suitable for residential development is available to accommodate this need. However, the County is not responsible for the actual construction of these units. (Mendocino County 2020).

**Table 3.13-5 Regional Housing Needs Allocation, 2018-2027**

Income Category	Income Range	Housing Units
Very Low	0-50% MFI	291
Low	51-80% MFI	179
Moderate	81-120% MFI	177
Above Moderate	120+% MFI	702
Total	0-120+% MFI	1,349

Source: Mendocino County 2020.

### 3.13.3 Environmental Impacts and Mitigation Measures

#### METHODOLOGY

The analysis of potential impacts on population and housing resulting from project implementation is based on review of cited data sources, including the Mendocino County 2020 General Plan Housing Element and the MCCR. The analysis focuses on the potential for implementation of the project to result in population and housing impacts in the unincorporated County. The project does not apply to tribal lands or public lands managed by US Forest Service, the California Department of Parks and Recreation, the US Bureau of Land Management, or the California Department of Fish and Wildlife.

#### THRESHOLDS OF SIGNIFICANCE

A population, employment, and housing impact would be significant if implementation of the project would:

- ▶ Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure) or
- ▶ Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

#### ISSUES NOT DISCUSSED FURTHER

##### Displace Substantial Numbers of Existing People or Housing, Necessitating the Construction of Replacement Housing Elsewhere

The project would not include demolition of any housing or any actions that would change zoning or allowable uses and result in a decrease in the housing supply. As described in Chapter 2, "Project Description," the project consists of commercial cannabis cultivation licensing conducted by the DCC under the Medicinal and Adult-Use Cannabis Regulation and Safety Act, which includes the transitioning of existing provisionally licensed commercial cannabis cultivation sites to annual licensure, consideration of expansion of existing provisionally licensed commercial cannabis cultivation sites, and the consideration of future requests for new commercial cannabis cultivation and associated processing and/or distribution transport-only operations. The issuance of licenses would not require the elimination of housing, nor would it prohibit the construction of future housing identified in the Mendocino County General Plan.

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.13-1: Induce Substantial Unplanned Population Growth in an Area, Either Directly (by Proposing New Homes or Businesses) or Indirectly (through Extension of New Roads or Other Infrastructure)

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Existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would not induce any changes in the operation of the existing businesses, and the conversion would not result in any substantial unplanned population growth. Potential new licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations could include new housing units and new job opportunities, but the potential increase in dwelling units would be consistent with allowed land uses under the Mendocino County General Plan and associated zoning. It is expected that new commercial cannabis cultivation jobs could be filled by employment resources in the County and region and would not trigger the need for substantial housing development beyond what is planned under the Mendocino County General Plan. This impact would be **less than significant**.

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As described in Section 3.13.2, “Environmental Setting,” the County is anticipated to continue to have low population growth with a 1.1 percent growth rate projected between 2024 and 2050 (California Department of Finance 2022).

### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual licensure would not result in new impacts to population growth or employment as operations are not anticipated to be altered through the annual licensing process. MCCR section 10A.17.070(E) would require legal parcels with a cultivation site to have a dwelling unit, however, it does not apply to several zoning districts such as U-R, A-G, R-L, F-L, TPZ, 1-1, 1-2, and P-1 zoning districts. Additionally, MCCR section 20.242.070(C)(6) would allow dwelling units to be exempt from requirements in R-R:L-10 zoning districts upon issuance of an administrative permit. While MCCR section 10A.17.080(B)(2) would allow commercial cannabis cultivation sites to be located within R-1, R-2, R-3, S-R, R-C, R-R:L-1, R-R:L-2, and R-R:L-5 zoning districts, they may only be issued a Type C, Type C-A, or Type C-B CCBL license given that there is an already existing dwelling unit that is a principally permitted use and the site is located on a legal parcel. Existing provisionally licensed sites would be required to continue to comply with MCCR section 10A.17.070(E), section 20.242.070(C)(6), and section 10A.17.080(B)(2) and state licensing requirements. Existing provisionally licensed commercial cannabis cultivation sites would not result in substantial unplanned population growth, as they already exist within the County. Therefore, there would be no impact from existing provisionally licensed sites because they would retain the extent of their existing licensed commercial cannabis cultivation.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation operations would still be required to comply with the County’s Zoning Code, MCCR section 10A.17.070(E), section 20.242.070(C)(6), and section 10A.17.080(B)(2), as well as applicable state licensing

requirements which would require cultivation sites to comply with zoning district requirements regarding dwelling units. For these reasons, this impact would be less than significant.

### Future Licensed Sites

As identified in Chapter 3, “Environmental Impacts and Mitigation Measures”, Table 3.0-1, future licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only are estimated to potentially generate approximately 1,863 employees over the next 20 years. Specifically, outdoor sites are expected to generate approximately 509 employees, mixed-light sites are expected to generate approximately 844 employees, indoor sites are expected to generate approximately 30 employees, and nurse sites are expected to generate approximately 480 employees. This generation of employees would be a 5-percent increase in current (2023) County employment conditions. Many of the experienced commercial cannabis cultivation employees, including those participating in commercial cannabis cultivation, harvest, processing, or distribution transport-only activities, are already present within the County and adjoining counties as evidenced by the level of commercial cannabis cultivation and noncultivation uses in these counties (e.g., Humboldt County had 1,838 applications for existing commercial cannabis cultivation sites in 2017 (Humboldt County 2017) and Trinity County had 198 licensed commercial cannabis cultivation sites in 2020 (Trinity County 2020)). The Mendocino County General Plan, specifically the Housing Element, anticipates a total countywide population of approximately 92,655 citizens by 2030. Currently the County is projected to have a total population of approximately 88,782 by 2023, and is projected to have a total population of approximately 89,697 citizens by 2050. While the County is projected to have a lower population count than anticipated in the Housing Element, the anticipated 1,903 employees to be generated as a result of future commercial cannabis cultivation sites would continue to allow the County’s population growth to fall within the projected population growth analyzed in the Housing Element. Additionally, the 1,903 expected employees does not exclude those currently living within the County.

MCCR section 10A.17.070(E) would require legal parcels with a cultivation site to have a dwelling unit, however, it does not apply to several zoning districts such as U-R, A-G, R-L, F-L, TPZ, 1-1, 1-2, and P-1 zoning districts. Additionally, MCCR section 20.242.070(C)(6) would allow dwelling units to be exempt from requirements in R-R:L-10 zoning districts upon issuance of an administrative permit. While MCCR section 10A.17.080(B)(2) would allow commercial cannabis cultivation sites to be located within R-1, R-2, R-3, S-R, R-C, R-R:L-1, R-R:L-2, and R-R:L-5 zoning districts, they may only be issued a Type C, Type C-A, or Type C-B CCBL license given that there is an already existing dwelling unit that is a principally permitted use and the site is located on a legal parcel. Future commercial cannabis cultivation sites may result in additional dwelling units to be constructed, as per compliance with MCCR section 10A.17.070(E); however, the cultivation sites would still be required to comply with zoning district requirements and allowed land uses per the General Plan. The issuance of new licenses would also not require the elimination of housing, nor would it prohibit the construction of future housing identified in the Mendocino County General Plan. Thus, future new licensed commercial cannabis cultivation and associated processing or distribution transport-only sites are not expected to induce unplanned population growth. This impact would be less than significant.

### Summary

Continued operation of existing provisionally licensed, expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites are not expected to generate new population or employment growth as operations are not anticipated to be altered through

the annual licensing process. As noted above, employment generated by potential new licensed commercial cannabis cultivation sites would not result in a substantial increase in employment in the County that could not be accommodated primarily through the use of existing experienced commercial cannabis cultivation employees in the region. Thus, this impact would be **less than significant**.

#### Mitigation Measures

No mitigation is required for this impact.

## 3.14 PUBLIC SERVICES AND RECREATION

This section describes the applicable federal, state, and local regulations and policies related to public services and recreation; provides an overview of public services and recreational resources in unincorporated Mendocino County; and analyzes the potential impacts on public services and recreation from implementation of the project. Utility impacts are addressed in Section 3.16, “Utilities and Service Systems.” Wildfire impacts are addressed in Section 3.17, “Wildfire.”

Several public services or recreation–related comments were received in response to the notice of preparation (NOP). These comments expressed concerns related to fire risk related to indoor and outdoor cultivation, response times for public services, compliance with fire regulations, and decreased recreational opportunities in the County. The reader is referred to Section 3.17, “Wildfire,” for analysis of wildfire risks. All comments received in response to the NOP are presented in Appendix A of this EIR.

### 3.14.1 Regulatory Setting

#### FEDERAL

Several federal agencies have jurisdiction over law enforcement and fire protection related to unlicensed commercial cannabis cultivation operations on federal lands in California. Because cannabis use and cultivation remain illegal under federal law, several federal agencies investigate and prosecute cannabis use, cultivation, and distribution on federally managed lands. Federal agencies involved in law enforcement in California include the US Forest Service (USFS), whose Law Enforcement and Investigations division conducts law enforcement operations on federal lands, including eradication of unlicensed cannabis cultivation on national forest lands. Both the US Bureau of Land Management and the National Park Service law enforcement programs target cannabis cultivation on federally managed lands.

In addition to law enforcement on federal lands, there are federal agencies that investigate and prosecute cannabis business activities, which is currently illegal at the federal level. The Federal Bureau of Investigation, as the nation’s foremost law enforcement agency, also works in California to investigate federal crimes and crimes that occur across state lines, including drug trafficking. The US Drug Enforcement Administration enforces federal controlled substances laws and regulations, including enforcement activities related to cannabis.

#### STATE

##### Mitigation Fee Act

Government Code sections 66000–66025 (commonly referred to Assembly Bill (AB) 1600 requirements) allow local agencies to enact a development impact fee in connection with the approval of a development project, for the purpose of defraying all or a portion of the cost of public facilities related to the development project. A development impact fee must be reasonably related to the cost of service provided by the local agency and is not considered a tax or special assessment. Local agencies use development impact fees under this provision

for facilities and equipment necessary to provide services to development; such facilities and equipment may include vehicles or fire and law enforcement stations.

#### California Health and Safety Code

State fire regulations are set forth in section 13000 et seq. of the Health and Safety Code. The Health and Safety Code includes requirements related to fire protection and notification systems, fire protection devices, such as extinguishers and smoke alarms, and fire suppression training.

#### California Division of Occupational Safety and Health

In accordance with CCR, title 8, section 1270 (Fire Prevention) and CCR, title 8, section 6773 (Fire Protection and Fire Equipment), the California Division of Occupational Safety and Health (referred to as Cal/OSHA) has established minimum standards for fire suppression and emergency medical service (EMS). The standards include guidelines on the handling of highly combustible materials; fire hose sizing requirements; restrictions on the use of compressed air; access roads; and the testing, maintenance, and use of all firefighting and emergency medical equipment.

#### California Building Code

The California Building Code, Title 24 of the CCR, serves as the basis for the design and construction of buildings in California. The California Building Code (Title 24, Part 2) covers all aspects of building design and required safety features for all types of buildings, including fire protection systems, fire and smoke protection features, means of egress, and structural design and materials. Title 24, Part 3 is the Electrical Code, which contains standards for electrical systems, including safety features, such as overcurrent protection, surge arresters, and proper wiring methods. Title 24 applies to all new construction of both residential and nonresidential buildings and regulates energy consumed for heating, cooling, ventilation, water heating, and lighting.

#### California Fire Code

The California Fire Code is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. It establishes minimum requirements to safeguard the public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings. The California Fire Code also contains requirements related to emergency planning and preparedness, fire service features, building services and systems, fire resistance-rated construction, fire protection systems, and construction requirements for existing buildings, as well as specialized standards for specific types of facilities and materials. Structures used for indoor cultivation of commercial cannabis and commercial cannabis-supportive uses (e.g., manufacturing, distribution, processing, microbusinesses, and retail nurseries) would be subject to applicable sections of the California Fire Code.

CCR, title 24, section 701A.3 (New Buildings Located in Any Fire Hazard Severity Zone) requires that new buildings located in a Fire Hazard Severity Zone in the State Responsibility Area (SRA), the Local Responsibility Area (LRA), any local agency Very-High Fire Hazard Severity Zone (VHFHSZ), or any Wildland-Urban Interface Fire Area designated by the enforcing agency for which an application for a building permit is submitted shall comply with all the requirements of Chapter 7A. These requirements include the following conditions:



- ▶ Roofing must be designed to be fire-resistant and constructed to prevent the intrusion of flames and embers (CCR, title 24, section 705A).
- ▶ Attic ventilation must be designed to be resistant to the intrusion of flames and embers into the attic area of the structure (CCR, title 24, section 706A).
- ▶ Exterior walls (including vents, windows, and doors) must be designed with noncombustible or ignition-resistant material and to resist the intrusion of flame and embers (CCR, title 24, sections 707A and 708A).
- ▶ Decking must be designed with ignition-resistant material (CCR, title 24, section 709A).
- ▶ Ancillary buildings and structures must comply with the above provisions (CCR, title 24, section 710A).

### Board of Forestry and Fire Protection

The Board of Forestry and Fire Protection (Board) is a governor-appointed body in the California Department of Forestry and Fire Protection (CAL FIRE). It is responsible for developing the general forest policy of the state, determining the guidance policies of CAL FIRE, and representing the state's interest in federal forestland in California. Together, the Board and CAL FIRE work to carry out the California Legislature's mandate to protect and enhance the state's unique forest and wildland resources.

The Board is charged with developing policy to protect all wildland forest resources in California that are not under federal jurisdiction. These resources include major commercial and non-commercial stands of timber, areas reserved for parks and recreation, woodlands, brush-range watersheds, and all private and state lands that contribute to California's forest resource wealth. In addition, the Board is responsible for identifying VHFHSZs in the SRA and LRA, cities, urban regions, and agriculture lands where the local government is responsible for wildfire protection. Local agencies are required to designate, by ordinance, VHFHSZs and to require landowners to reduce fire hazards adjacent to occupied buildings within these zones (Government Code sections 51179 and 51182). The intent of identifying areas with very high fire hazards is to allow CAL FIRE and local agencies to develop and implement measures that would reduce the loss of life and property from uncontrolled wildfires (Government Code section 51176).

Public Resources Code (PRC) sections 4114 and 4130 authorize the Board to establish a fire plan, which, among other things, determines the levels of statewide fire protection services for SRA lands. CAL FIRE's most recently adopted fire plan is the 2019 Strategic Fire Plan; it is currently developing the 2024 Strategic Plan, building on the goals and objectives of the 2019 plan. The primary goals of the 2019 Strategic Fire Plan for California include both suppression efforts and fire prevention efforts (CAL FIRE 2019). Government Code section 65302.5 gives the Board the regulatory authority to evaluate General Plan safety elements for their land use policies in the SRA and VHFHSZs, as well as methods and strategies for wildland fire risk reduction and prevention in those areas.

### Public Resources Code Section 4291

CAL FIRE is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors (PRC sections 4201–4204 and Government Code sections 51175–51189). Factors that increase an area's susceptibility to fire hazards include slope, vegetation type and condition, and atmospheric conditions. CAL FIRE has identified two types of wildland fire risk areas: 1) wildland areas that may contain substantial forest fire risks and hazards, and 2) very high fire hazard risk zones.

PRC section 4291 gives CAL FIRE the authority to enforce 100 feet of defensible space around all buildings and structures on SRA lands. PRC sections 4790 through 4799.04 provide the regulatory authority for CAL FIRE to administer the California Forest Improvement Program. PRC sections 4113 and 4125 give CAL FIRE the responsibility for preventing and extinguishing wildland fires in the SRAs. The PRC also includes fire safety statutes that restrict the use of equipment that may produce a spark, flame, or fire; requires the use of spark arrestors on construction equipment with internal combustion engines; specifies requirements for the safe use of gasoline-powered tools in fire hazard areas; and specifies fire suppression equipment that must be provided for various types of work in fire-prone areas.

New development located in SRAs are subject to the following requirements:

- ▶ Determination that new subdivisions are consistent with regulations adopted by the State Board of Forestry and Fire Protection pursuant to PRC sections 4290 and 4291 or are consistent with local ordinances certified by the State Board of Forestry and Fire Protection as meeting or exceeding the state regulations (CCR, title 14, section 1266.01),
- ▶ Defensible space of 100 feet around all buildings and structures (PRC section 4291; CCR, title 14, section 1299.03),
- ▶ Provision of adequate emergency access and egress (PRC sections 4290, 4291; CCR, title 14, sections 1273.01–1273.09),
- ▶ Emergency water requirements (CCR, title 14, sections 1275.01–1275.04), and
- ▶ Building signage and number requirements (PRC sections 4290 4291; CCR, title 14, sections 1274.01–1274.04).

#### Public School Development Impact Fees

Government Code section 65995 establishes the dollar amount school districts may impose on new development; however, this may not be sufficient to fund all required facilities. Funding from state grants is possible, but other sources would most likely still be required. Sources include Proposition 51 (2016 Public School Facility Bonds) funds, increased developer and local tax fees, and the local general obligation bond funds. New public school facilities proposed by school districts must undergo site-specific CEQA and California Board of Education evaluation before construction to identify and lessen environment-related impacts.

Government Code sections 65995(h) and 65996(b) require full and complete school facilities mitigation. Section 65995(h) of the Government Code states that the payment or satisfaction of a fee, charge, or other requirement levied or imposed pursuant to section 17620 of the Education Code is deemed to be full and complete mitigation of the impacts for the planning, use, development, or provision of adequate school facilities. Section 65996(b) of the Government Code states that the provisions of the Government Code provide full and complete school facilities mitigation.

#### California Emergency Medical Services Authority

The Emergency Medical Services Authority provides statewide coordination and leadership for the planning, development, and implementation of local EMS systems. California has 33 local EMS systems, which provide EMS for California's 58 counties. Seven regional EMS systems and 26 single-county agencies provide the services. Regional systems are usually composed of small, more rural, less-populated counties, and single-county systems generally exist in the larger and more urban counties (EMSA 2023).

## Emergency Response/Evacuation Plans

The State of California passed legislation authorizing the Office of Emergency Services to prepare a Standard Emergency Management System (SEMS) program, which sets forth measures by which a jurisdiction should handle emergency disasters (Government Code section 8607 et seq.). Noncompliance with SEMS could result in the state withholding disaster relief from the noncomplying jurisdiction in the event of an emergency disaster. The preservation of life, property, and the environment is an inherent responsibility of local, state, and federal government.

## Department of Cannabis Control

CCR, title 4, Division 9 includes the following requirements regarding public services for commercial cannabis uses.

- ▶ CCR, title 4, section 15011: Additional Information
  - (a) A commercial cannabis business applying for a license to cultivate cannabis shall provide the following information:
    - (10) An attestation that the local fire department has been notified of the cultivation site if the application is for an indoor license type.
- ▶ CCR, title 4, section 15036: Notification of Theft, Loss, and Criminal Activity
  - (a) A licensee shall notify the Department and local law enforcement within 24 hours of discovery of any of the following situations:
    - (1) The licensee discovers a significant discrepancy, as defined in section 15034, in its inventory.
    - (2) The licensee discovers diversion, theft, loss, or any other criminal activity pertaining to the operations of the licensee.
    - (3) The licensee discovers diversion, theft, loss, or any other criminal activity by an agent or employee of the licensee pertaining to the operations of the licensee.
    - (4) The licensee discovers loss or unauthorized alteration of records related to cannabis or cannabis products, customers, or the licensee's employees or agents.
    - (5) The licensee discovers any other breach of security.
  - (b) The notification to the Department pursuant to subsection (a) shall be submitted on the Licensee Notification and Request Form, Notifications and Requests Regarding Regulatory Compliance, DCC-LIC-028 (New 2/22), which is incorporated herein by reference, and shall include the date and time of occurrence of the theft, loss, or criminal activity, the name of the local law enforcement agency that was notified, and a description of the incident including, where applicable, the item(s) that were taken or lost.
- ▶ CCR, title 4, section 15042: Premise Access Requirements
  - (a) For a premises that is not open to the public, the licensee shall establish and implement an identification and sign-in/sign-out procedure for all persons accessing the premises, including authorized individuals, suppliers, and visitors.
  - (b) Licensees shall ensure that only employees of the licensee and other authorized individuals access the licensed premises.

- (c) For the purpose of this section, “authorized individuals” include outside vendors, contractors, or other individuals conducting business that requires access to the licensed premises.
- (d) An individual who enters the licensed premises and is not employed by the licensee shall be escorted by an employee of the licensee at all times while within the licensed premises.
- (e) A licensee shall maintain a record of all authorized individuals who are not employees of the licensee who enter the licensed premises. The record shall include the name of the individual, the company the individual works for, the reason the individual entered the licensed premises, the date, and the times the individual entered and exited the licensed premises. These records shall be made available to the Department immediately upon request.
- (f) A licensee shall not receive consideration or compensation for permitting an individual to enter the licensed premises.

## LOCAL

### Mendocino County General Plan

The following policies related to public services and recreation from the Mendocino County General Plan Development Element are applicable to the project (Mendocino County 2021a):

- ▶ **Policy DE-140:** Maximize the safety of transportation corridors for Mendocino County’s isolated populations/populations with limited egress through safety improvements and fuel reduction activities.
- ▶ **Policy DE-141:** Require all new development, redevelopment, or major renovation applying for discretionary approval to comply with Cal Fire requirements regarding ingress/egress issues to facilitate effective evacuation.
- ▶ **Policy DE-188:** Where possible, adequate rights-of-way shall be reserved to develop facilities for nonmotorized uses along new and extended roadways. Rights-of-way shall be reserved for hiking, biking, and pedestrian paths identified in adopted plans.
- ▶ **Policy DE-225:** The County shall encourage emergency preparedness among visitors.
- ▶ **Policy DE-226:** The General Plan Land Use and zoning maps shall limit development potential within Very High Fire Hazard Severity Zones (VHFHSZ), limiting or avoiding new development in these areas.
- ▶ **Policy DE-227:** Development, densities, intensities, and type shall be consistent with the state wildfire hazard rating system and Fire Safe Regulations (addressing weather, fuel and slope, access, water, and other factors).
- ▶ **Policy DE-228:** The County shall deny development proposals that present substantial fire hazard risk to residents and safety providers responding to a wildland fire.
- ▶ **Policy DE-229:** Development shall be located, designed, and managed to reduce fire risk to life, property, and natural resources, and incorporate adequate fire protection consistent with the General Plan and adopted regulations.
- ▶ **Policy DE-231:** Development shall facilitate and integrate the ability for fire protection agencies to access and maintain fuel and firebreaks, water supplies, and public and private emergency access routes.

- ▶ **Policy DE-232:** New development in the High and Very High Wildfire Hazard Severity Zones and wildland urban/rural interfaces shall incorporate the following:
  - Fuel breaks or greenbelts coordinated with water supplies and access, providing maximum circulation consistent with topography.
  - Adequate and accessible defensible space that does not rely on publicly owned lands or open space designations of homeowner associations.
  - At least two ingress-egress routes to a public roadway, unless alternative routes accessible to fire equipment are provided.
  - Access to publicly maintained evacuation routes at regular intervals.
  - Access routes sufficient to accommodate evacuating vehicles, fire equipment, and vegetation management zones.
  - Primary traffic lanes to all building sites with turnarounds to accommodate fire equipment.
  - Water supplies within a short distance of fire equipment access. Fire flows with adequate duration.
  - Develop fire-safe plans for communities to assist in qualifying for grants.
- ▶ **Policy DE-235:** Developments shall be approved only if sufficient firefighting resources, such as fire stations, equipment, personnel, hydrants, and water supplies, will be available to serve all phases of development and include ongoing operations and maintenance.
- ▶ **Policy DE-237:** Areas within the SRA and Fire Hazard Severity Zones shall be evaluated to determine the appropriate type, density, and locations of new development or reconstruction, and ensure adequate circulation, infrastructure, and services are available consistent with the latest Fire Safe Regulations.
- ▶ **Policy DE-238:** New development not located in a fire protection district should mitigate impacts on first responders to emergency calls and should be required to contribute its fair share cost of providing emergency services.
- ▶ **Policy DE-241:** The County shall work with local communities and property owners to engage in and facilitate the removal of highly invasive flammable weeds (gorse, French broom, eucalyptus, etc.)
- ▶ **Policy DE-249:** Increase compliance with regulations intended to protect public, community and environmental health and safety. Measures include:
  - Working with law enforcement agencies to improve coordination during the land use and development process.
  - Working with affected agencies and interests to find cost effective solutions to significant compliance issues.
  - Educating employers and the public, including conducting school programs, about the benefits of regulations intended to protect public, community and environmental health and safety.
  - Establish and maintain adequate code enforcement staffing for an effective compliance program.

### Mendocino County Fire Safe Council

The Mendocino County Fire Safe Council, founded in 2003, is a coalition of individuals, businesses, and public and private agencies who share the goal of preventing loss of life, destruction of property, and damage to the environment caused by wildfire within the County. Each neighborhood fire safe group/council identifies and prioritizes areas for hazardous fuel reduction treatments and has identified the types and methods of treatments and programs that will help protect the community and its essential infrastructure. Each plan contains recommended measures that homeowners and the community can take to reduce the ignitability of structures within the corresponding neighborhood group/council area. The formal goals of the Mendocino County Fire Safe Council are as follows:

- ▶ Work to minimize losses to values at stake, which include but are not limited to human lives, homes, animals, and natural resources.
- ▶ Educate residents, agencies, and other stakeholders about the nature and impacts of wildfire, fire prevention strategies, and effective preparedness in the event that wildfire occurs.
- ▶ Secure and utilize funding to assist residents in education, outreach, community projects, and other activities that further the mission and objectives of the Mendocino County Fire Safe Council.
- ▶ Encourage road associations, homeowner groups, subdivisions, towns, and other community groups to create their own neighborhood fire safe councils.
- ▶ Act as an advocate for the people of Mendocino County in the area of fire prevention.

The Mendocino County Fire Safe Council developed a Community Wildfire Protection Plan, as described below. The plan is a blend of the CAL FIRE Mendocino Unit Wildfire Management Plan with further information gained and processed as needed to meet the requirements of a Community Wildfire Protection Plan.

### Mendocino County Community Wildfire Protection Plan

The Mendocino County Fire Safe Council assisted with the development of the first comprehensive Mendocino County Community Wildfire Protection Plan (MCCWPP) in 2005 and its update and revision in 2015. The MCCWPP identifies and prioritizes areas for hazardous fuel reduction treatments and recommends the types of methods of treatment that will protect Mendocino County. It also recommends measures to reduce the ignitability of structures throughout the area addressed by the MCCWPP. The creation of the MCCWPP was primarily a cooperative effort of the Mendocino County Fire Safe Council and CAL FIRE's Mendocino Unit, with input from local government fire departments and engaged citizens (MCFSC 2023).

### Mendocino County Multi-Jurisdictional Hazard Mitigation Plan

The County Multi-Jurisdictional Hazard Mitigation Plan (adopted in 2021) analyzes the nature, history, location, extent, and probability of future events for identified hazards throughout Mendocino County. Hazards include dam failure, earthquake, flood, a hazardous materials event, landslide, tsunami, urban conflagration, and wildland fire. The plan also provides a blueprint for reducing potential hazards by developing a list of mitigation goals and potential actions to address the risks facing Mendocino County. Mitigation actions include preventive actions, property protection techniques, natural resource protection strategies, structural projects, emergency services, evacuation provisions that include maintenance and vegetation

clearance of evacuation routes, and public information and awareness activities (Mendocino County 2021b).

#### Ukiah Valley Area Plan

The Ukiah Valley Area Plan (UVAP) is a comprehensive and long-range interjurisdictional planning document that represents the vision of the people who live and work in the Ukiah Valley. The UVAP is an element of the Mendocino County General Plan governing land use and development on the unincorporated lands in the Ukiah Valley. The following policies related to public services and recreation from the UVAP are applicable to the project (Mendocino County 2011).

- ▶ **Policy HS1.3:** Maintain land use and building regulations that promote fire safety.
- ▶ **Policy HS1.3b: Fire Hazard Areas.** Do not approve subdivision of existing parcels in areas designated by CAL FIRE as having “high” or “very high” fire hazard rating unless the responsible fire protection agency determines in writing that adequate access, evacuation routes, emergency response, and fire-flow are available, and that the project complies with the most current State requirements for development in wildlands.
- ▶ **Policy HS1.3c: Wildfire Protection Plan.** Implement the recommendations of the Wildfire Protection Plan when approving new development. Support the proposed signage and address project included in that plan and support maintenance of improvements constructed as part of the Westside Vegetation Management Plan.

#### Brooktrails Township Specific Plan

The following policies related to public services and recreation from the Brooktrails Township Specific Plan are applicable to the project (Mendocino County 2002).

- ▶ **Policy FS-7.2-1A:** Establish brush reduction and fire abatement programs consistent with the existing ecosystem and accepted forestry management practices.
- ▶ **Policy FS-7.2-1B:** Evaluate whether on-going development affords suitable fire protection. Consider weather, fuel, and slope in determining the level of fire risk.

#### Mendocino County Code of Ordinances - Mendocino County Cannabis Regulation

The Mendocino County Cannabis Regulation (MCCR) contains the following requirements related to fire protection:

##### Section 10A.17.040: General Limitations on Cultivation of Cannabis

The following limitations shall apply to all cultivation of cannabis in Mendocino County, including but not limited to cultivation pursuant to a Cannabis Cultivation Business License (CCBL) issued under this Chapter or an exemption provided for in Section 10A.17.030. Cultivation of cannabis shall also be subject to all applicable restrictions of Mendocino County Code Chapter 20.242:

- (A) The cultivation of cannabis in Mendocino County, in any amount or quantity by any entity, shall not be allowed in the following areas:
  - (1) Within one thousand (1,000) feet of a youth-oriented facility, a school, or a park as defined herein that is in existence at the time a CCBL is initially applied for.

### Section 10A.17.070: Requirements for All CCBL's

Unless specifically exempted, in addition to compliance with all other requirements of this Chapter, all CCBL Holder's shall comply with the requirements of this Section.

- (N) Maintain the applicable "Defensible Space" protocols and distances, as established by the California Department of Forestry and Fire Protection around structures located on the legal parcel.

### Section 10A.17.090: CCBL Application and Zoning Review

Any person or entity that wishes to engage in the cultivation of cannabis shall submit an application for a CCBL to the Department. Applications for CCBL's shall be made upon such forms and accompanied by such plans and documents as may be prescribed by the Department. The application shall be reviewed by the Department and other agencies as described herein and renewed annually. Any referral to or consultation with an agency other than the County of Mendocino shall state that a response must be returned within thirty (30) days of the date of the referral.

Following the submission of an application for a Phase One CCBL, an applicant may file with the Department, on a form prescribed by the Department, a Notice of Application Stay for the purpose of preventing the denial of an application for a Phase One CCBL based on inactivity by the applicant for up to a one (1) year period. An applicant may only file a Notice of Application Stay one (1) time. Nothing in this paragraph is intended to prevent the county or the applicant the ability to continue processing or perfecting the application. During the time period of this Application Stay, the applicant shall be prohibited from cultivating cannabis in excess of the limitations of paragraph (B) or (C) of section 10A.17.030 and shall allow the county to make and shall pay the reasonable costs for an inspection of the applicant's cultivation site (and origin site if the application involves a relocation) to confirm compliance with this paragraph; violation of this prohibition shall be a violation of County Code, subject to administrative penalties, and shall be cause for immediate denial of the permit application. Any denial of an application may be followed by nuisance abatement procedures. During the time period of the Application Stay, the applicant shall remain subject to all code enforcement provisions as identified in section 10A.17.100.

The Department shall refer each application to the Department of Planning and Building Services for a determination pursuant to Chapter 20.242 as to what type of clearance or permit is required. No application for a CCBL shall be approved without clearance or final permit approval as required by Section 10A.17.090.

- (E) A cultivation and operations plan which includes elements that meet or exceed the minimum legal standards for the following: water storage, conservation and use; drainage, runoff and erosion control; watershed and habitat protection; and proper storage of fertilizers, pesticides and other regulated products to be used on the legal parcel. The plan will also provide a description of cultivation activities including, but not limited to, permit type, cultivation area, soil/media importation and management, the approximate date(s) of all cannabis cultivation activities that have been conducted on the legal parcel prior to the effective date of this ordinance, and schedule of activities during each month of the growing and harvesting season. The cultivation and operations plan shall also include the following:

- (6) A statement describing the proposed security measures for the facility that shall be sufficient to ensure the safety of members and employees and protect the premises from theft.



## 3.14.2 Environmental Setting

### FIRE PROTECTION

Mendocino County is served by a total of 22 local fire service agencies and city fire departments, as well as CAL FIRE and the USFS, all of which are part of mutual-aid agreements to assist each other in handling fire and other emergency calls. Fire protection in Mendocino County is provided by local fire service agencies, the Cities of Ukiah and Fort Bragg, CAL FIRE, and USFS. Most of the unincorporated County is located in SRAs (Mendocino County 2021a). An SRA is an area of the state where CAL FIRE has the primary financial responsibility for the prevention and suppression of wildland fires. AB X1 29 required the State Board of Forestry and Fire Protection to establish a regulatory program to impose a fire prevention fee for each structure on a parcel within an SRA.

Local fire service agencies have mutual-aid agreements to assist each other in handling fire and other emergency calls. The County of Mendocino Office of Emergency Services coordinates emergency response in Mendocino County through the Fire and Rescue Mutual Aid Coordinator. The state is divided into six mutual-aid regions, which helps facilitate the coordination of mutual aid. The Fire and Rescue Mutual Aid Coordinator functions within the California Fire Service and Rescue Emergency Mutual Aid System, which informs the Governor's Office of Emergency Services of conditions in each geographic and organizational area of the state, and the occurrence or imminent threat of disaster. Several private companies provide air ambulance services, vital to many of the County's remote areas. To address fire response and risk reduction, the County relies on the CAL FIRE Mendocino Unit Strategic Fire Plan, the MCCWPP, and the 2020 Mendocino County Multi-Hazard Mitigation Plan. These plans provide additional resources on current and future initiatives to be undertaken by the County to alleviate wildfire risks (Mendocino County 2021a).

Most of the first responders for local fire service agencies—excluding the Ukiah Valley Fire Authority, CAL FIRE, and USFS—are volunteers, with relatively few paid staff. Volunteer firefighters staff most local fire stations. With only limited funding through property taxes and/or local assessments, local fire suppression operations in Mendocino County require continual fundraising. The following additional general problems faced by the County's community fire districts were identified by the Mendocino County Fire Chief's Association Prevention Officers Committee in 2002:

- ▶ Service providers are not always able or available to provide high-quality, timely transport of the sick and injured, including indigent care. Several ambulance services have reduced services, gone out of business, or face the possibility of one or the other soon.
- ▶ County fire and emergency service agencies, along with the County itself, have endured financial difficulties in providing the funding necessary to maintain the joint dispatch system.
- ▶ Fire protection districts serve large areas of the County outside their boundaries, without financial compensation.

The CAL FIRE Mendocino Unit consists of 2,361,560 acres, and CAL FIRE provides direct protection for 2,244,450 acres, 28,145 of which are in southern Trinity County. With the exception of the four incorporated cities of Ukiah, Fort Bragg, Willits, and Point Arena, and small areas of Local Responsibility Area lands in Mendocino County, CAL FIRE maintains statutory responsibility for all wildland fires. The CAL FIRE Mendocino Unit is geographically divided into six battalions. Suppression resources during fire season include 128 career

personnel and another 100 seasonal personnel countywide, spread over 7 days, on duty around the clock, staffing 10 fire stations, 16 engines, four bulldozers, and other equipment throughout the County (Mendocino County Fire Safe Council 2023).

## LAW ENFORCEMENT

The Mendocino County Sheriff's Office is responsible for providing law enforcement services to the County's unincorporated areas. The Mendocino County Sheriff's Office also provides contract law enforcement services to the City of Point Arena, the US Bureau of Land Management (Cow Mountain Recreation Area), US Army Corps of Engineers (Lake Mendocino), and City of Fort Bragg. The main sheriff's station, including dispatch and detention facilities, is located at the Mendocino County Administration Center complex in the City of Ukiah. Substations are located in the Cities of Willits and Fort Bragg. The Cities of Ukiah, Fort Bragg, and Willits have their own police departments (Mendocino County 2021a).

The California Highway Patrol (CHP) is responsible for traffic enforcement services on state highways and County roads. A CHP office is located in Ukiah. Police protection services in the County are provided by the County Sheriff's Department and the CHP. The primary responsibility of the CHP is to provide traffic safety, and the primary responsibility of the Sheriff's Department is to protect persons and property (Mendocino County 2021a).

## SCHOOLS

Mendocino County is serviced by several school districts with a total of 64 public, charter, and private schools, composed of elementary, middle, and high schools (Mendocino County Office of Education 2023). School districts include Anderson Valley Unified in Boonville, Arena Union Elementary in Point Arena, Fort Bragg Unified in Fort Bragg, Laytonville Unified in Laytonville, Leggett Valley Unified in Leggett, Manchester Union Elementary in Manchester, Mendocino Unified in Mendocino, Point Arena Joint Union High School in Point Arena, Potter Valley Community Unified in Potter Valley, Round Valley Unified in Covelo, Ukiah Unified in Ukiah, and Willits Unified in Willits.

The College of the Redwoods Community College District was founded in Humboldt County. Later, coastal Mendocino County and Del Norte County joined to form the current district. The College of the Redwoods District has three campuses, one of which is in Fort Bragg. The Mendocino-Lake Community College District serves inland Mendocino County and Lake County. The main campus, Mendocino College, is in the Ukiah Valley north of Ukiah, with satellite campuses in Willits and Lakeport. A portion of the County is also in the Santa Rosa Junior College District (Mendocino County 2021a).

## LIBRARIES

The library system in Mendocino County provides library services countywide. The Ukiah Branch, Fort Bragg Branch, Willits Branch, Coast Community Branch in Point Arena, Round Valley Branch in Covelo, and Laytonville Branch offer various library services throughout the week. The seven branch libraries, along with the Bookmobile (a mobile library branch that makes stops throughout the County), are funded by property taxes, state funds, library fines and fees, and donations (Mendocino Library 2023).

## SOCIAL SERVICES

The County provides a variety of general government service functions (e.g., food and nutrition, health coverage, job services, veterans services, and in-home support services) that improve quality of life for County residents. These services include health, elections, education, child support, and administration of County operations (Mendocino County 2023a).

## RECREATION

The unincorporated portion of the County includes numerous federal, state, and County parks. The Mendocino County parks system, which includes seven parks and two public access areas, is operated and maintained by the Facilities and Fleet Division of the Mendocino County General Services Agency. The three state parks and four state recreation areas in the County are operated and maintained by the California Department of Parks and Recreation. The largest recreational areas in the County are Mendocino National Forest, managed by USFS, and Cow Mountain Recreation Area, managed by the US Bureau of Land Management (Mendocino County 2023b). An overview of Mendocino County parks, with details on the park's location, size in acres, and facilities, follows:

- ▶ **Bower Park**, located northeast of Gualala, spans 50 acres and features amenities such as a group picnic area, ball field, play area, nature trail, fitness course, tennis and basketball courts, multipurpose community services room, and an outdoor theater.
- ▶ **Faulkner Park**, located west of Boonville, covers 40 acres and offers trails, picnic areas, and play areas.
- ▶ **Indian Creek Park**, located southeast of Philo, encompasses 10 acres and provides overnight camping facilities and a nature trail.
- ▶ **Low Gap Regional Park**, in Ukiah, with 80 acres, includes a range of facilities, including covered picnic areas, tennis courts, playgrounds, softball field, horseshoe pits, fitness course, volleyball and basketball courts, archery range, disc golf course, nature/hiking trails, and an amphitheater.
- ▶ **McKee Parkway**, in Potter Valley has a portage trail and Russian River access.
- ▶ **Mill Creek Park**, east of Ukiah, covers 400 acres and includes picnic areas, a volleyball court, nature trails, barbeque, and horseshoe pits.
- ▶ **Redwood Valley Lions Club Park** spans 3 acres and offers a basketball court, volleyball court, softball field, picnic area, barbeque pit, and playground (Mendocino County 2023b).

### 3.14.3 Environmental Impacts and Mitigation Measures

#### METHODOLOGY

The evaluation of potential public service and recreation impacts is based on a review of documents and regulatory standards. Impacts on public services and recreation that would result from implementing the project were identified by comparing existing service capacity and facilities against future demand associated with project implementation. The reader is also referred to the impact analysis provided in Section 3.17, "Wildfire."

## THRESHOLDS OF SIGNIFICANCE

A public services and recreation impact would be significant if implementation of the project would:

- ▶ result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:
  - Fire,
  - Police protection,
  - Schools,
  - Parks, and
  - Other public facilities;
- ▶ increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or
- ▶ include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

## ISSUES NOT DISCUSSED FURTHER

### School, Library, and Other Public Services

The project involves the transition of provisional commercial cannabis cultivation licenses to annual licensure, as well as the issuance of new annual commercial cannabis licenses by the DCC. Because the MCCR requires a legal dwelling unit to be located on sites within the Rural Residential (5 acres) (RR5) zoning district, it is possible that the issuance of new/future commercial cannabis cultivation licenses may result in additional housing and, therefore, population increases. Furthermore, new commercial cannabis cultivation operations could result in increased job opportunities, thus resulting in increased County population. As discussed in Section 3.13, "Population, Employment, and Housing," the development potentially resulting from implementation of the project would not substantially induce population growth in the unincorporated County, such that additional or increased housing beyond existing housing/growth projections would be required. Furthermore, it is anticipated that newly created jobs could be filled by existing County residents, including the unemployed labor force, as well as those commuting from neighboring counties. For these reasons, implementing the project is not anticipated to result in a substantial increase in County population levels.

Because anticipated growth would not exceed existing housing/growth projections identified for the County (refer to Section 3.13, "Population, Employment, and Housing"), implementation of the project is not expected to result in an increased demand for schools, libraries, or other public facilities (e.g., general governmental services such as administration and public health) such that would trigger new or expanded facilities that could create physical environmental impacts. Thus, issues pertaining to impacts on these public services related to population growth are not discussed further.

## Parks and Recreation

The parks in Mendocino County are managed by federal, state, and local authorities. Implementation of the commercial cannabis cultivation licenses is not expected to result in a direct loss of park and recreational facilities as MCCR section 10A.17040(A)(1) prohibits commercial cannabis cultivation from occurring within 1,000 feet of a youth-oriented facility, a school, or a park. Commercial cannabis cultivation sites are agricultural in nature and would not trigger the need for new or modified park facilities. Therefore, no impact on parks and recreation is expected to occur.

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Impact 3.14-1: Result in Substantial Adverse Physical Impacts Associated with the Need for New or Physically Altered Fire Protection Facilities

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Potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could increase the demand for fire protection services. All existing and future licensed sites would be required to comply with state and local regulations (including the MCCR and fire code regulations). This impact would be **less than significant**.

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As described above in Section 3.14.2 “Environmental Setting,” and Section 3.17, “Wildfire,” the majority of the County is forested, has a high wildfire risk, and has experienced multiple fires over the past 10 years. The construction and operation of commercial cannabis cultivation sites under the project would introduce new ignition sources that could increase wildfire hazards associated with electrical sources, storage of flammable materials, and related operation activities. This could increase service demands on local fire protection agencies and CAL FIRE.

#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual licensure would not create new or additional fire hazards as existing structures, and operations are not anticipated to be altered through the annual licensing process. Existing provisionally licensed sites are required to continue to comply with regulations and standards outlined in PRC sections 4290 and 4291, local fire protection agency requirements, and the California Fire Code and its implementing regulations (CCR, Title 24, section 701A.3). Adherence to these requirements would ensure implementation of on-site fire protection measures that minimize exacerbation of existing fire hazards. Furthermore, it would avoid the requirement for expanded fire protection services, such as the construction of new fire stations. As a result, this impact would be less than significant.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation operations features would be subject to compliance with PRC sections 4290 and 4291, and CCR, title 24, section 701A.3 (additional building standards for new building construction located in any Fire Hazard Severity Zone within SRAs, any local agency Very-High Fire Hazard Severity Zone, or any Wildland-Urban Interface Fire Area), local fire protection agency requirements, and California Fire Code to minimize hazards of fire. Additionally, new licensed cultivation sites would be required to

comply with sections 10A.17.070(N), 10A.17.070(V), and 10A.17.090(E)(3) of the MCCR to reduce wildfire exposure risks by ensuring proper storage of potential fuel and ignition sources and by ensuring proper defensible space protocols and distances are maintained. The County Multi-Jurisdictional Hazard Mitigation Plan also includes provisions for the maintenance and vegetation of evacuation routes. For these reasons, this impact would be less than significant.

#### Future Licensed Sites

New licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would be required to comply with PRC sections 4290 and 4291, and CCR, title 24, section 701A.3 (additional building standards for new building construction located in any Fire Hazard Severity Zone within SRAs, any local agency Very-High Fire Hazard Severity Zone, or any Wildland-Urban Interface Fire Area), local fire protection agency requirements, and California Fire Code to minimize hazards of fire. Additionally, new licensed cultivation sites would be required to comply with sections 10A.17.070(N), 10A.17.070(V), and 10A.17.090(E)(3) of the MCCR to reduce wildfire exposure risks by ensuring proper storage of potential fuel and ignition sources and by ensuring proper defensible space protocols and distances are maintained. The County Multi-Jurisdictional Hazard Mitigation Plan also includes provisions for the maintenance and vegetation of evacuation routes. Compliance with these requirements would ensure that on-site fire protection measures are provided that would not exacerbate existing fire hazards and would avoid the need for expanded fire protection services that would necessitate the construction of new fire protection facilities (e.g., fire stations). As a result, this impact is would be less than significant.

#### Summary

As described above, existing provisionally licensed, potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites would be required to comply with regulations and standards related to fire hazards which would avoid exacerbating existing fire hazards and related impacts. Compliance with these requirements would ensure the provision of on-site fire protection measures that do not exacerbate existing fire hazards. Additionally, it would avoid the necessity for expanded fire protection services, which would otherwise require the construction of new fire protection facilities (e.g., fire stations). Impacts would be **less than significant**.

#### Mitigation Measures

No mitigation is required for this impact.

#### Impact 3.14-2: Result in Substantial Adverse Physical Impacts Associated with the Need for New or Physically Altered Law Enforcement Facilities

Potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would not require increased law enforcement services that would result in the need for new or altered facilities to ensure compliance with state and local security requirements for commercial cannabis cultivation sites. Therefore, the potential impact related to law enforcement services would be **less than significant**.

As described in Section 3.14.1, "Regulatory Setting," DCC regulations outline specific security requirements for commercial cannabis licensees. These regulations include CCR, title 4, section 15042, which imposes access limitations for commercial cannabis cultivation sites.

MCCR section 10A.17.090 requires that security measures for the facility be sufficient to ensure the safety of members and employees and protect the premises from theft. Additionally, Mendocino County General Plan policies, such as DE-244 and DE-247, outline criteria for addressing the physical impacts arising from the necessity for new or modified law enforcement facilities.

#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual licensure would not create new or additional demands as existing structures and operations are not anticipated to be altered through the annual licensing process. Existing provisionally licensed sites are required to continue to comply with CCR, title 4, section 15042 and MCCR section 10A.17.090 that requires security measures for the facility be sufficient to ensure the safety of members and employees and protect the premises from theft. Compliance with these requirements would ensure that on-site security measures are provided that would not exacerbate existing law enforcement demands and would avoid the need for expanded sheriff services that would necessitate the construction of new facilities (e.g., sheriff stations). As a result, this impact is would be less than significant.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation operations features would be required to comply with CCR, title 4, section 15042 and MCCR section 10A.17.090 that requires security measures for the facility be sufficient to ensure the safety of members and employees and protect the premises from theft. New licensed cultivation sites approved by the County would also be subject to General Plan Policies DE-244 and DE-247. These regulations and General Plan policies require collaboration with law enforcement agencies for coordination of land use and development processes, emphasizing the County's commitment to providing funding to address safety issues associated with commercial cannabis cultivation. Compliance with these requirements would ensure that on-site security measures are provided that would not exacerbate existing law enforcement service demands and would avoid the need for expanded sheriff services that would necessitate the construction of new facilities (e.g., sheriff stations). As a result, this impact is would be less than significant.

#### Future Licensed Sites

New licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would be required to comply with CCR, title 4, section 15042 and MCCR section 10A.17.090 that requires security measures for the facility be sufficient to ensure the safety of members and employees and protect the premises from theft. New licensed cultivation sites approved by the County would also be subject to General Plan Policies DE-244 and DE-247. These regulations and General Plan policies require collaboration with law enforcement agencies for coordination of land use and development processes, emphasizing the County's commitment to providing funding to address safety issues associated with commercial cannabis cultivation. Compliance with these requirements would ensure that on-site security measures are provided that would not exacerbate existing law enforcement service demands and would avoid the need for expanded sheriff services that would necessitate the construction of new facilities (e.g., sheriff stations). As a result, this impact is would be less than significant.

### Summary

As described above, existing provisionally licensed, potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites would be required to comply with regulations and standards related to security which would avoid exacerbating existing law enforcement service demand impacts. Compliance with these requirements would ensure that on-site security measures are provided that would not exacerbate existing law enforcement service demands and would avoid the need for expanded sheriff services that would necessitate the construction of new facilities (e.g., sheriff stations). As a result, this impact is would be **less than significant**.

### Mitigation Measures

No mitigation is required for this impact.



## 3.15 TRANSPORTATION

This section describes the applicable federal, state, and local transportation regulations and policies; discusses the existing roadway network and transportation facilities in the vicinity of the project; and analyzes the potential impacts on transportation from implementation of the project. Mitigation measures that would reduce impacts, where applicable, are also discussed.

Pursuant to Senate Bill (SB) 743, Public Resources Code (PRC) section 21099 and State CEQA Guidelines, section 15064.3(a), generally, vehicle miles traveled (VMT) is the most appropriate measure of transportation impacts and a project's effect on automobile delay shall no longer constitute a significant impact under CEQA. Therefore, the transportation analysis herein evaluates impacts using VMT and does not include level of service (LOS) analysis.

Comments received regarding transportation in response to the notice of preparation (NOP) were related to safety concerns on rural roadways due to increased traffic including conflicts for bicyclists and damage to the roadway surface. Because a project's effects on automobile delay no longer constitutes a significant impact under CEQA, comments related to automobile delay (e.g., LOS, congestion) are not addressed herein. See Appendix A for all NOP comments received.

### 3.15.1 Regulatory Setting

#### FEDERAL

There are no federal laws or regulations addressing transportation and circulation that are relevant to the project. However, federal regulations related to the Americans with Disabilities Act (ADA), Title VI, and Environmental Justice relate to transit service.

#### STATE

##### California Department of Transportation

The California Department of Transportation (Caltrans) is the state agency responsible for design, construction, maintenance, and operation of the California State Highway System, as well as the segments of the Interstate Highway System that lie within California. Caltrans District 1 is responsible for the operation and maintenance of State Route (SR) 1, SR 20, SR 253, SR 148, SR 175, and United States (US) Highway 101 in the project area. Caltrans requires a transportation permit for any transport of heavy construction equipment or materials that necessitates the use of oversized vehicles on state highways.

The Caltrans Transportation Impact Study Guide (TISG) was prepared to provide guidance to Caltrans Districts, lead agencies, tribal governments, developers, and consultants regarding Caltrans review of a land use project or plan's transportation analysis using a VMT metric. This guidance is not binding on public agencies but is intended to be a reference and informational document. The TISG replaces the Guide for the Preparation of Traffic Impact Studies and is for use with local land use projects, not for transportation projects on the State Highway System (Caltrans 2020).

California Manual on Uniform Traffic Control Devices, Part 6: Temporary Traffic Control  
The California Manual on Uniform Traffic Control Devices (CA-MUTCD), Part 6: Temporary Traffic Control provides principles and guidance for the implementation of temporary traffic control (TTC) to ensure the provision of reasonably safe and effective movement of all roadway users (e.g., motorists, bicyclists, pedestrians) through or around TTC zones while reasonably protecting road users, workers, responders to traffic incidents, and equipment. Additionally, this document notes that TTC plans and devices shall be the responsibility of the authority of a public body or official having jurisdiction for guiding road users (i.e., County of Mendocino for this project).

#### Caltrans Standard Specifications

The Caltrans Standard Specifications provide detailed requirements and guidelines for the construction of transportation projects in California. These specifications cover a wide range of topics, including materials, construction methods, testing procedures, and quality assurance measures. They are intended to ensure that transportation projects in the state are built to high standards and meet the necessary safety and performance criteria. Contractors, engineers, and other stakeholders involved in transportation projects funded or managed by Caltrans must adhere to these specifications during the planning, design, and construction phases. The specifications are periodically updated to reflect changes in technology, industry best practices, and regulatory requirements.

#### California Fire Code

The 2022 California Fire Code, which is found in Title 24 of the California Code of Regulations (CCR), incorporates by adoption the 2021 International Fire Code and contains regulations related to construction, maintenance, access, and use of buildings. Topics addressed in the California Fire Code include design standards for fire apparatus access (e.g., turning radii, minimum widths), standards for emergency access during construction, provisions intended to protect and assist fire responders, and several other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The California Fire Code contains specialized technical regulations related to fire and life safety. The California Building Standards Code, which includes the California Fire Code, contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. It is revised and published every 3 years by the California Building Standards Commission.

#### Senate Bill 743

Senate Bill (SB) 743 (Chapter 386, Statutes of 2023) requires the California Governor's Office of Planning and Research (OPR) to develop new State CEQA guidelines that address traffic metrics under CEQA. As stated in the legislation, upon adoption of the new guidelines, "automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to this division, except in locations specifically identified in the guidelines, if any."

OPR published its proposal for the comprehensive updates to the State CEQA Guidelines in November 2017 which included proposed updates related to analyzing transportation impacts pursuant to SB 743. These updates indicated that VMT would be the primary metric used to identify transportation impacts. In December of 2018, OPR and the State Natural Resources Agency submitted the updated State CEQA Guidelines to the Office of Administrative Law for final approval to implement SB 743. The Office of Administrative Law subsequently approved

the updated State CEQA Guidelines and, as of July 1, 2020, implementation of updated State CEQA Guidelines, section 15064.3 .

In December 2018, OPR published the most recent version of the Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR 2018), which provides guidance for VMT analysis. The Office of Administrative Law approved the updated State CEQA Guidelines and lead agencies had an opt-in period until July 1, 2020, to implement the updated guidelines regarding VMT.

## REGIONAL

### Regional Transportation Plan and Active Transportation Plan

The Mendocino Council of Governments (MCOG) is designated as a Regional Transportation Planning Agency that is responsible for area wide transportation planning in Mendocino County. MCOG is required by California law to adopt and submit an approved Regional Transportation Plan (RTP) to the California Transportation Commission, every 4 years.

In February 2022, the joint Mendocino County RTP and Active Transportation Plan was adopted. The regional transportation planning process is a long-range (1–20 year) planning effort that involves federal, state, regional, local, and tribal governments; public and private organizations; and individuals working together to plan how future regional transportation needs can be met. The 2022 RTP guides transportation investments in the County over the next 20 years. The 2022 RTP includes an assessment of existing transportation facilities; establishes the goals, objectives, and policies that address transportation issues by mode; and evaluates transportation improvement options (MCOG 2022).

### Regional Transportation Improvement Program

MCOG is also responsible for preparing and adopting the Regional Transportation Improvement Program (RTIP) as required by state law every odd numbered year. The RTIP is a program of highway, local road, transit, and active transportation projects that a region plans to fund with State and Federal revenue programmed by the California Transportation Commission in the State Transportation Improvement Program (MCOG 2019). The RTIP consists of a subset of projects in the federally mandated regional transportation plan, a federal master transportation plan, which guides a region's transportation investments over a 20- to 25-year period. MCOG adopted the 2022 RTIP in December 2021. The 2022 RTIP covers 4 years of programming: fiscal years 2021 through 2025. The project listing in the RTIP provides a detailed description for each individual project in the 2020 RTIP.

## LOCAL

### Mendocino County Cannabis Regulation

The purpose and intent of the Mendocino County Cannabis Regulation (MCCR) is to regulate the cultivation of commercial cannabis within the unincorporated areas of Mendocino County in a manner that is consistent with State law and which promotes the health, safety, and general welfare of the residents and businesses within those areas by balancing the needs of medical patients and their caregivers for enhanced access to medical cannabis, the needs of neighbors and communities to be protected from public safety and nuisance impacts, and the need to limit harmful environmental impacts that are sometimes associated with commercial cannabis cultivation. The following section of the MCCR is relevant to transportation:

▶ **Section 10A.17.070**

(Y) Inspections by Department. All applicants shall be subject to and shall facilitate an on-site pre-CCBL inspection and additional inspections as required by this chapter or as deemed necessary by the Department. All inspections will be scheduled with at least twenty-four (24) hours advance notice to the applicant or CCBL holder and shall be conducted during regular business hours.

Cancellation of scheduled inspections without notice to the Department shall result in the CCBL Holder being invoiced in accordance with the published current fee schedule.

- (1) Site inspections may include a representative from the Department of Planning and Building Services.
- (2) Any documents or approvals required to have been obtained by this chapter for issuance of a CCBL shall be available for review during any inspection.
- (3) Any guard dog(s) or guard animals kept at the cultivation site shall be restrained to a fixed point or contained in some manner to facilitate the inspections performed by any entity performing an inspection as required by this chapter. Animals considered family pets will be kept on a leash at all times and under control when any entity is performing a required inspection.

Mendocino County General Plan

The County General Plan was initially adopted in August 2009 and revised in 2021. The General Plan's Development Element contains the following policies regarding transportation that are applicable to the project (Mendocino County 2021):

- ▶ **Policy DE-126:** Provide for multiple transportation modes and functions within transportation corridors and rights-of-way constructed by project developers or using appropriate grants funding.
- ▶ **Policy DE-128:** Ensure that transportation infrastructure accommodates the safety and mobility of motorists, pedestrians, bicyclists, and persons in wheelchairs.
- ▶ **Policy DE-131:** Development impact fees, assessments, and other secured funding sources may be required to fund transportation improvements to provide an adequate transportation system or offset transportation impacts.
- ▶ **Policy DE-138:** The County supports the use of traffic calming techniques, where appropriate, to improve safety for motorists, bicyclists, pedestrians, and others. Special attention will be given to safety on roadways, which provide access for children to school.
- ▶ **Policy DE-139:** Support the construction or improvement of secondary neighborhood routes to alleviate congestion of the arterials and ensure effective evacuation access.
- ▶ **Policy DE-141:** Require all new development, redevelopment, or major renovation applying for discretionary approval to comply with Cal Fire requirements regarding ingress/egress issues to facilitate effective evacuation.
- ▶ **Policy DE-142:** Maximize the use of existing road systems and reduce environmental and community disruption through compatible land use planning.
- ▶ **Policy DE-152:** Major development applications shall include traffic studies to evaluate and mitigate cumulative effects on network level of service and safety.

- ▶ **Policy DE-153:** The County supports community programs to reduce traffic volumes and single-occupant vehicles during peak hours.
- ▶ **Policy DE-158:** Provide pedestrian and bicycle ways along public roadway systems consistent with community area goals and policies and where sufficient right of way is available.
- ▶ **Policy DE-162:** When development occurs, require installation of pedestrian and bicycle systems or, if infeasible, the payment of in-lieu fees to fund improvements to bicycle and pedestrian facilities.
- ▶ **Policy DE-220:** Development shall not hinder the maintenance and use of routes and sites critical to evacuation, emergency operations, and recovery.
- ▶ **Policy DE-231:** Development shall facilitate and integrate the ability for fire protection agencies to access and maintain fuel and firebreaks, water supplies, and public and private emergency access routes.
- ▶ **Policy DE-232:** New development in the High and Very High Wildfire Hazard Severity Zones and wildland urban/rural interfaces shall incorporate the following:
  - Fuel breaks or greenbelts coordinated with water supplies and access, providing maximum circulation consistent with topography.
  - Adequate and accessible defensible space that does not rely on publicly owned lands or open space designations of homeowner associations.
  - At least two ingress-egress routes to a public roadway, unless alternative routes accessible to fire equipment are provided.
  - Access to publicly maintained evacuation routes at regular intervals.
  - Access routes sufficient to accommodate evacuating vehicles, fire equipment, and vegetation management zones.
  - Primary traffic lanes to all building sites with turnarounds to accommodate fire equipment.
  - Water supplies within a short distance of fire equipment access.
  - Fire flows with adequate duration.
  - Develop fire-safe plans for communities to assist in qualifying for grants.
- ▶ **Policy DE-237:** Areas within the SRA and Fire Hazard Severity Zones shall be evaluated to determine the appropriate type, density, and locations of new development or reconstruction, and ensure adequate circulation, infrastructure, and services are available consistent with the latest Fire Safe Regulations.

The Mendocino County General Plan Community-Specific Policies chapter provides policies specific to eight community areas in the County (Mendocino County 2009). The following transportation-related policies are applicable to the project:

- ▶ **Policy CP-L-3:** The County supports improvements to the safety, efficiency, and appearance of the State Route 101 corridor through downtown Laytonville. Potential strategies include:
  - Reducing traffic hazards associated with pedestrian crossings of State Route 101 in and around the downtown area.

- Establishing public parking areas with easy access to, but visually screened from, State Route 101.
- Accommodating highway visitor travel through visually enhanced on-street parking and streetscapes.
- Prohibiting tall solid fences, sound walls or similar barriers along State Route 101 in downtown Laytonville.
- Working with local businesses and Caltrans in planting native trees along State Route 101 in the commercial district of Laytonville.
- Working with Caltrans to install a public restroom facility or rest stop along State Route 101 near Laytonville, with adequate on-site public parking.

#### Mendocino County ADA Comprehensive Access Plan

The County's ADA Comprehensive Access Plan for the County Maintained Road System, commissioned by the Mendocino County Department of Transportation, is intended to address aspects of the County-maintained road system that are appropriate for pedestrian infrastructure features to provide path of travel in compliance with the federal ADA and applicable provisions in the California Building Code (Mendocino County 2010).

#### Brooktrails Township Specific Plan

Brooktrails Township is an unincorporated community located northwest of the City of Willits. The Brooktrails Township Specific Plan furthers the goals listed in the County's General Plan and focuses a comprehensive planning effort on issues unique to the future development of Brooktrails Township (Mendocino County 2002). The Brooktrails Township Specific Plan addresses issues including zoning, lot reduction, development, community design, circulation, and water supply. The following transportation-related goals and policies could apply to the project:

- ▶ **Transportation and Circulation Goal FS-7.1-1:** Improve vehicular access/egress to/from the Township and ensure adequate circulation within the Township.
  - **Transportation and Circulation Policy FS-7.1-1D:** Construct a trail from the Township to the City of Willits for walking and bicycling.
  - **Transportation and Circulation Policy FS-7.1-F:** Promote unsubsidized Mendocino County Transit Authority service to the Township.

#### Ukiah Valley Area Plan

The Ukiah Valley Area Plan represents a commitment to a comprehensive and long-range interjurisdictional planning document that represents the vision and foresight of the people who live and work in the Ukiah Valley (Mendocino County 2011). The following transportation-related policies are applicable to the project.

- ▶ **LU 1.1:** Promote development and building practices that support healthy communities.
  - **LU 1.1a: Healthy Communities:** Ensure that land use and development decisions include consideration of impacts on water and indoor/outdoor air quality, as well as access to healthy food vendors, social and recreational opportunities, safe networks for walking and bicycling, and other attributes that promote the health of the community.
- ▶ **CT3.2:** Evaluate proposed new development impacts on roadways.

- **CT3.2a** Maximize Existing Road Capacity: Prioritize development applications that rely on appropriately classified existing roads with available capacity, over proposals that would require new transportation facilities and infrastructure.
- **CT3.2b** Required Studies: Require that major discretionary project applications include generalized traffic and circulation information, including bicycle and pedestrian impacts. The County may require a traffic study prepared by a licensed professional, which may include an evaluation of project and cumulative average daily traffic, impacts on level of service, safety and the area-wide transportation system, consistency with General Plan policies, and adopted Caltrans and City of Ukiah transportation planning documents if applicable, and projected mitigations.
- **CT3.2e:** Travel Demand Management Strategies: Mitigate trips generated by new development using travel demand management strategies, such as: free transit passes, mixed use development with concentrated employment centers and residential communities, efficient walking and bicycle connections.

### Mendocino County Code of Ordinances

Title 15 of the Mendocino County Code of Ordinances addresses vehicles, parking, and traffic regulations, including those related to construction. Title 18 provides regulations related to building, construction, and fire prevention including the County’s adoption of the 2022 California Building Code, 2022 California Fire Code, and the 2022 California Green Building Standards. Title 20 is the County Zoning Ordinance and includes divisions that apply to properties within specific unincorporated areas such as the Inland Zoning Code (Division I of Title 20), the Coastal Zoning Code (Division II of Title 20), and the Mendocino Town Zoning Code (Division III of Title 20).

### County Roads and Development Standards

The Mendocino County Roads and Development Standards, developed by the Mendocino County Department of Transportation, are intended to provide an adequate, well-maintained, efficient, and safe network of County-maintained roads that extend into the unincorporated areas of the County from the State Highway system and provide for both area and regional surface transportation needs of the County (Mendocino County 2008). The Roads and Development Standards include standard road specifications, road design standards, traffic design standards, and exception procedures for any road improvement, project-related improvement in subdivisions, and any other land development project that requires County authorization.

## 3.15.2 Environmental Setting

This section describes the existing environmental setting, which is the baseline scenario upon which project-specific impacts are evaluated. The environmental setting for transportation includes descriptions of roadway, bicycle, pedestrian, and transit facilities.

### ROADWAY SYSTEM

As of 2021, the Mendocino County region is served by approximately 110 miles of city roads, 1,180 miles of county roads, 384 miles of state highways, and 130 miles of federal roads (Caltrans 2023). In Chapter 2, “Project Description,” Figure 2-2 identifies the alignments of existing highways in the County in relation existing provisionally licensed commercial cannabis

cultivation premises. Although, provisionally licensed commercial cannabis cultivation sites are dispersed throughout the unincorporated County, there are concentrations of licensed commercial cannabis cultivation sites located along US 101, SR 20 (east of US 101), and SR 128.

### United States Highways and State Routes

Mendocino County is served by US 101, SR 1, SR 20, SR 128, SR 175, and SR 253, which are described in detail below.

#### United States Highway 101

US 101 is a bidirectional four-lane that traverses north-south through Mendocino County. US 101 runs from the State of Washington to Los Angeles, California, and provides regional access to the project area.

#### State Route 1

SR 1 is a two-lane eligible State Scenic Highway that traverses north-south through Mendocino County, beginning at US 101 in Leggett, passing south through the communities of Hale Grove, Rockport, Hardy, and Westport and the City of Fort Bragg, to Sonoma County.

#### State Route 20

SR 20 is a two-lane minor arterial road that traverses east-west through Mendocino County from Lake County to Lake Mendocino where it connects to and becomes US 101. SR 20 continues at the SR 20/US 101 interchange in Willits west through the Jackson Demonstration Forest and connects with SR 1 in Fort Bragg.

#### State Route 128

SR 128 is a two-lane minor arterial that passes northwest-southeast through Mendocino County. SR 128 begins at the Navarro River Bridge SR 1/SR 253 intersection in Albion and traverses southeast to Sonoma County.

#### State Route 175

SR 175 is a two-lane minor arterial road that traverses west-east from the intersection of SR 175/US 101 in Hopland through the Mendocino National Forest to Lake County.

#### State Route 253

SR 253 is a two-lane minor arterial road that traverses southeast-northwest from the intersection of SR 253 and SR 128 in Boonville to the US 101 onramp just south of the City of Ukiah.

### County Roads

The roadway network serving the County consists of the following roadway classifications as defined in the General Plan (Mendocino County 2021):

- ▶ **Principal Arterial System.** The principal arterial system consists of a connected network of continuous routes having the following characteristics:
  - Serve corridor movements having the trip length and travel density characteristics indicative of substantial statewide or interstate travel.
  - Serve all, or virtually all, urban areas of 50,000 and overpopulation and a large majority of those with a population of 25,000 and over.



- Provide an integrated network without stub connections except where unusual geographic or traffic flow conditions dictate otherwise, such as to connections to coastal cities and inter-governmental boundaries.
- ▶ **Minor Arterial System.** The minor arterial road system should, in conjunction with the principal arterial system, form a network having the following characteristics:
  - Link cities and towns above 5,000 population (and other traffic generators, such as major recreational areas with equivalent capacity for generating and attracting travel over long distances) and form an integrated network providing interstate and intercounty service.
  - Be spaced at such intervals, consistent with population density, so that all developed areas of the County are within a reasonable distance of an arterial.
  - Constitute routes whose design should be expected to provide for relatively high overall travel speeds with minimum interference to through movement.
- ▶ **Connectors.** The connector road system provides connections between the higher-order systems serving those corridors that have low-volume/long-trip length characteristics. Connectors provide service to any county seat not on a higher system and to the larger towns not directly served by higher-order systems. They provide service to mining, agricultural, or recreational areas having State or regional importance not served by the higher-order systems. Connectors will be found more predominantly in the very sparsely developed areas where there are relatively few local roads, e.g., in the desert areas, mountainous and heavily timbered portions of the State, and where there are large public landholdings.
- ▶ **Collector Road System.** The collector routes generally serve travel of primarily regional importance rather than Statewide importance and constitute those routes on which (regardless of traffic volume) predominant travel distances are shorter than on arterial routes.
- ▶ **Major Collector Roads:**
  - Provide service to the larger towns not directly served by the higher systems and to other traffic generators of equivalent intra-regional importance, such as consolidated schools, shipping points, county parks, and important mining and agricultural areas.
  - Link the above places with nearby larger towns or cities, or with routes of higher classification.
  - Serve the more important intra-regional travel corridors.
- ▶ **Minor Collector Roads:**
  - Spaced at intervals, consistent with population density, to collect traffic from local connectors and local roads and bring all developed areas within a reasonable distance of a collector road.
  - Provide service to the remaining smaller communities.
  - Serve to link locally important traffic generators.
- ▶ **Local Connectors:**
  - Provides access to residential, commercial, and agricultural areas not served by a higher system.

- Provides access to local schools, recreational areas, and other community facilities.
- Link the Local Road System with Collector Road System.
- ▶ **Local Roads:**
  - Serve primarily to provide access to adjacent land.
  - Provide service to travel over relatively short distances as compared to collectors or other higher systems.
  - Constitute the rural mileage not otherwise classified.

## TRANSIT SYSTEM

The Mendocino Transit Authority (MTA) service area encompasses approximately 2,800 square miles and provides a diverse system of long distance, commute, and local fixed routes, two Dial-A-Ride routes, and one Flex Route (MTA 2023). MTA provides daily connections with Sonoma County Transit, Santa Rosa City Bus, AMTRAK, and Golden Gate Transit for regional service to the Counties of Marin and San Francisco in Santa Rosa. MTA also provides daily connections with the Sonoma County Airport Express and connects with Lake Transit service to and from Lake County Monday through Saturday (MTA 2023).

## BICYCLE AND PEDESTRIAN SYSTEM

The bicycle network serving the County consists of the following bicycle facility classifications as described in the General Plan (Mendocino County 2021):

- ▶ **Class I Bike Paths** are facilities specifically designated for the exclusive use of bicycles and pedestrians. Class I bike paths are separate from streets, although they may cross roadways.
- ▶ **Class II Bike Lanes** are striped lanes on a street or highway, designated for use by bicycles. Vehicle parking and vehicle pedestrian crossflows are permitted at designated locations.
- ▶ **Class III Bike Routes** are usually designated by pavement markings to indicate the use of bicycles within the vehicular travel lane of a roadway.

All state routes in the County are open to bicycle traffic, and SR 1 is legislatively designated as the Pacific Coast Bike Route (Mendocino County 2021). As of 2020, six major bikeways exist in the County. The greatest concentration of bicycle lanes, generally Class II or III, in Mendocino County is in the City of Ukiah. Bicycle travel does occur within communities such as Mendocino, between the outlying areas and communities such as the eastern hills of the Ukiah Valley and Ukiah, and along various sections of State Route 1. The location of the six major bikeways as described in the County General Plan is provided below (Mendocino County 2021):

- ▶ Hensley Creek Road (Ukiah Valley, Mendocino College)
- ▶ Simpson Lane (near Fort Bragg)
- ▶ Little Lake Road (Mendocino area)
- ▶ Lake Mendocino Drive (Ukiah Valley)
- ▶ Vichy Springs Road (Ukiah Valley)
- ▶ A portion of the former Georgia Pacific haul road, north of the City of Fort Bragg

### 3.15.3 Environmental Impacts and Mitigation Measures

This section describes the analysis techniques, assumptions, and results used to identify potential significant impacts of the project on the transportation system. Transportation impacts are described and assessed, and mitigation measures are recommended for impacts identified as significant or potentially significant.

#### METHODOLOGY

The following methodologies were used to evaluate impacts of the project.

##### Consistency with General Plan Circulation Policies

The evaluation of potential impacts related to transportation is based on a review of existing transportation facilities and conditions, anticipated future facilities, and transportation-related plans and policies relevant to the project implementation. Due to the countywide scope of the project and because the exact locations of all future commercial cannabis cultivation and associated processing or distribution transport-only operations are not known at this time, the analysis does not evaluate specific sites.

##### Bicycle and Pedestrian Analysis

The bicycle and pedestrian analyses evaluate if the project would, either directly or indirectly, disrupt existing bicycle or pedestrian programs or facilities; interfere with the implementation of a planned facility; or create a physical or operational transportation outcomes that conflict with applicable bicycle or pedestrian system plans, guidelines, policies, or standards.

##### Transit Analysis

The transit analysis evaluates if the project would, directly or indirectly, disrupt existing transit services or facilities; interfere with the implementation of a planned transit facility; or create physical or operational transportation outcomes that conflict with desired conditions expressed in transit policies adopted by the County or MTA for their respective facilities in the project area.

##### VMT Analysis

The County of Mendocino has yet to develop VMT guidelines and thresholds to meet the State requirements set by SB 743 and address State CEQA Guidelines, section 15064.3. Therefore, in the absence of adopted VMT guidelines and thresholds of significance, the VMT analysis here-in relies on the guidance provided in State CEQA Guidelines, section 15064.3 and the OPR Technical Advisory.

State CEQA Guidelines, section 15064.3(b) identifies four criteria for analyzing the transportation impacts of a project. To determine how the project should be considered, each of the criteria is discussed below.

Section 15064.3(b)(1) of the State CEQA Guidelines addresses land use projects. The project involves DCC's consideration of transitioning existing provisional commercial cannabis cultivation licenses to annual licensure, potential expansion of existing provisionally licensed commercial cannabis cultivation sites, as well as future commercial cannabis cultivation annual licensing actions (e.g., the issuance of new annual cultivation licenses), within the unincorporated areas of Mendocino County. Section 15064.3(b)(1) of the State CEQA Guidelines provides that projects with specified proximity to "major" or "high quality" transit should be presumed to cause a less than significant transportation impact. The unincorporated

area of Mendocino County does not have transit service that meets these criteria, and therefore, this presumption would not apply to future projects regulated under the project. This section does not apply to the project. Section 15064.3(b)(1) of the State CEQA Guidelines also provides that projects that would decrease VMT in the project area as compared to existing conditions should also be presumed to have a less than significant effect. Future individual projects seeking issuance of annual commercial cannabis cultivation licenses may be subject to this criterion (as described below).

Section 15064.3(b)(2) of the State CEQA Guidelines addresses transportation projects. The project would not include the construction or alteration of any roadways or transportation facilities. Therefore, this section does not apply.

Section 15064.3(b)(3) of the State CEQA Guidelines, Qualitative Analysis, states that if existing models or methods are not available to estimate the VMT for the particular project being considered, a lead agency may analyze the project's VMT qualitatively.

Section 15064.3(b)(4) of the State CEQA Guidelines, Methodology, explains that the lead agency, has discretion to choose the most appropriate methodology to evaluate VMT subject to other applicable standards, such as State CEQA Guidelines, section 15151 (standards of adequacy for EIR analyses).

Relevant to calculating trips is section 15064.3(a) of the State CEQA Guidelines, which states, "For the purposes of this section, 'vehicle miles traveled' refers to the amount and distance of automobile travel attributable to a project." Here, the term "automobile" refers to on-road passenger vehicles, specifically cars and light trucks (OPR 2018). Heavy-duty truck VMT could be included for modeling convenience and ease of calculation (for example, where models or data provide combined auto and heavy truck VMT), but need not be. Therefore, larger on-road construction vehicles that do not fall within the categories of cars and light trucks do not need to be considered in calculations of trips or VMT.

In support of State CEQA Guidelines, section 15064.3, the OPR Technical Advisory was issued. The OPR Technical Advisory outlines recommended procedures and methods for evaluating transportation impacts for residential, office, and retail projects. However, it does not offer guidance for a programmatic project like the subject commercial cannabis cultivation licenses, which would consider annual licensing actions (e.g., the issuance of new, additional annual commercial cannabis cultivation licenses) for future commercial cannabis cultivation within the unincorporated areas of Mendocino County. The project could result in a development potential of up to 1,075 new commercial cannabis cultivation licenses and 10 new nursery licenses within the unincorporated County. Therefore, implementation of the project could potentially result in changes to VMT.

The OPR Technical Advisory notes by way of background (page 2) that there are three primary ways of reducing GHG emissions for the transportation sector: increasing vehicle efficiency, reducing fuel carbon content, and reducing the amount of vehicle travel. Local jurisdictions are not able to influence or control the first two, but through careful land use planning local governments can ensure reductions in vehicle travel. The OPR Technical Advisory highlights the relationship between reduction of VMT and reduction of GHG emissions, which is a key component of SB 743.

Additionally, the OPR Technical Advisory notes that some local agencies have developed screening thresholds to indicate when detailed analysis is needed and includes recommendations related to VMT screening thresholds for small projects. The OPR Technical Advisory states that absent substantial evidence indicating that a project would generate a

potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact (OPR 2018). This EIR is a programmatic EIR that looks at the combined effect of assumed future commercial cannabis operations under the project; thus, this EIR does not rely on this screening threshold. However, any individual projects seeking an annual commercial cannabis cultivation license that would not result in 110 or more trips per day would be assumed in project-level CEQA documents, using OPR guidance, to result in a less than significant VMT impact.

Taking into consideration the four criteria detailed in section 15064.3(b) of the State CEQA Guidelines for analyzing the transportation impacts and their applicability to the proposed project, state policy, and the recommendations of the OPR Technical Advisory, the following threshold was determined as appropriate for the purpose of analyzing the potential change in VMT under the project:

- ▶ An increase in countywide VMT as compared to existing conditions shall be presumed to result in a significant effect.

#### Transportation Hazards and Emergency Access Analysis

Transportation hazards and emergency access analysis evaluates if the Project would directly or indirectly, substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or result in inadequate emergency access.

## THRESHOLDS OF SIGNIFICANCE

The significance criteria used to evaluate the project impacts to transportation under CEQA are based on Appendix G of the CEQA Guidelines. Impacts to the roadway system would be significant if they:

- ▶ Conflict with a plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;
- ▶ Conflict or are inconsistent with State CEQA Guidelines, section 15064.3, subdivision(b);
- ▶ Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- ▶ Result in inadequate emergency access.

## ISSUES NOT DISCUSSED FURTHER

All impacts regarding transportation are discussed below.

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Impact 3.15-1: Conflict with a Program, Plan, Ordinance or Policy Addressing the Circulation System Consisting of Transit, Roadway, Bicycle, and Pedestrian Facilities

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Although it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites will propose to expand their cultivation activities as they transition to annual licensure, expansion of existing commercial cannabis cultivation sites would still be required to comply with all applicable policies related to bicycles, pedestrians, transit, and safety. Future licensed commercial cannabis cultivation and associated processing or distribution transport-only uses would be required by Mendocino County to comply with the County's General Plan policies and applicable requirements (e.g., MCCR). For these reasons, the project would not conflict with a program, plan, ordinance, or policy addressing the circulation system. This impact would be **less than significant**.

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Existing and future licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations are subject to all applicable guidelines, standards, and specifications related to transit, bicycle, and pedestrian facilities as described above in Section 3.15.1, "Regulatory Setting." A stated goal of the County General Plan is to implement functional, safe, and attractive pedestrian and bicycle systems in coordination with regional and local transportation plans and other transportation modes (Mendocino County 2021). The Development Element of the County General Plan establishes policies for transportation systems in the unincorporated areas of Mendocino County.

#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual licensure would not result in new transportation related policy impacts for existing provisionally licensed sites that would retain the extent of their existing licensed commercial cannabis cultivation as operations are not anticipated to be altered through the annual licensing process. Therefore, there would be no conflicts with a program, plan, ordinance, or policy addressing the circulation system consisting of transit, roadway, bicycle, and pedestrian facilities.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. If a provisionally licensed commercial cannabis cultivation site proposes expanded activities, it would be required to comply with the same County policies, standards, and regulations as future new licensed commercial cannabis sites. Existing provisionally licensed sites would be subject to County policies, including County General Plan Policies DE-131, DE-138, DE-152, and DE-158, which intend to improve safety for bicyclists, pedestrians, and motorists. Additionally, applicable standards contained in the County Road and Development Standards would need to be complied with. The expansion of existing provisionally licensed sites would not be approved if the individual project would damage or conflict with existing bicycle, pedestrian, or transit facilities. Therefore, compliance with applicable Mendocino County policies and standards would ensure that existing provisionally licensed sites seeking to expand their facilities would not conflict with a program, plan, ordinance, or policy addressing pedestrian, bicycle, and transit facilities. Therefore, the impacts to bicycle, pedestrian, and transit facilities would be less than significant.

### Future Licensed Sites

Implementing the project could result in employment and residential growth which could generate increased demand for transit facilities and services. According to the OPR Technical Advisory, when evaluating impacts on multimodal transportation networks, the addition of new transit users generally should not be treated as an adverse impact (OPR 2018).

Future new licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations could affect roadway safety on unincorporated County roadways due to increased truck use; however, construction associated with future commercial cannabis operations would be required to meet all County requirements related to construction, including the County Roads and Development Standards. Section 1-1.05, "Traffic Control," which mandates that a project contractor shall provide traffic control during all roadwork, and section E.4 requires that a traffic control plan (TCP) is prepared for all road closures, detours, land closures or other work within the public right of way. The preparation of a TCP and implementation of traffic control would optimize the safe circulation for pedestrians, bicyclists, and vehicles during construction associated with future licensed facilities.

New licensed commercial cannabis cultivation sites would be subject to County policies, including County General Plan Policies DE-131, DE-138, DE-152, and DE-158, which aim to improve safety for bicyclists, pedestrians, and motorists. Additionally, new commercial cannabis cultivation uses would be subject to compliance with General Plan Policy DE-162 requires the installation of pedestrian and bicycle systems when development occurs or, if infeasible, the payment of in-lieu fees to fund such systems or improvements. Compliance with applicable Mendocino County policies and standards would ensure that future licensed sites would not conflict with a program, plan, ordinance, or policy addressing pedestrian, bicycle, and transit facilities. For these reasons, impacts to bicycle, pedestrian, and transit facilities would be less than significant.

### Summary

Existing provisionally licensed commercial cannabis cultivation sites would not involve construction or changes in operations; thus, the transition of existing provisional licenses to annual licenses would not conflict with a program, plan, ordinance, or policy addressing pedestrian, bicycle, and transit facilities. Additionally, expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites would be required to comply with applicable Mendocino County General Plan policies pertaining to bicycle, pedestrian, and transit facilities. If construction of new commercial cannabis cultivation sites would require improvements in the public right of way, the individual project site contractors would be required to develop and implement a TCP, and the project would comply with the County's design and safety standards. For these reasons, the impact would be **less than significant**.

### Mitigation Measures

No mitigation is required for this impact.

### Impact 3.15-2: Conflict or Be Inconsistent with State CEQA Guidelines, Section 15064.3, Regarding VMT

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There would be no construction activities or change in operations for existing provisionally licensed sites that would retain the extent of their existing licensed commercial cannabis cultivation. Additionally, although it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites will propose to expand their cultivation activities as they transition to annual licensure, as described below, this component of the project would meet OPR Technical Advisory's screening criteria for small projects (i.e., generate less than 110 new daily trips). Although future licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations would likely meet the same screening criteria mentioned above during project-level environmental review, at the programmatic level, the uncertainty related to estimating trip lengths associated with individual commercial cannabis cultivation sites makes accurately quantifying the change in total VMT associated with implementation of the project too speculative. For this reason, as allowed under State CEQA Guidelines, section 15145, it is too speculative to determine to what degree VMT would change as a result of implementation of the project. Therefore, no significance conclusion is provided.

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#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual licensure would not result in new VMT impacts as operations are not anticipated to be altered through the annual licensing process.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. The County limits each cannabis cultivation site to 10,000 square feet of canopy. It is expected that the difference in size and associated operations between existing conditions and potential expansion for individual projects would result in minimal new daily trips. Accordingly, the transition of the existing provisional licenses to annual licenses would not exceed 110 new daily trips consistent with the OPR Technical Advisory's screening criteria for small projects, and this portion of the project would not conflict or be inconsistent with State CEQA Guidelines, section 15064.3. This impact would be less than significant.

#### Future Licensed Sites

As detailed in the OPR Technical Advisory, travel demand models, sketch models, spreadsheet models, research, and data can all be used to calculate and estimate VMT. Additionally, the OPR Technical Advisory notes that the typical calculation methodologies for VMT include trip-based assessment, tour-based assessment, and change in total VMT with and without the project. Based on the significance threshold detailed above (i.e., a net increase in total VMT from existing conditions shall be presumed to result in a significant effect), the estimation of the change in total VMT with and without the project is the most appropriate general calculation methodology.

As detailed in the OPR Technical Advisory, a trip-based assessment of a project's effect on travel behavior counts VMT from individual trips to and from the project and is the most basic, and traditionally the most common method of counting VMT. At its most basic level, this VMT



assessment methodology requires estimation of the number of individual vehicle trips and average trip lengths associated with the land use being analyzed.

For analysis at the programmatic level, estimates of trips generated by new licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations are based on industry assumptions informed by total commercial cannabis cultivation application requests received by Mendocino County since 2017, current composition of commercial cannabis cultivation uses licensed by the DCC, state-licensed commercial cannabis operations in other rural communities with similar rural land use characteristics (e.g., Humboldt and Trinity Counties), available commercial cannabis application data, and other published information regarding commercial cannabis operations (See Table 3.0-1, “Future Cannabis Cultivation Assumptions”). It should be noted that neither Mendocino County nor DCC have any restriction on the total number of commercial cannabis cultivation licenses that could be issued in the County. Additionally, future commercial cannabis cultivation licenses applications may consist of the use of existing unlicensed commercial cannabis cultivation sites or existing agricultural sites. However, because the exact number of existing unlicensed commercial cannabis cultivation sites is unknown, it cannot be determined what percentage of these trips would be newly generated currently contributing to the existing transportation environment.

As detailed in the OPR Technical Advisory, to achieve the State’s long-term climate goals, California needs to reduce per capita VMT (OPR 2018). As such, the intent of SB 743 is to reduce VMT from on-road passenger vehicles, specifically cars and light trucks as described in the “Methodology” section, above. Of land use projects, residential, office, and retail projects tend to have the greatest influence on VMT and do not address agricultural land use types such as commercial cannabis cultivation. Therefore, the guidance provided in the OPR Technical Advisory focuses its quantified thresholds for land use projects only on those project types for the purpose of analysis and mitigation and lead agencies, using more location-specific information, may develop their own more specific thresholds, which may include other land use types (OPR 2018).

For this reason, the analysis herein focuses on the trip generation solely from employee commutes. Thus, considering the potential employment generated by the project of 1,863 employees (see Table 3.0-1 in the introduction to this chapter), the project could result in a total of approximately 3,726 daily employment-related trips, assuming an average of 2 trips per day per employee.

In addition to average daily trip generation, the average trip length for commercial cannabis cultivation activities is needed to estimate average daily VMT of the proposed project. The location of individual commercial cannabis cultivation sites throughout the unincorporated County is an important determinant of vehicle travel patterns and trip lengths. Because the exact location of individual future commercial cannabis cultivation sites within the unincorporated County are not known at this time, the travel patterns and trip lengths associated with implementation of the project cannot be known or forecasted at this time. Therefore, any estimate of average trip length for trips associated with the project would be too speculative.

Individual projects using this EIR would be required to undergo project-specific environmental review, including an impact analysis of project generated VMT. It is likely that subsequent, individual commercial cannabis cultivation sites associated with the project would each generate less than 110 or more trips per day and would therefore result in a less than significant VMT impact, consistent with OPR Technical Advisory screening criteria for small

projects. Although VMT associated with individual commercial cannabis cultivation licensed premises would not likely result in substantial increases in VMT at the project level, the uncertainty related to trip lengths associated with individual commercial cannabis cultivation sites makes accurately quantifying the change in total VMT associated with implementation of the project too speculative at the program level.

According to State CEQA Guidelines, section 15144, “drafting an EIR or preparing a Negative Declaration necessarily involves some degree of forecasting. While foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can.” Additionally, State CEQA Guidelines, section 15145 states that “if, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact.” As detailed above, the lack of reliable data, variety of possible scenarios and circumstances, and number of assumptions that would need to be made make it too speculative to determine the VMT impact of the project. Therefore, no significance conclusion is provided for this issue.

### Summary

Although some existing provisionally licensed commercial cannabis cultivation sites could involve expanded cultivation activities, the transition of existing provisional licenses to annual licenses would not result in a substantial increase in trips as compared to existing conditions and, thus, would not exceed the OPR Technical Advisory screening criteria threshold of 110 new daily trips for small projects. New licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations would be required to undergo project level environmental review and would likely generate less than 110 daily trips. However, at the programmatic level, the project could result in an estimated 3,726 daily employment-related trips. Because the exact location of future individual licensed sites is not known at this time, any estimate of average trip length for trips associated with the project would be too speculative. For this reason, no significance conclusion is provided for this issue in compliance with State CEQA Guidelines, section 15145.

### Mitigation Measures

No mitigation is required for this impact.

### Impact 3.15-3: Substantially Increase Hazards Due to a Design Feature or Incompatible Uses

The transition of provisionally licensed commercial cannabis cultivation sites to annual licensure, and potential expansion of such existing provisionally licensed commercial cannabis cultivation sites are not expected to create transportation hazards related to these sites. Additionally, future licensed commercial cannabis cultivation and associated processing or distribution transport-only uses would be subject to and constructed in accordance with applicable roadway design and safety standards such as Caltrans Standard Specifications and the County Roads and Development Standards. Individual site plans for future licensed sites would be subject to review by County of Mendocino staff ensuring all applicable design and safety standards are met. Furthermore, the preparation and implementation of a TCP for each new licensed site that dictates construction within public roadway right of way would minimize potential hazards during construction. Therefore, compliance with local and State standards and regulations would not result in substantially increased hazards due to a design feature or incompatible uses. This impact would be **less than significant**.

Caltrans and Mendocino County have adopted and enforce roadway design standards that address a variety of roadway elements (e.g., road width and grading). The use and

enforcement of these design standards prevents the development of transportation infrastructure that would substantially increase safety hazards due to a design feature. Additionally, per section 10A.17.010 of the MCCR, all licensed sites are required to comply with applicable local and State construction and building standards.

Section 1-1.05 “Traffic Control” of the County Roads and Development Standards mandates that a project contractor shall provide traffic control during all roadwork according to section 7-1.03 “Public Convenience”; section 7-1.04 “Public Safety”; and Chapter 12, “Temporary Traffic Control” of the Caltrans Standard Specifications. Section 7-1.04 of the Caltrans Standard Specifications details regulations for ensuring public safety during construction. These include the implementation of necessary protective measures to prevent damage or injury to the public, as well as measures to perform work in a manner that does not interfere with the free and safe passage of the public. Chapter 12 of the Caltrans Standard Specifications includes specifications for providing temporary traffic control such as flagging and temporary traffic control devices.

Section E.4. of the County Roads and Development Standards outlines requirements for all contractors, permittees, or agencies doing work within public roads or the public right of way. The requirements include conducting construction area traffic control (e.g., installing and maintaining required traffic control devices, providing adequate safeguards for workers and the public, and patrolling the construction site to ensure that all devices are in place and are operating properly) and developing and implementing a TCP for all road closures, detours, land closures or other work within the public right of way.

#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual licensure would not result in new transportation safety hazards as operations are not anticipated to be altered through the annual licensing process. Thus, no impact would occur.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expansions of existing provisionally commercial cannabis cultivation operations would involve sites that already have roadway facilities in place. Any improvements to existing roadway facilities and access would be subject to applicable County and Caltrans design and safety standards identified above. Thus, this impact would be less than significant.

#### Future Licensed Sites

Section 20.242.070 of the County Code of Ordinances establishes that planning approval is required for all new licensed sites and ensures that commercial cannabis cultivation and associated processing and/or distribution transport-only operations are allowed within the zoning district and in compliance with other provisions of the County Code. Therefore, future licensed sites would not substantially increase hazards due to incompatible uses.

Development associated with new and future licensed operations could include on-site grading and new or improved access roads to cultivation sites. Such activities could result in temporary construction within the public right of way, including the possibility of temporary lane closures and the hauling of machinery, which could increase hazards. As detailed above, construction and improvements related to future licensed sites would be designed and constructed in accordance with all applicable County and Caltrans design and safety standards. Per section E.4 of the County Roads and Development Standards, all contractors, permittees, or agencies

doing work within public roads, or the public right of way would be required to develop and implement a TCP, which would reduce any temporary construction-related traffic hazards. Additionally, according to section C.3.L of the County Roads and Development Standards, any future development that would gain access from an existing road that does not meet applicable standards would be responsible for improving the full length of the existing access road to the point where it is adequate to meet the intent of road standards, as reviewed by the Department of Transportation Director and determined by the Approval Authority. Furthermore, per section 10A.17.070(Y) of the MCCR, all applicants would be subject and required to facilitate an on-site pre-CCBL (i.e., licensing) inspection and any additional inspections as deemed necessary by the DCC. Therefore, future licensed facilities would not result in roadway hazards due to a design feature or incompatible uses and this impact would be less than significant.

### Summary

Existing provisionally licensed sites would not involve construction or changes in operations; thus, the transition of existing provisional licenses to annual licenses would not result in increases in transportation hazards compared to existing conditions. Potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites would be required to meet County Roads and Development Standards and individual project contractors would comply with the County's requirement to develop and implement a TCP for construction work performed within public right of way. Additionally, section 10A.17.070(Y) of the MCCR states that all applicants would be subject and required to facilitate an on-site pre-CCBL inspection and any additional inspections as deemed necessary by the DCC to ensure transportation safety standards are met. For these reasons, the project would not substantially increase hazards. Therefore, the impact would be **less than significant**.

### Mitigation Measures

No mitigation is required for this impact.

### Impact 3.15-4: Result in Inadequate Emergency Access

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Existing provisionally licensed, potential expansion of existing provisionally licensed, and future licensed commercial cannabis cultivation and associated processing and/or distribution transport-only uses would be subject to review by County of Mendocino staff and responsible emergency service agencies. Additionally, future licensed facilities would be constructed in accordance with applicable County policies, including established roadway design and safety standards such as the County Roads and Development Standards and the 2022 California Fire Code adopted by reference in section 18.04.025 of the County Code of Ordinances. These standards would prevent the development of future facilities and associated offsite improvements that would result in inadequate emergency access. This impact is **less than significant**.

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The County of Mendocino has adopted and enforces roadway design standards as detailed in the County Roads and Development Standards. These standards address a variety of roadway elements to address transportation safety and hazards. According to section C.1.C of the County Roads and Development Standards, County roads are designed to accommodate the grade, turning, and passage needs of emergency and service vehicles.

Emergency access to commercial cannabis operations would be provided primarily via existing public and private roadways, and access driveways. In addition to the County Roads and Development Standards, the County has adopted the 2022 California Fire Code (Title 24, Part 9) by reference in section 18.04.025 of the County Code of Ordinances. As detailed in the

2022 California Fire Code, the width of an unobstructed roadway must measure no less than 24 feet in order to provide adequate access for fire and emergency responders. These regulations do not apply to existing structures, roads, streets and private lanes or facilities; however, the following activities would require compliance with the Fire Safe Ordinance:

- ▶ Permitting or approval of new parcels;
- ▶ Application for a building permit for new construction, not relating to existing structure;
- ▶ Application for a use permit;
- ▶ Road construction, including construction of a road that does not currently exist, or extension of an existing road.

#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites transitioning to annual licensure would not result in new impacts to emergency access as operations are not anticipated to be altered through the annual licensing process. Existing provisionally licensed sites are required to continue to comply with regulations and standards outlined in PRC sections 4290 and 4291, local fire protection agency requirements, and the California Fire Code to minimize hazards of fire. Additionally, existing provisionally licensed cultivation sites would be required to continue to comply with sections 10A.17.070(N), 10A.17.070(V), and 10A.17.090 (E)(3) of the MCCR to reduce wildfire exposure risks by ensuring proper storage of potential fuel and ignition sources and by ensuring proper defensible space protocols and distances are maintained. Thus, no impact would occur.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expansions of existing provisionally commercial cannabis cultivation operations would involve sites that already have roadway facilities and emergency access points in place. Any improvements to existing roadway facilities and access would be required to comply with regulations and standards outlined in PRC sections 4290 and 4291, local fire protection agency requirements, and the California Fire Code to minimize hazards of fire. Additionally, existing provisionally licensed cultivation sites would be required to continue to comply with sections 10A.17.070(N), 10A.17.070(V), and 10A.17.090 (E)(3) of the MCCR to reduce wildfire exposure risks by ensuring proper storage of potential fuel and ignition sources and by ensuring proper defensible space protocols and distances are maintained. Thus, this impact would be less than significant.

#### Future Licensed Sites

As detailed in Chapter 2, "Project Description," licensing of new commercial cannabis cultivation and associated processing or distribution transport-only uses may include construction of new structures, new or improved access roads and/or crossings to cultivation sites, and on-site grading. Per section E.4 of the County Roads and Development Standards, all contractors, permittees, or agencies doing work within public roads, or the public right of way would be required to develop and implement a TCP consistent with Chapter 12 of the Caltrans Standards Specifications. Section 12-1.01 of the Caltrans specifications details that temporary traffic control must comply with the Part 6 "Temporary Traffic Control" of the California MUTCD, which includes provisions to ensure emergency response time and access is not hindered during construction.

Additionally, County General Plan Policies DE-141, DE-220, DE-231, and DE-237 would help maintain adequate emergency access as future licensed sites are developed. However, per section C.3.L of the County Roads and Development Standards, any future development that would gain access from an existing road that does not meet applicable standards would be responsible for improving the full length of the existing access road to the point where it is adequate to meet the intent of road standards, as reviewed by the Department of Transportation Director and determined by the Approval Authority. Therefore, the grade, turning, and passage needs of emergency vehicles for future licensed sites would be met.

New licensed sites would be required to comply with regulations and standards outlined in PRC sections 4290 and 4291, local fire protection agency requirements, and the California Fire Code for emergency and fire access. Additionally, these new licensed sites would also be required to comply with sections 10A.17.070(N), 10A.17.070(V), and 10A.17.090 (E)(3) of the MCCR to by ensuring proper defensible space and access to sites are maintained. New licensed sites would follow construction and design standards set forth in the California Fire Code, as adopted by the County in section 18.04.060 of the County Code of Ordinances. Therefore, due to the required adherence to local and State emergency access design standards and regulations, future licensed sites would result in adequate emergency vehicle access. This impact would be less than significant.

### Summary

Existing provisionally licensed commercial cannabis cultivation sites would not involve construction or changes in operations; thus, the transition of such provisional licenses to annual licenses would not result in inadequate emergency access compared to existing conditions. Individual project contractors associated with expansion of existing provisionally licensed and future commercial cannabis cultivation sites would be required to develop and implement a TCP for construction work performed within public right of way which would reduce adverse effects to emergency access during construction activities. Additionally, future sites would be required to comply with applicable regulations that access maintaining access for emergency vehicles. Further, the project would be subject to review by DCC, County staff, and emergency service agencies to ensure emergency access standards are met. For these reasons, the impact would be **less than significant**.

### Mitigation Measures

No mitigation is required for this impact.

## 3.16 UTILITIES AND SERVICE SYSTEMS

This section provides an overview of wastewater, water, energy, and solid waste services in unincorporated Mendocino County and an impact analysis associated with these services. The reader is referred to Section 3.6, “Energy,” for a discussion of energy impacts; 3.7, “Geology, Soils, and Mineral Resources,” for a discussion of on-site septic system impacts; and Section 3.10, “Hydrology and Water Quality,” for a discussion of drainage and water resource (surface water and groundwater) impacts.

Comments received in response to the notice of preparation (NOP) pertained to adequate water supply, water demand, and sewer service. These issues are discussed below, and in the sections noted above,. All comments received in response to the NOP are presented in Appendix A of this EIR.

### 3.16.1 Regulatory Setting

#### FEDERAL

There are no federal plans or programs that address utilities and service systems and that would apply to the project.

#### STATE

##### Commercial Cannabis Cultivation Licensing Requirements

The following cannabis cultivation regulations are associated with water supply and solid waste.

##### CCR, Title 4, Section 15049.1: Additional Requirements for Recording Cultivation Activities

(b) The following information shall be reported in the track and trace system for each harvest batch:

- (2) A cannabis waste management plan developed in accordance with section 17223.

##### CCR, Title 4, Section 16309: Cultivation Plan Requirements

(a) Licensed cultivators shall establish and maintain a cultivation plan that includes all of the following:

- (2) The weight of cannabis waste associated with each harvested plant.

##### CCR, Title 4, Section 16311: Supplemental Water Source Information

The following information shall be provided for each water source identified by the applicant:

(a) Retail water supply sources:

- (1) If the water source is a retail water supplier, as defined in section 13575 of the Water Code, such as a municipal provider, provide the following:

- (A) Name of the retail water supplier; and

- (B) A copy of the most recent water service bill or written documentation from the water supplier stating that service will be provided at the premises address.

- (2) If the water source is a small retail water supplier, such as a delivery service, and is subject to section 26060.1(a)(1)(B) of the Business and Professions Code and the retail water supplier contract is for delivery or pickup of water from a surface water body or an underground stream flowing in a known and definite channel, provide all of the following:
- (A) The name of the retail water supplier under the contract;
  - (B) The water source and geographic location coordinates, in either latitude and longitude or the California Coordinate System, of any point of diversion used by the retail water supplier to divert water delivered to the commercial cannabis business under the contract;
  - (C) The authorized place of use of any water right used by the retail water supplier to divert water delivered to the commercial cannabis business under the contract;
  - (D) The maximum amount of water delivered to the commercial cannabis business for cannabis cultivation in any year; and
  - (E) A copy of the most recent water service bill.
- (3) If the water source is a small retail water supplier, such as a delivery service, and is subject to section 26060.1(a)(1)(B) of the Business and Professions Code and the retail water supplier contract is for delivery or pickup of water from a groundwater well, provide all of the following:
- (A) The name of the retail water supplier under the contract;
  - (B) The geographic location coordinates for any groundwater well used to supply water delivered to the commercial cannabis business, in either latitude and longitude or the California Coordinate System;
  - (C) The maximum amount of water delivered to the commercial cannabis business for cannabis cultivation in any year;
  - (D) A copy of the well completion report filed with the Department of Water Resources pursuant to section 13751 of the Water Code for each percolating groundwater well used to divert water delivered to the commercial cannabis business. If no well completion report is available, the applicant shall provide evidence from the Department of Water Resources indicating that the Department of Water Resources does not have a record of the well completion report. When no well completion report is available, the State Water Resources Control Board may request additional information about the well; and
  - (E) A copy of the most recent water service bill.
- (b) If the water source is a groundwater well, provide the following:
- (1) The groundwater well's geographic location coordinates, in either latitude and longitude or the California Coordinate System; and
  - (2) A copy of the well completion report filed with the Department of Water Resources pursuant to section 13751 of the Water Code. If no well completion report is available, the applicant shall provide evidence from the Department of Water Resources indicating that the Department of Water Resources does not have a record of the well completion report. If no well completion report is available, the State Water Resources Control Board may request additional information about the well.



- (c) If the water source is a rainwater catchment system, provide the following:
- (1) The total square footage of the catchment footprint area(s).
  - (2) The total storage capacity, in gallons, of the catchment system(s).
  - (3) A detailed description and photographs of the rainwater catchment system infrastructure, including the location, size, and type of all surface areas that collect rainwater. Examples of rainwater collection surface areas include a rooftop and greenhouse.
  - (4) Geographic location coordinates of the rainwater catchment infrastructure in either latitude and longitude or the California Coordinate System.
- (d) If the water source is a diversion from a waterbody (such as a river, stream, creek, pond, lake, etc.), provide any applicable water right statement, application, permit, license, or small irrigation use registration identification number(s), and a copy of any applicable statement, registration certificate, permit, license, or proof of a pending application issued under part 2 (commencing with section 1200) of division 2 of the California Water Code as evidence of approval of a water diversion by the State Water Resources Control Board.

CCR, Title 4, Section 17223: Waste Management

- (a) A licensee shall dispose of all waste in accordance with the Public Resources Code and any other applicable state and local laws. It is the responsibility of the licensee to properly evaluate waste to determine if it should be designated and handled as a hazardous waste, as defined in Public Resources Code section 40141.
- (b) A licensee shall establish and implement a written cannabis waste management plan that describes the method or methods by which the licensee will dispose of cannabis waste, as applicable to the licensee's activities. A licensee shall dispose of cannabis waste using only the following methods:
- (1) On-premises composting of cannabis waste.
  - (2) Collection and processing of cannabis waste by a local agency, a waste hauler franchised or contracted by a local agency, or a private waste hauler permitted by a local agency in conjunction with a regular organic waste collection route.
  - (3) Self-haul cannabis waste to one or more of the following:
    - (A) A staffed, fully permitted solid waste landfill or transformation facility;
    - (B) A staffed, fully permitted composting facility or staffed composting operation;
    - (C) A staffed, fully permitted in-vessel digestion facility or staffed in-vessel digestion operation;
    - (D) A staffed, fully permitted transfer/processing facility or staffed transfer/processing operation;
    - (E) A staffed, fully permitted chip and grind operation or facility; or
    - (F) A recycling center as defined in title 14, California Code of Regulations, section 17402.5(d) that meets the following:
      - (i) The cannabis waste received shall contain at least ninety (90) percent inorganic material;

- (ii) The inorganic portion of the cannabis waste is recycled into new, reused, or reconstituted products that meet the quality standards necessary to be used in the marketplace; and
  - (iii) The organic portion of the cannabis waste shall be sent to a facility or operation identified in subsections (b)(3)(A)-(E).
- (4) Reintroduction of cannabis waste back into agricultural operation through on-premises organic waste recycling methods including, but not limited to, tilling directly into agricultural land and no-till farming.
- (c) The licensee shall maintain any cannabis waste in a secured waste receptacle or secured area on the licensed premises until the time of disposal. Physical access to the receptacle or area shall be restricted to the licensee, employees of the licensee, the local agency, waste hauler franchised or contracted by the local agency, or private waste hauler permitted by the local agency only. Nothing in this subsection prohibits licensees from using a shared waste receptacle or area with other licensees, provided that the shared waste receptacle or area is secured and access is limited as required by this subsection.
  - (d) A licensee that disposes of waste through an entity described in subsection (b)(2) shall do all of the following:
    - (1) Maintain and make available to the Department upon request the business name, address, contact person, and contact phone number of the entity hauling the waste; and
    - (2) Obtain documentation from the entity hauling the waste that evidences subscription to a waste collection service.

#### State Water Resources Control Board—Cannabis Cultivation Policy

Attachment A of State Water Resources Control Board (SWRCB) Order WQ 2023-0102-DWQ establishes surface water diversion standards that are designed to protect surface water flow conditions and associated aquatic resources under section 3, “Numeric and Narrative Instream Flow Requirements.” The reader is referred to Section 3.10, “Hydrology and Water Quality,” for a further discussion of the Numeric and Narrative Instream Flow Requirements.

SWRCB’s cannabis cultivation policy provides requirements for the treatment of wastewater associated with indoor cannabis cultivation as well as wastewater created from the processing of cannabis (as defined in Attachment A of SWRCB Order WQ 2023-0102-DWQ as industrial wastewater). Indoor cannabis cultivation structure must either: (1) discharge all industrial wastewaters generated to a permitted wastewater treatment collection system and facility that accepts cannabis cultivation wastewater, or (2) collect all industrial wastewater in an appropriate storage container to be stored and properly disposed of by a permitted wastewater hauler at a permitted wastewater treatment facility that accepts cannabis cultivation wastewater (Term 38 of Attachment A, Section 1 of SWRCB Order WQ 2023-0102-DWQ). Term 27 of Attachment A of SWRCB Order WQ 2023-0102-DWQ prohibits discharges of wastewater from cannabis manufacturing activities defined in Business and Professions Code section 26100, indoor grow operations, or other industrial wastewater to an onsite wastewater treatment system (e.g., septic tank and associated disposal facilities), to surface water, or to land.

#### California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989 (Assembly Bill (AB) 939, Chapter 1095, Statutes of 1989) requires state, county, and local governments to substantially decrease the volume of waste disposed of at landfills by 2000 and beyond. The act requires

each county to submit an integrated waste management plan that includes an adopted source reduction and recycling element from each of its cities, as well as a county-prepared source reeducation and recycling element for the unincorporated area. The element identifies existing and future quantities and types of solid waste, an inventory of existing disposal sites, a determination of the plan's economic feasibility, enforcement programs, and implementation schedule.

Senate Bill (SB) 1383 (Chapter 395, Statutes of 2016) and AB 1826 (Chapter 727, Statutes of 2014) have established additional waste reductions for organic waste. SB 1383 was placed in code and requires 50-percent reduction in organic waste levels in landfills from 2014 levels by 2020 and 75-percent reduction by 2025. AB 1826 requires businesses to recycle organic waste and requires local jurisdictions to implement an organic waste recycling program to divert organic waste generated by businesses.

## LOCAL

### Mendocino County General Plan

The following policies related to utilities and service systems included in the Mendocino County General Plan Development Element (Mendocino County 2020) are applicable to the project:

- ▶ **Policy DE-197:** Land use plans and development shall minimize impacts to the quality or quantity of drinking water supplies.
- ▶ **Policy DE-212:** All development projects shall include plans and facilities to store and manage solid waste and hazardous materials and wastes in a safe and environmentally sound manner.

### Brooktrails Township Specific Plan

The Specific Plan Element of the Brooktrails Township Specific Plan contains the following policies related to utilities and service systems (Mendocino County 2002):

#### Chapter 7, "Community Facilities and Services"

- ▶ **Solid Waste Policy FS-7.2-2A:** Promote recycling of consumer and business waste to reduce landfill requirements and lengthen service of existing landfills, and to meet mandatory waste stream reduction requirements established by State law.
- ▶ **Utilities Policy FS-7.3-1B:** Promote water conservation through the use of water saving devices and incentive rates in residences and businesses.

### Ukiah Valley Area Plan

The Water Management Element of the Ukiah Valley Area Plan contains the following policies related to utilities and service system (Mendocino County 2011):

#### Section 6, "Water Management"

- ▶ **Policy WM1.2:** Protect and enhance quality of the Valley's groundwater system and long-term sustained yield.
- ▶ **Policy WM2.2:** Require proof of water before approving development projects.
- ▶ **Policy WM4.2:** Protect water supplies from adverse impacts.

### Mendocino Solid Waste Management Authority

The Mendocino Solid Waste Management Authority, a joint powers agency formed in 1990 by the County and the Cities of Fort Bragg, Ukiah, and Willits is the solid waste department for Mendocino County and is dedicated to providing responsible management of all types of solid waste, including recyclables, organics, and hazardous materials. It offers a range of services, from hazardous waste disposal to electronic waste recycling and provides information to the community regarding how to properly handle and dispose of various materials. The Mendocino Solid Waste Management Authority identifies a number of transfer stations, recycling processing facilities, and composting facilities that are necessary to implement each jurisdiction's waste diversion goals (Mendocino County 2023).

### Mendocino County Code of Ordinances

Section 16.04.030 of the Mendocino County Code of Ordinances requires that a permit be obtained to construct, repair, or destroy any well. Section 16.04.060 of the Mendocino County Code of Ordinances requires that a State of California well completion report be submitted to the Health Department within 15 days of completion as a requirement of final approval of construction, modification, repair, or destruction. Well construction, repair, modification, or destruction is generally required to meet the standards set forth in Chapter II of the California Department of Water Resources Bulletin No. 74, "Water Well Standards."

Chapter 9.12 includes regulations related to the licensing of sewage disposal systems.

Chapter 9A.08 includes regulations related to solid waste.

### Mendocino County Cannabis Regulation

The Mendocino County Cannabis Regulation (MCCR) contains the following requirements related to utilities and service systems:

#### Section 10A.17.070: Requirements for All Cannabis Cultivation Business Licenses

(H) CCBL Holders shall comply with all statutes, regulations and requirements of the California State Water Resources Control Board, Division of Water Rights, including obtaining and complying with any applicable and approved permit, license, or registration, and the annual filing of a statement of diversion and use of surface water from a stream, river, underground stream, or other watercourse pursuant to Water Code section 5101.

#### Section 10A.17.080: CCBL Phases and Requirements Specific to Each Phase

(B) Requirements specific to Phase One CCBL's.

(3) Relocation. Persons able to show proof of prior cultivation pursuant to paragraph (B)(1) above may apply for a CCBL not on the site previously cultivated (the "origin site") but on a different legal parcel (the "destination site"), subject to the following requirements:

(d) Unless the destination site is within the Agricultural zoning district, the application shall include either a water availability analysis pursuant to paragraph (C)(1)(b) below or a will serve letter pursuant to paragraph (C)(1)(c) below.

(C) Requirements specific to Phase Three CCBL's.

(1) Watershed Assessment. All CCBL applications, except for legal parcels located in the Agricultural (A-G) zoning district, shall demonstrate there is adequate water to serve the cultivation site:

- (a) If surface water (or groundwater influenced by surface water) will be used, applicants may demonstrate that there is adequate water by providing (i) a watershed assessment that establishes there is sufficient watershed supply to serve the proposed cultivation site and existing uses within the watershed, and (ii) a water right exists to serve the cultivation site. A watershed assessment shall consist of an established "In Stream Flow Policy" as prepared by the State Water Resources Control Board Division of Water Rights or an equivalent document approved by that agency.
- (b) If groundwater not influenced by surface water will be used, the applicant may demonstrate that there is adequate water by providing a water availability analysis which will address the adequacy of the proposed water supply, the direct effects on adjacent and surrounding water users, and possible cumulative adverse impacts of the development on the water supply within the watershed and show there is a sustained yield to support the proposed level of use.
- (c) If water will be provided by a mutual water company, municipal or private utility or similar community provider, the applicant may demonstrate that there is adequate water by providing a will serve letter from the proposed provider.

#### Section 10A.17.090: CCBL Application and Zoning Review

- (E) A cultivation and operations plan which includes elements that meet or exceed the minimum legal standards for the following: water storage, conservation and use; drainage, runoff and erosion control; watershed and habitat protection; and proper storage of fertilizers, pesticides and other regulated products to be used on the legal parcel. The plan will also provide a description of cultivation activities including, but not limited to, permit type, cultivation area, soil/media importation and management, the approximate date(s) of all cannabis cultivation activities that have been conducted on the legal parcel prior to the effective date of this ordinance, and schedule of activities during each month of the growing and harvesting season. The cultivation and operations plan shall also include the following:
- (4) A description of the legal water source for the cultivation site and an irrigation plan and projected water usage for the proposed cultivation activities.
  - (5) If water or sewer services to the cultivation site will be provided by a community provider, a will-serve letter from the provider indicating adequate capacity to serve the cultivation site.
  - (7) A statement describing the handling of waste discharge from the grow location of items including, but not limited to nutrients, spent growing media, un-used containers and other associated hardware, supplies, and garbage.

### 3.16.2 Environmental Setting

#### WASTEWATER

Wastewater services in Mendocino County are primarily provided by on-site facilities, such as septic tanks and leach field systems. Municipal wastewater treatment services are available in the larger communities of Brooktrails, Covelo, Gualala, Hopland, Mendocino, Fort Bragg, Willits, Ukiah, and Point Arena. These systems are described as follows.

### Public Wastewater Systems

The Brooktrails Community Service District (CSD) owns, operates, and maintains a public wastewater collection system and receives wastewater treatment and disposal services from the City of Willits at an allowable volume of effluent of 0.49 million gallons per day (MGD). The CSD's wastewater collection system serves a total of 1,435 connections, including 1,434 in Brooktrails Township and one connection to the City of Willits for the Willits Municipal Airport. In 2018, Brooktrails CSD's average daily flow volume of effluent to the City's Wastewater Treatment Plant was 0.28 MGD (Mendocino LAFCo 2019a). The City of Willits WWTP provides service to the City of Willits, Brooktrails Township, Meadowbrook subdivision, and Sherwood Valley Rancheria. The system contains approximately 22 miles of pipe ranging from 4 to 24 inches in diameter (City of Willits 2016).

The Covelo CSD provides sewer service to approximately 348 active connections. The District's WWTP is located just outside the District's boundary to the southeast, adjacent to Town Creek immediately upstream from its confluence with Grist Creek. The current capacity of the wastewater treatment plant is 70,000 gallons per day (gpd) (Mendocino LAFCo 2021).

The Gualala CSD provides a communitywide wastewater system to the Gualala area. The wastewater system was designed to serve existing development and provide for additional growth in the surrounding area. The WWTP currently services Service Zones 1 and 2 of Gualala and the North portion of Sea Ranch. The Gualala CSD currently provides service to 428 active connections (Mendocino LAFCo 2014).

The Hopland Public Utilities District (HPUD) owns and operates a wastewater treatment facility (WWTF) that provides wastewater treatment and disposal for the community of Hopland. HPUD has 274 active sewer connections. Average daily flow is 45,000 gpd, while capacity is 90,000 gpd. The peak daily flow capacity is 220,000 (Mendocino LAFCo 2016).

The Mendocino City CSD operates the Mendocino Sewerage System and provides wastewater service to residential and commercial uses in the town of Mendocino and surrounding communities. The Mendocino City CSD's WWTP has a capacity of 1,500 equivalent single dwellings (Mendocino LAFCo 2020).

Wastewater services in the City of Ukiah and the Ukiah Valley are provided by both the City of Ukiah and the Ukiah Valley Sanitation District, which operate together under a participation agreement and is treated by its own wastewater treatment plant (Ukiah Valley Sanitation District 2021).

### Private Wastewater Systems

On-site systems provide sewage treatment for a majority of the housing units in Mendocino County. The type of sewage system used depends on the location, soil porosity, and groundwater level on the property. There are four facilities that accept private septage, and additional capacity is available at each facility (Mendocino County 2008) (Table 3.16-1).

**Table 3.16-1 Septage Capacities of Wastewater Treatment Plants in Mendocino County**

Facility	Daily Septage Capacity (gallons)
Fort Bragg City Wastewater Treatment Plant	1,000,000
Hopland Public Utilities District Wastewater Treatment Facility	90,000
Ukiah City Wastewater Treatment Plant	3,000,100
Willits Wastewater Treatment Plant	7,000,000

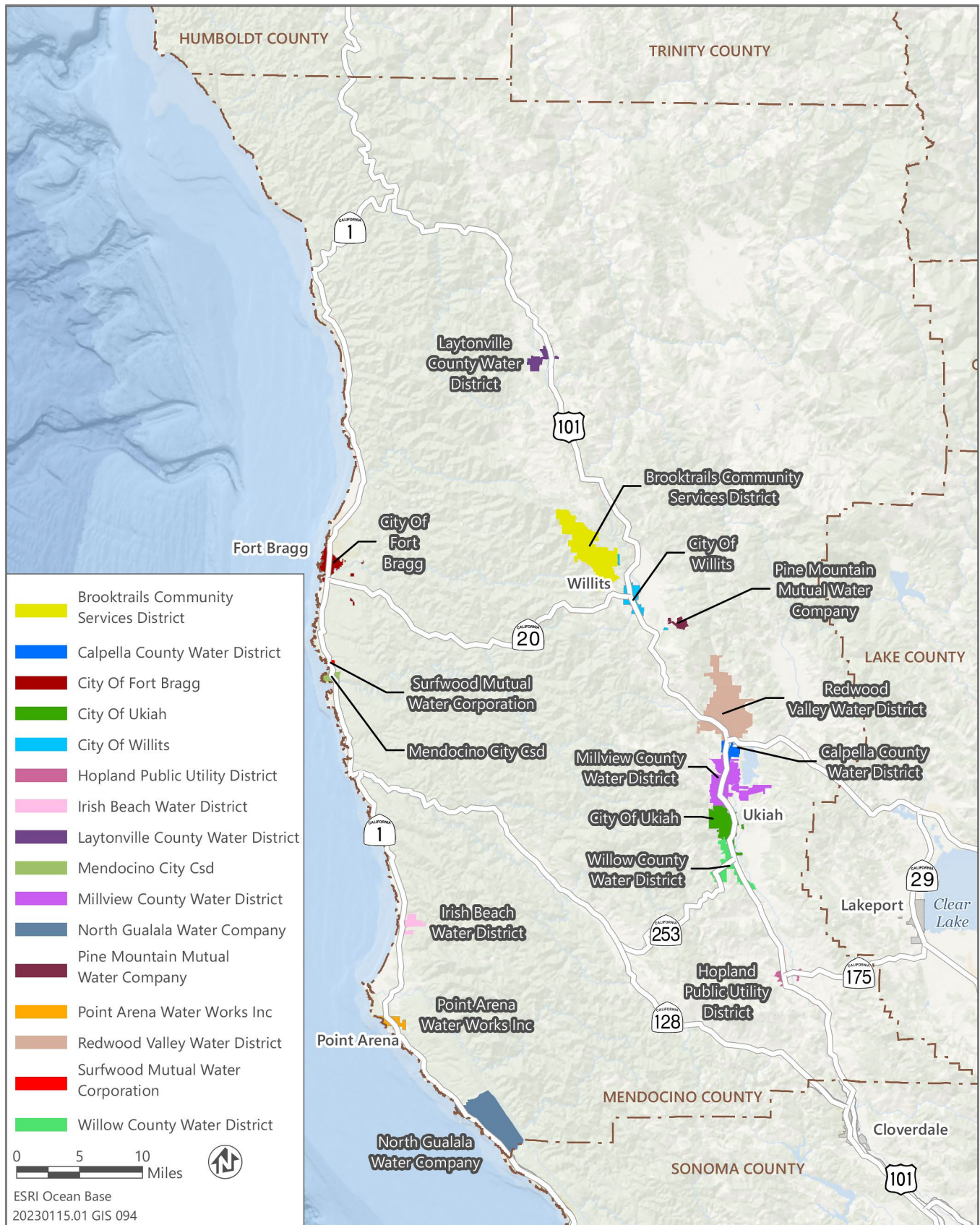
Sources: Mendocino LAFCo 2016, 2017, 2019b, 2022.

## WATER

Water service in much of Mendocino County is provided by on-site methods, such as groundwater wells and springs. There are 125 public/municipal water systems that serve the County; however, only purveyors identified below provide water to 100 or more service connections, including three campgrounds (Mendocino County 2008). These water service providers have a total supply of 12,729.4 acre-feet annually (Mendocino LAFCo 2023). The service area of these providers is illustrated in Figure 3.16-1. These community water systems include:

- ▶ Brooktrails Township CSD
- ▶ Calpella County Water District
- ▶ City of Fort Bragg
- ▶ City of Ukiah
- ▶ City of Willits
- ▶ Hopland Public Utilities District
- ▶ Irish Beach Water District
- ▶ Laytonville Community Water District
- ▶ Mendocino City CSD
- ▶ Millview County Water District
- ▶ North Gualala Water Company
- ▶ Pine Mountain Mutual Water Corporation
- ▶ Point Arena Water Works
- ▶ Redwood Valley County Water District
- ▶ Ridgewood Water System
- ▶ Surfwood Mutual Water Corporation
- ▶ Willow County Water District

Rural areas outside of water systems procure water from surface diversions and groundwater wells. Groundwater supplies in the mountainous areas cover most of the County. The reader is referred to Section 3.10, "Hydrology and Water Quality," for a further discussion of drainage and water resources.



Source: Data received from Mendocino County in 2023; adapted by Ascent in 2024.

**Figure 3.16-1 Water Service Providers**



## SOLID WASTE DISPOSAL

Mendocino County contains 10 transfer stations: Albion Transfer Station, Boonville Transfer Station, Caspar Transfer Station, Covelo Transfer Station, Laytonville Transfer Station, Potter Valley Transfer Station, South Coast Transfer Station, Ukiah Transfer Station, Westport Transfer Station, and Willits Transfer Station (Mendocino County 2023). Currently, no landfills operate in the County. Solid waste generated in the County is exported for disposal across nine different landfills through transfer stations located in surrounding counties (Mendocino County 2008). Table 3.16-2 shows the maximum permitted capacity at each of the County's transfer stations.

**Table 3.16-2 Transfer Station Solid Waste Disposal Capacity**

Solid Waste Transfer Facility	Max. Permitted Capacity (cubic yards/day)
Albion Transfer Station	99
Boonville Transfer Station	55
Caspar Transfer Station	19
Covelo Transfer Station	11
Laytonville Transfer Station	40
Potter Valley Transfer Station	99
South Coast Transfer Station	179
Ukiah Transfer Station	286
Westport Transfer Station	16
Willits Transfer Station	1,800

Sources: CalRecycle 2019a, 2019b, 2019c, 2019d, 2019e, 2019f, 2019g, 2019h, 2019i, 2019j.

## ENERGY AND NATURAL GAS

All residents and businesses in Mendocino County, except those in Ukiah, receive electric service from Pacific Gas and Electric Company (PG&E). PG&E maintains transmission lines throughout the County. Ukiah Public Utilities, the only municipal utility in Mendocino County, provides electricity to approximately 15,000 residential and business customers in the City of Ukiah, including county facilities in the city. The City of Ukiah also owns a hydroelectric power facility at Coyote Dam/Lake Mendocino designed to produce 3 megawatts (about 10 percent of the city's load) of power when water flows are adequate. The utility purchases the remainder of its power through the Northern California Power Association, a joint powers agency comprised of 13 municipal and other public agencies (Mendocino County 2020). PG&E also provides natural gas to southeast Mendocino County via its pipeline along the US 101 corridor from the Sonoma County line to Willits. Throughout the County, a number of private businesses maintain large-volume propane gas containers to supply households and businesses. In addition to these sources, some homes and businesses in Mendocino County are self-powered through other means, such as solar electricity (Mendocino County 2020).

### 3.16.3 Environmental Impacts and Mitigation Measures

#### METHODOLOGY

The analysis of potential impacts on utilities and service systems resulting from project implementation is based on a review of available data and information obtained from license applications for commercial cannabis cultivation operations. The reader is referred to Section 3.10, "Hydrology and Water Quality," for a discussion related to methods and assumptions to determine water supply demands for commercial cannabis cultivation uses, as well as an evaluation of groundwater resource impacts.

#### THRESHOLDS OF SIGNIFICANCE

A utilities and service systems impact would be significant if implementation of the project would:

- ▶ Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
- ▶ Result in a determination by the water provider that serves or may serve the project that it has insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;
- ▶ Result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand, in addition to the provider's existing commitments;
- ▶ Generate solid waste in excess of state or local standards or in excess of the capacity of local infrastructure;
- ▶ Fail to comply with federal, state, or local management and reduction statutes and regulations related to solid waste.

#### ISSUES NOT DISCUSSED FURTHER

##### Water, Wastewater, Drainage, Energy, and Telecommunication Infrastructure

Continued operation of existing provisionally licensed commercial cannabis cultivation sites transitioning to annual licensure would not create new or additional water, wastewater, drainage, energy, or telecommunication infrastructure impacts, as existing structures and operations are not anticipated to be altered through the annual licensing process. Thus, no impact would occur.

Potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations may construct and/or improve water, wastewater, stormwater drainage, electric power, natural gas (where available), and telecommunication facilities as needed based on site-specific conditions. Extension of these infrastructure facilities are expected to be limited as they are generally available along roadway frontage of the parcels or may be accommodated on the site (e.g., drainage ditches, detention basins, solar energy generation). The potential environmental impacts of extending infrastructure off-site could be evaluated as part of

subsequent license application review by Mendocino County and DCC. However, the overall environmental impacts for construction and operation of commercial cannabis uses (including those related to infrastructure facilities) have been programmatically evaluated in this EIR. The reader is referred to Section 3.6, “Energy,” for energy use impacts and Section 3.10, “Hydrology and Water Quality,” for drainage and water quality impacts. This issue is not further evaluated.

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Impact 3.16-1: Increase Demand on Wastewater Treatment Systems

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Continued operation of existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could result in increased wastewater service demand for public wastewater systems that may not have adequate treatment capacity. Wastewater septage capacity in the County is shown in Table 3.16-1. Commercial cannabis cultivation uses could generate wastewater that may contain contaminants, such as residual pesticides and herbicides, that cannot be adequately treated by existing public wastewater treatment systems. Pursuant to SWRCB Order WQ 2023-0102-DWQ, all cannabis wastewater must be disposed either through a connection to a permitted wastewater treatment collection system that accepts cannabis wastewater or collected in storage tanks and disposed of by a permitted wastewater handler at a permitted wastewater treatment facility that accepts cannabis wastewater. The MCCR also requires verification of wastewater service. This impact would be **less than significant**.

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Licensed commercial cannabis cultivation sites would require wastewater services for domestic wastewater and cannabis wastewater from processing activities. Wastewater service would be provided using on-site systems, such as septic tanks, or connecting to a municipal wastewater treatment plant or facility. As described in Section 3.16.1, “Regulatory Setting,” cannabis processing wastewater is defined as “industrial wastewater” under Attachment A of SWRCB Order WQ 2023-0102-DWQ. Term 27 of Attachment A, Section 1 of SWRCB Order WQ 2023-0102-DWQ prohibits discharges of wastewater from cannabis manufacturing activities defined in Business and Professions Code section 26100, indoor grow operations, or other industrial wastewater to an onsite wastewater treatment system (e.g., septic tank and associated disposal facilities), to surface water, or to land. In addition, indoor commercial cannabis cultivation structure must either: (1) discharge all industrial wastewaters generated to a permitted wastewater treatment collection system and facility that accepts cannabis cultivation wastewater; or (2) collect all industrial wastewater in an appropriate storage container to be stored and properly disposed of by a permitted wastewater hauler at a permitted wastewater treatment facility that accepts cannabis cultivation wastewater (Term 38 of Attachment A, Section 1 of SWRCB Order WQ 2023-0102-DWQ). New licensed commercial cannabis cultivation operations would be required to receive approval for an individual septic facility and comply with the standards set forth in the County Code of Ordinances section 9.12.080, as well as SWRCB Order WQ 2023-0102-DWQ, and MCCR section 10A.17.090(E)(5) that requires a will-serve confirmation from wastewater service providers. The reader is referred to Section 3.7, “Geology, Soils, and Mineral Resources,” for a further analysis of on-site domestic wastewater disposal.

### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution operations transitioning to annual licensure would not create new or additional wastewater treatment impacts as existing structures and operations are not anticipated to be significantly altered through the annual licensing process. Existing provisionally licensed sites are required to continue to comply with Terms 27 and 38 of Attachment A, Section 1 of SWRCB Order WQ 2023-0102-DWQ that address the proper disposal of cannabis wastewater. For these reasons, this impact would be less than significant for existing provisionally licensed sites would retain the extent of their existing licensed commercial cannabis cultivation.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. Expansion of existing commercial cannabis cultivation sites would still be required to comply with MCCR section 10A.17.090(E)(5) which requires that a will-serve letter from the provider be provided indicating that there is adequate capacity to serve the commercial cannabis cultivation site. The MCCR also limits commercial cannabis cultivation and nursery sites to 22,000 square feet of commercial cannabis canopy per site that would apply to expanded commercial cannabis cultivation sites. Thus, impacts associated with existing provisionally licensed commercial cannabis cultivation operations would be less than significant.

### Future Licensed Sites

New licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would be required to receive approval for an individual septic facility and comply with the standards set forth in the County Code of Ordinances section 9.12.080 and MCCR section 10A.17.090(E)(5) that requires will-serve confirmation from wastewater service providers. New licensed commercial cannabis cultivation sites would also be prohibited from discharging cannabis wastewater into on-site wastewater treatment systems (Term 27 of Attachment A, Section 1 of SWRCB Order WQ 2023-0102-DWQ) and indoor cannabis cultivation uses would be through a connection to a permitted wastewater treatment collection system that accepts cannabis wastewater. If the permitted wastewater treatment collection system cannot accept cannabis wastewater, the indoor commercial cannabis cultivation and processing operation must collect the cannabis wastewater in storage tanks and disposed of by a permitted wastewater handler at a permitted wastewater treatment facility that accepts cannabis wastewater (Term 38 of Attachment A, Section 1 of SWRCB Order WQ 2023-0102-DWQ). Compliance with these standards would ensure that wastewater generated by new licensed commercial cannabis cultivation sites is treated properly. Thus, this impact is less than significant.

### Summary

Existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites would be subject to wastewater handling and capacity requirements County Code of Ordinances section 9.12.080 and MCCR section 10A.17.090(E)(5) Terms 27 and 38 of Attachment A of SWRCB Order WQ 2023-0102-DWQ. Thus, this impact would be **less than significant**.

### Mitigation Measures

No mitigation is required for this impact.

### Impact 3.16-2: Increase Demand for Water Supplies

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Operation of existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would increase water demand in the County. SWRCB Order WQ 2023-0102-DWQ instream flow requirements and surface water diversion forbearance during dry months address surface water diversion impacts of licensed commercial cannabis cultivation uses, while the MCCR requires identification and verification of water supply source to be used. This impact would be **less than significant**.

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Licensed commercial cannabis cultivation sites would require water supply for irrigation and operational demands. As identified in Impact 3.10-2 in Section 3.10, “Hydrology and Water Quality,” it is estimated that the existing 623 licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations have a total water demand of approximately 387 acre-feet per year. Outdoor commercial cannabis cultivation, which includes a significant portion of existing provisionally licensed commercial cannabis cultivation sites, is considered to be a low water demand crop compared to other popular crops in the area, including but not limited to field crops, fruit and nut crops, and grapes/wine grapes (Yolo County 2019). As described in Section 3.16.2, “Environmental Setting,” and Section 3.10, “Hydrology and Water Quality,” available water supply sources in the County include surface water diversions, groundwater, and municipal water service for a variety of service providers located in the County. As described in Section 3.16.1, “Regulatory Setting,” licensed commercial cannabis cultivation uses are subject to the following regulations regarding water supply:

- ▶ CCR, title 4, section 16311 that requires documentation of water supply sources to be used to be provided to the DCC.
- ▶ SWRCB Order WQ 2023-0102-DWQ Attachment A establishes surface water diversion standards that are designed to protect surface water flow conditions and associated aquatic resources under Section 3, Numeric and Narrative Instream Flow Requirements.
- ▶ MCCR section 10A.17.070(H) that requires compliance with SWRCB water diversion standards.
- ▶ MCCR section 10A.17.080(B) and (C) that require water availability analyses with the exception of sites located in agricultural zoning.
- ▶ MCCR section 10A.17.090(E) requires the identification of a legal water source.

The reader is referred to Section 3.10, “Hydrology and Water Quality,” for a further analysis of groundwater resources and impacts.

#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual licensure would not result in additional impacts to water supply as operations are not anticipated to be significantly altered through the annual licensing process. Existing provisionally licensed commercial cannabis cultivation sites would be required to continue to comply with SWRCB Order WQ 2023-0102-DWQ Attachment A, section 3 (Numeric and Narrative Instream Flow Requirements) For these reasons, this impact would be less than

significant for existing provisionally licensed sites would retain the extent of their existing licensed commercial cannabis cultivation.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. Expansion of existing commercial cannabis cultivation sites would still be required to comply with MCCR section 10A.17.080(C) which requires a watershed assessment, that demonstrates that there is adequate water supply from either surface water (or groundwater) or from a mutual water company, or municipal or private utility community provider. The MCCR also limits commercial cannabis cultivation and nursery sites to 22,000 square feet of commercial cannabis canopy per site that would apply to expanded commercial cannabis cultivation sites. Thus, impacts associated with existing provisionally licensed commercial cannabis cultivation operations would be less than significant.

### Future Licensed Sites

As shown in Table 3.10-8 in Section 3.10, "Hydrology and Water Quality," new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only uses are estimated to generate approximately 672.08 acre-feet per year of water demand. It is unknown what amount of this projected water demand would be met by surface water, groundwater, or municipal water sources. Future new licensed commercial cannabis cultivation sites would be subject to the water supply documentation, verification of adequate source of supply, and use restrictions requirements provided under CCR, title 4, section 16311, SWRCB Order WQ 2023-0102-DWQ Attachment A, section 3 (Numeric and Narrative Instream Flow Requirements) and MCCR sections 10A.17.070(H), 10A.17.080(B), and 10A.17.090(E).

As described in Impact 3.10-2, groundwater levels in the County are generally stable and, with the exception of the Ukiah Valley Basin described further below, are not subject to groundwater sustainability plans (GSPs). The Ukiah Valley Basin GSP identifies groundwater sustainable yield of 6,500 acre-feet annually, which factor approximately 5,983 acre-feet annually of groundwater pumping from municipal and agricultural uses (Ukiah Valley Basin Groundwater Sustainability Agency 2021). In Water Year 2022, a total of 5,423 acre-feet of groundwater was produced from the Ukiah Valley Groundwater Basin, 4,275 acre-feet of which were pumped by municipal and agricultural users (Ukiah Valley Basin Groundwater Sustainability Agency 2023). The projected water demand for all future new licensed commercial cannabis cultivation sites (672.08 acre-feet per year) would be within the remaining sustainable yield (note that siting of all new commercial cannabis cultivation uses is not anticipated to occur solely within the Ukiah Valley Groundwater Basin). Thus, no groundwater supply impacts would be less than significant.

As identified in Section 3.16.2, "Environmental Setting," the larger municipal water service providers in the County have a total supply of 12,729.4 acre-feet annually (Mendocino LAFCo 2023). Depending on individual municipal water service provider capacity and verification (as required under the MCCR), this water could be available to new licensed commercial cannabis cultivation sites. Thus, impacts to municipal water systems would be less than significant.

Surface water use by future new licensed commercial cannabis cultivation sites would be required to comply with MCCR section 10A.17.080(C) that requires a watershed assessment for all surface water or groundwater influenced by surface water as well as the requirements under SWRCB Order WQ 2023-0102-DWQ Attachment A section 3, (Numeric and Narrative Instream Flow Requirements). SWRCB's flow standards and diversion requirements were

developed to protect fish spawning, migration, and rearing for endangered anadromous salmonids, and flows needed to maintain natural flow conditions within each watershed. The diversion requirements would ensure that the individual and cumulative effects of water diversions and discharges associated with commercial cannabis cultivation do not affect instream flows necessary for fish spawning, migration, and rearing for endangered anadromous salmonids, and flows needed to maintain natural flow variability (SWRCB 2017a). The policy was scientifically peer-reviewed by four experts. The peer review determined that water quality, instream flow, and diversion requirements of the policy were based on sound scientific knowledge, methods, and data (SWRCB 2017b). Thus, impacts to surface water resources would be less than significant.

### Summary

Existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites would be subject to the water supply documentation, verification of adequate source of supply, and use restrictions requirements provided under CCR, title 4, section 16311, SWRCB Order WQ 2023-0102-DWQ Attachment A, section 3 (Numeric and Narrative Instream Flow Requirements) and MCCR sections 10A.17.070(H), 10A.17.080(B), and 10A.17.090(E). Given these regulations and the documented availability of water resources available, this impact would be **less than significant**.

### Mitigation Measures

No mitigation is required for this impact.

### Impact 3.16-3: Generate Amounts of Solid Waste in Excess of Infrastructure, Violate Existing Statutes Related to Solid Waste, or Result in Adverse Environmental Effects

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Operation of existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would generate solid waste from cannabis plant and product waste, as well as non-cannabis waste (e.g., vegetation clearing and waste associated with pesticide use). Consistent with state commercial cannabis licensing regulations, licensees must maintain accurate and comprehensive records regarding cannabis waste that account for, reconcile, and provide evidence for all activity related to the generation and disposition of cannabis waste. Waste management plans and other regulations would ensure that solid waste (cannabis and non-cannabis waste) that is hauled off-site is disposed of properly. In addition, implementation of a cannabis waste management plan, as required by CCR, title 4, section 17223, would result in proper management of on-site composting of cannabis waste and prevent adverse environmental effects. This impact would be **less than significant**.

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Licensed commercial cannabis cultivation operations would generate solid waste from cannabis plant and product waste, as well as non-cannabis waste (e.g., vegetation clearing and other related solid waste). As described in Section 3.16.1, "Regulatory Setting," CCR, title 4, section 17223 requires cultivation facilities to have a cannabis waste management plan that identifies methods for managing cannabis waste, including on-premises composting, collection and processing by an agency, or self-hauling to a permitted facility. Transportation of self-hauled cannabis waste shall be performed only by the licensee or employees of the licensee. A licensee must report all cannabis waste activities, up to and including disposal, into the state's track-and-trace system. CCR, title 4, section 15049 requires that all disposed cannabis

is entered into the track-and-trace system for disposal purposes. Non-cannabis waste would be disposed of through the County's existing 10 transfer stations that would divert recyclable materials and dispose of remaining materials to available landfills.

#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and distribution transport-only operations transitioning to annual licensure would not result in additional impacts to cannabis waste and other solid waste disposal as operations are not anticipated to be significantly altered through the annual licensing process.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. Expansion of existing commercial cannabis cultivation sites would still be required to comply with CCR, title 4, section 17223 and 15049 regarding the implementation of a cannabis waste management plan and track and trace of cannabis product and materials to ensure proper transfer and disposal. The MCCR also limits commercial cannabis cultivation and nursery sites to 22,000 square feet of commercial cannabis canopy per site that would apply to expanded commercial cannabis cultivation sites. For these reasons, this impact would be less than significant for existing provisionally licensed sites would retain the extent of their existing licensed commercial cannabis cultivation.

#### Future Licensed Sites

Future new licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations would be required to comply with DCC regulations regarding the proper handling of cannabis waste through implementation of a cannabis waste management plan required under CCR, title 4, section 17223. Most licensed sites compost on-site, although licensees are allowed to self-haul cannabis waste to a fully permitted waste facility.

As noted above, several transfer station facilities in the County could accommodate non-cannabis waste. Mendocino County operates 10 transfer stations that haul to nine landfills. Additionally, based on the availability of these facilities, and compliance with CCR, title 4, section 17223 regulations, it is not expected that implementation of the project would require construction or expansion of solid waste facilities that could trigger environmental impacts.

#### Summary

Because existing and future licensed commercial cannabis cultivation sites would comply with CCR, title 4, sections 17223 and 15049, the impact related to generating solid waste in excess of infrastructure capacity, violating existing statutes related to solid waste, or resulting in adverse environmental would be **less than significant**.

#### Mitigation Measures

No mitigation is required for this impact.



## 3.17 WILDFIRE

This section evaluates the potential impacts of the project related to wildfire hazards; including an assessment of the potential increased risk of wildfire associated with project implementation and feasible mitigation measures for any significant or potentially significant impacts. Policies and regulations related to wildfire and existing wildfire hazard mapping/modeling are described.

Comment letters submitted in response to the notice of preparation (NOP) for this EIR identified issues pertaining to wildfire dangers associated with commercial cannabis cultivation sites and fire safe road regulations. Issues related to wildfire hazards associated with implementation of the project are addressed below. The potential for the project to impair emergency access is addressed in Section 3.9, "Hazards and Hazardous Materials." All comments received in response to the NOP are presented in Appendix A of this EIR.

### 3.17.1 Regulatory Setting

#### FEDERAL

##### US Forest Service

As described in Chapter 2, "Project Description," the Mendocino National Forest is located in the County. The US Forest Service (USFS) responds to fires in national forests. The Mendocino National Forest has established policies and guidelines that address wildfire (also referred to as wildland fire).

##### Mendocino National Forest Land and Resource Management Plan

The 1995 Management Plan identifies the following policies and guidelines related to fire management (USFS 1995):

1. Provide for protection from wildfire through timely detection and suppression response with appropriate forces, such that cost plus net resource loss due to wildfire is minimized. All wildfires will be contained, confined, or controlled in accordance with specific management area direction.
2. Utilize the appropriate suppression response (i.e., confine, contain, or control) for naturally occurring unplanned ignitions outside Wilderness.
3. Design fuel treatment and fire suppression strategies, practices, and activities to meet Aquatic Conservation Strategy objectives, and to minimize disturbance of riparian ground cover and vegetation. Strategies should recognize the role of fire in ecosystem function and identify those instances where fire suppression or fuel management activities could be damaging to long-term ecosystem function.
4. Locate incident bases, camps, helibases, staging areas, helispots, and other centers for incident activities outside riparian reserves. If the only suitable location for such activities is within the riparian reserve, an exemption may be granted following review and recommendation by a resource advisor. The advisor will prescribe the location, use conditions, and rehabilitation requirements. Use an interdisciplinary team to redetermine suitable incident base and helibase locations.

5. Minimize delivery of chemical retardant, foam, or additives to surface waters. An exception may be warranted in situations where immediate, overriding safety imperatives exist, or following review and recommendation by a resource advisor, when an escape would cause more long-term damage.
6. Immediately establish an emergency team to develop a rehabilitation treatment plan needed to attain Aquatic Conservation Strategy objectives whenever riparian reserves are significantly damaged by wildfire or a prescribed fire burning outside prescribed parameters.
7. Limit the size of all fires within riparian reserves. When watershed and/or landscape analysis, or province-level plans are completed and approved, some natural fires may be allowed to burn under prescribed conditions. Rapidly extinguishing smoldering coarse woody debris and duff should be considered to preserve these ecosystem elements. In riparian reserves, water drafting sites shall be located and managed to minimize adverse effects on riparian habitat and water quality as consistent with Aquatic Conservation Strategy objectives.
8. Manage fuels to reduce the potential rate of spread and fire intensity so the planned initial attack organization can meet initial attack objectives.
9. Integrate multi-resource management objectives into fire hazard reduction efforts. Design prescribed burn projects and prescriptions to contribute to attainment of Aquatic Conservation Strategy objectives.
10. Emphasize fuel management efforts for fire hazard reduction purposes in the following areas:
  - Natural Fuels: (a) continuous, mature brush stands of more than 150 acres adjacent to or within areas of urban interface, resource investments, or high fire hazards; (b) continuous, mature brush stands more than 25 years old; (c) continuous, mature brush stands with dead-to-live ratios greater than 35%; (d) forested areas with excessive accumulations of natural fuels.
  - Activity Fuels: (a) in zones of urban interface or other high fire hazard areas; (b) where treatment is necessary before initiating other multi-resource management projects, e.g., reforestation.
11. Encourage cooperative agreements with other agencies and organizations to provide cost efficient and effective fire prevention, fire detection, fuels management, and fire suppression programs. Cooperate with local landowners and local, state, and federal agencies in preparing and implementing coordinated resource plans.
12. Consider the particular needs for specific vegetative communities and sensitive plants where prescribed burning is used as a vegetation management tool (e.g., within the “shrub hardwood” type). Vary or adjust the frequency, intensity, and timing of prescribed burning proposals as necessary to protect specific vegetation types, botanical diversity, and the viability of sensitive plant species.

## STATE

### Executive Order B-52-18

On May 10, 2018, in response to the changing environmental conditions and the increased risk to California’s citizens, California Governor Brown issued Executive Order (EO) B-52-18 to

support the state's resilience to wildfire and other climate impacts; to address extensive tree mortality; increase forests' capacity for carbon capture; and to improve forest and forest fire management. EO B-52-18 requires the California Natural Resources Agency, in coordination with other agencies including the State Board of Forestry and Fire Protection, the California Department of Forestry and Fire Protection (CAL FIRE), to increase the pace and scale of fire fuel treatments on state and private lands. Moreover, EO B-52-18 calls for doubling the land actively managed through vegetation thinning, prescribed burning, and restoration from 250,000 to 500,000 acres per year to reduce wildfire risk. In order to support these efforts, a May 11, 2018, budget revision committed \$96 million in additional state funds.

#### Senate Bill 1260

On February 15, 2018, Governor Brown signed Senate Bill (SB) 1260 (Chapter 624, Statutes of 2018), which aims to help protect California communities from catastrophic wildfire by improving forest management practices to reduce the risk of wildfires in light of the changing climate. It recognizes that prescribed burning is an important tool to help mitigate and prevent the impacts of wildfire and includes provisions that encourage more frequent use of prescribed burns in managing California's forest lands. SB 1260 also includes provisions for the State Board of Forestry and Fire Protection's Vegetation Treatment Program PEIR, when certified, to serve as the programmatic environmental document for future prescribed burns in the Sierra-Cascade, central coast, and north coast regions of the state.

#### Senate Bill 901

SB 901 (Chapter 626, Statutes of 2018) boosted the budget for government fire protection efforts. CAL FIRE will oversee those funds, generally divided into two categories: \$165 million per year for fire prevention grants to landowners and for community prevention efforts, and \$35 million to continue CAL FIRE's prescribed burning, research, and monitoring. In addition, under SB 901, landowners have the ability to help reduce overgrowth by cutting down small and mid-sized trees.

#### Assembly Bill 301

Assembly Bill (AB) 301 (Chapter 104, Statutes of 2015) was enacted to amend section 4213.1 and add section 4213.2, which are related to fire prevention, to the Public Resources Code (PRC). Section 4213.1 requires CAL FIRE to notify an owner of property, through the Fire Prevention Fee billing process, that if selling the habitable structure or structures, a division of the fee may be negotiated as one of the terms of sale. Section 4213.2 of the PRC allows the owner of a property with one or more habitable structures subject to the fee, if selling the property, to negotiate a division of the fee as one of the terms of the sale. However, payment of the total fee liability remains the responsibility of the person who owns the habitable structure on July 1 of the year the fee is due.

#### Assembly Bill X1 29

AB X1 29 (Chapter 8, Statutes of 2011) was enacted to add Chapter 1.5 (commencing with Section 4210) to part 2 of Division 4 of the Public Resources Code. Existing law requires the state to have primary financial responsibility for preventing and suppressing fires within State Responsibility Areas (SRAs). An SRA is an area of the state where CAL FIRE has the primary financial responsibility for the prevention and suppression of wildland fires. AB X1 29 required the State Board of Forestry and Fire Protection to establish a regulatory program to impose a fire prevention fee for each structure on a parcel within a SRA.

## Public Resources Code

CAL FIRE is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors (PRC sections 4201-4204; Government Code sections 51175–51189). Factors that increase an area’s susceptibility to fire hazards include slope, vegetation type and condition, and atmospheric conditions. CAL FIRE has identified two types of wildland fire risk areas: (1) wildland areas that may contain substantial forest fire risks and hazards; and (2) very high fire hazard risk zones.

PRC section 4291 gives CAL FIRE the authority to enforce 100 feet of defensible space around all buildings and structures on SRA lands. PRC sections 4790 through 4799.04 provide the regulatory authority for CAL FIRE to administer the California Forest Improvement Program. PRC sections 4113 and 4125 give CAL FIRE the responsibility to prevent and extinguish wildland fires in SRAs. The PRC also includes fire safety statutes that restrict the use of equipment that may produce a spark, flame, or fire; requires the use of spark arrestors on construction equipment with internal combustion engines; specifies requirements for the safe use of gasoline-powered tools in fire hazard areas; and specifies fire suppression equipment that must be provided for various types of work in fire-prone areas.

New development located in SRAs are subject to the following requirements:

- ▶ Determination that new subdivisions are consistent with regulations adopted by the State Board of Forestry and Fire Protection pursuant to PRC sections 4290 and 4291 or are consistent with local ordinances certified by the State Board of Forestry and Fire Protection as meeting or exceeding the state regulations (CCR, title 14, section 1266.01)
- ▶ Defensible space of 100 feet around all buildings and structures (PRC section 4291; CCR, title 14, section 1299.03)
- ▶ Provision of adequate emergency access and egress (PRC sections 4290 and 4291; CCR, title 14, sections 1273.01–1273.09)
- ▶ Emergency water requirements (CCR, title 14, sections 1275.01–1275.04)
- ▶ Building signing and number requirements (PRC sections 4290 and 4291; CCR, title 14, sections 1274.01-1274.04)

## California Building Code

CCR, title 24, section 701A.3 (“New Buildings Located in Any Fire Hazard Severity Zone”) requires that new buildings located in any Fire Hazard Severity Zone within SRAs, any local agency Very-High Fire Hazard Severity Zone, or any Wildland-Urban Interface Fire Area designated by the enforcing agency for which an application for a building permit is submitted, shall comply with all the requirements of Chapter 7A. These requirements include the following design elements:

- ▶ Roofing be designed to be fire resistant and constructed to prevent the intrusion of flames and embers (CCR, title 24, section 705A);
- ▶ Attic ventilation be designed to be resistant to the intrusion of flames and embers into the attic area of the structure (CCR, title 24, section 706A);
- ▶ Exterior walls design (including vents, windows, and doors) be designed with noncombustible or ignition-resistant material and to resist the intrusion of flame and ember (CCR, title 24, sections 707A and 707A);
- ▶ Decking be designed with ignition-resistant material (CCR, title 24, section 709A); and

- ▶ Ancillary buildings and structures comply with the above provisions (CCR, title 24, section 710A).

### Board of Forestry and Fire Protection

The Board of Forestry and Fire Protection (Board) is a Governor-appointed body within CAL FIRE. It is responsible for developing the general forest policy of the state, determining the guidance policies of CAL FIRE, and representing the state's interest in federal forestland in California. Together, the Board and CAL FIRE work to carry out the California Legislature's mandate to protect and enhance the state's unique forest and wildland resources.

The Board is charged with developing policy to protect all wildland forest resources in California that are not under federal jurisdiction. These resources include major commercial and non-commercial stands of timber, areas reserved for parks and recreation, woodlands, brush-range watersheds, and all private and state lands that contribute to California's forest resource wealth. In addition, the Board is responsible for identifying Very High Hazard Severity Zones (VHFHSZ) in the SRA and in the Local Responsibility Area (LRA)—cities, urban regions, and agriculture lands where the local government is responsible for wildfire protection. Local agencies are required to designate, by ordinance, VHFHSZ and to require landowners to reduce fire hazards adjacent to occupied buildings within these zones (Government Code sections 51179 and 51182). The intent of identifying areas with very high fire hazards is to allow CAL FIRE and local agencies to develop and implement measures that would reduce the loss of life and property from uncontrolled wildfires (Government Code section 51176).

PRC sections 4114 and 4130 authorize the Board to establish a fire plan, which, among other things, determines the levels of statewide fire protection services for SRA lands. CAL FIRE's most recently adopted fire plan is the 2019 Strategic Fire Plan; CAL FIRE is currently in the process of developing a new 2024 Strategic Plan, building on the goals and objectives of the 2019 plan. The primary goals of the 2019 Strategic Fire Plan for California include both suppression efforts and fire prevention efforts (CAL FIRE 2019). Government Code section 65302.5 gives the Board the regulatory authority to evaluate General Plan safety elements for its land use policies in the SRA and VHFHSZs as well as methods and strategies for wildland fire risk reduction and prevention in those areas.

### CAL FIRE

CAL FIRE is dedicated to the fire protection and stewardship of over 31 million acres of the state's privately owned wildlands. In addition, CAL FIRE provides emergency services in 36 of the state's 58 counties via contracts with local governments. PRC section 4291 gives CAL FIRE the authority to enforce 100 feet of defensible space around all buildings and structures on nonfederal SRA lands, or non-federal forest-covered lands, brush-covered lands, grass-covered lands, or any land that is covered with flammable material. PRC sections 4790 through 4799.04 provide the regulatory authority for CAL FIRE to administer the California Forest Improvement Program. PRC sections 4113 and 4125 give CAL FIRE the responsibility for preventing and extinguishing wildland fires in the SRA (PRC sections 4113 and 4125). The PRC, beginning with Section 4427, includes fire safety statutes that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors on construction equipment with internal combustion engines; specify requirements for the safe use of gasoline-powered tools in fire hazard areas; and specify fire suppression equipment that must be provided on site for various types of work in fire-prone areas.

CAL FIRE currently implements vegetation treatments under PRC sections 4475 through 4495. PRC sections 4461 through 4471 and 4491 through 4494 authorize CAL FIRE to

implement its existing Chaparral Management Program, now known, in part, as the Vegetation Management Program (VMP). In addition, with the 2005 passage of SB 1084 (Chapter 5, Statutes of 2022), the Legislature modified, and in some cases, added language to PRC Sections 4475 through 4480 that:

- ▶ Broadened CAL FIRE's range of vegetation treatment practices beyond those described for the existing CMP and VMP;
- ▶ Added a definition of "hazardous fuel reduction;" and
- ▶ Made other changes to the major statutory provisions guiding CAL FIRE's vegetation treatment authorities.

### 2019 Strategic Fire Plan for California

The 2019 Strategic Plan prepared by CAL FIRE and the California Natural Resources Agency lays out central goals for reducing and preventing the impacts of fire in the state (CAL FIRE 2019). The goals are meant to establish, through local, state, federal, and private partnerships, a natural environment that is more resilient and human-made assets that are more resistant to the occurrence and effects of wildland fire. The goals of the 2019 Strategic Plan include: improving core capabilities; enhancing internal operations; ensuring health and safety; and building an engaged, motivated, and innovative workforce.

In addition to the 2019 Strategic Plan, individual CAL FIRE units develop fire plans, which are major strategic documents that establish a set of tools for each CAL FIRE unit for its local area. Updated annually, unit fire plans identify wildfire protection areas, initial attack success, assets and infrastructure at risk, prefire management strategies, and accountability within their unit's geographical boundaries. The unit fire plan identifies strategic areas for prefire planning and fuel treatment as defined by the people who live and work locally. The plans include contributions from local collaborators and stakeholders and are aligned with other plans for the area.

### California Fire Code

The California Fire Code (CFC) is contained within CCR, title 24. The CFC establishes requirements for development design to safeguard public health, safety, and general welfare from the hazards of fire. This includes standards on building design, materials, fire flow, and other suppression provisions. The CFC also regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The CFC and the California Building Code use a hazard classification system to determine what protective measures are required to protect life and provide fire safety. These measures may include applying construction standards, requiring separation between structures and property lines, and using specialized equipment. To ensure that these safety measures are met, the CFC employs a permit system based on hazard classification. The CFC is updated every three years. Chapter 23 of the CFC provides specific standards for the construction and operation of motor fuel dispensing facilities that includes emergency shut-off systems, leak detection, secondary containment, and fuel delivery nozzle design requirements that includes vapor recovery to avoid fire hazards.

### Emergency Response/Evacuation Plans

The State of California Emergency Plan was adopted by the Governor's Office of Emergency Services on October 1, 2017, and describes how state government mobilizes and responds to emergencies and disasters in coordination with partners in all levels of government, the private sector, non-profits, and community-based organizations. The Plan also works in conjunction with the California Emergency Services Act and outlines a robust program of emergency

preparedness, response, recovery, and mitigation for all hazards, both natural and human caused. All local governments with a certified disaster council are required to develop their own emergency operations plan (EOP) for their jurisdiction that meets state and federal requirements. Local EOPs contain specific emergency planning considerations, such as evacuation and transportation, sheltering, hazard specific planning, regional planning, public-private partnerships, and recovery planning.

### California Cannabis Cultivation Regulations

CCR, title 4, Division 19 includes the following requirements regarding wildfire:

- ▶ CCR, title 4, section 15011(a): A commercial cannabis business applying for a license to cultivate cannabis shall provide the following information:
  - (10) An attestation that the local fire department has been notified of the cultivation site if the application is for an indoor license type.

State Water Resources Control Board Regulations for Commercial Cannabis Cultivation Permitting of waste discharges to surface waters from commercial cannabis cultivation is regulated under the State Water Resources Control Board (SWRCB) Cannabis Policy under Order WQ 2023-0102-DWQ, General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities. A summary of erosion and sediment control requirements is provided below. The reader is referred to Section 3.10, “Hydrology and Water Quality,” for additional details on this order.

The Cannabis General Order provides a statewide, tiered approach for permitting discharges and threatened discharges of waste from commercial cannabis cultivation and associated activities. The two tiers are as follows:

- Tier 1 outdoor commercial cultivation activities disturb an area equal to or greater than 2,000 square feet and less than 1 acre (43,560 square feet).
- Tier 2 outdoor commercial cultivation activities disturb an area equal to or greater than 1 acre.

For the purposes of this regulation, land disturbances are areas where natural conditions have been modified in a way that may result in an increase in turbidity in water discharged from the site. Land disturbance includes all activities associated with developing or modifying land for commercial cannabis cultivation–related activities or access. Land disturbance activities consist of construction of roads, buildings, and water storage areas as well as excavation, grading, and site clearing.

Tier 1 and Tier 2 enrollees must characterize the risk designation based on the slope of disturbed areas and the proximity to a water body. Enrollees must comply with the riparian setback and slope limits associated with the following low, moderate, and high-risk classifications:

- ▶ Low risk: A commercial cannabis cultivation site is classified as low risk if no part of the disturbed area is located on a slope of 30 percent or greater. Commercial cannabis cultivators associated with low-risk sites shall register as low risk and submit a site management plan.
- ▶ Moderate risk: A commercial cannabis cultivation site is classified as moderate risk if any part of the disturbed area is located on a slope greater than 30 percent and less than 50

percent. Commercial cannabis cultivators associated with moderate-risk sites shall register as moderate risk and submit a site erosion and sediment control plan.

- ▶ High risk: A commercial cannabis cultivation site is classified as high risk if any part of the disturbed area exists within the riparian setback limits. Commercial cannabis cultivators associated with high-risk sites shall register as high risk, submit a disturbed area stabilization plan, and address the compliance issue as described below. Because such commercial cannabis cultivators pose a higher risk to water quality and will require a higher level of regional water quality control board (RWQCB) oversight, they are subject to a higher application and annual fee. When the commercial cannabis cultivation site is reconfigured to comply with the riparian setbacks, the commercial cannabis cultivator can request that the RWQCB reclassify the site to a lower risk level and allow a lower annual fee to be assessed.

To obtain coverage under the waiver or enroll under the general order, the discharger is required to submit an online application, application fee, and relevant technical reports. Technical report requirements are based on tier and risk level. Pursuant to SWRCB Order WQ 2023-0102-DWQ, moderate- and high-risk sites are required to comply with the following plans to address soil erosion (SWRCB 2023).

## LOCAL

### Mendocino County General Plan

The Mendocino County General Plan Development Element lays out goals/policies that address wildfire hazards. These goals/policies are listed below:

- ▶ **Policy DE-226:** The General Plan Land Use and zoning maps shall limit development potential within Very High Fire Hazard Severity Zones (VHFHSZ), limiting or avoiding new development in these areas.
- ▶ **Policy DE-227:** Development, densities, intensities, and type shall be consistent with the state wildfire hazard rating system and Fire Safe Regulations (addressing weather, fuel and slope, access, water, and other factors).
- ▶ **Policy DE-228:** The County shall deny development proposals that present substantial fire hazard risk to residents and safety providers responding to a wildland fire.
- ▶ **Policy DE-229:** Development shall be located, designed, and managed to reduce fire risk to life, property, and natural resources, and incorporate adequate fire protection consistent with the General Plan and adopted regulations.
- ▶ **Policy DE-231:** Development shall facilitate and integrate the ability for fire protection agencies to access and maintain fuel and firebreaks, water supplies, and public and private emergency access routes.
- ▶ **Policy DE-232:** New development in the High and Very High Wildfire Hazard Severity Zones and wildland urban/rural interfaces shall incorporate the following:
  - Fuel breaks or greenbelts coordinated with water supplies and access, providing maximum circulation consistent with topography.
  - Adequate and accessible defensible space that does not rely on publicly owned lands or open space designations of homeowner associations.



- At least two ingress-egress routes to a public roadway, unless alternative routes accessible to fire equipment are provided.
  - Access to publicly maintained evacuation routes at regular intervals.
  - Access routes sufficient to accommodate evacuating vehicles, fire equipment, and vegetation management zones.
  - Primary traffic lanes to all building sites with turnarounds to accommodate fire equipment.
  - Water supplies within a short distance of fire equipment access.
  - Fire flows with adequate duration.
  - Develop fire-safe plans for communities to assist in qualifying for grants.
- ▶ **Policy DE-235:** Developments shall be approved only if sufficient firefighting resources, such as fire stations, equipment, personnel, hydrants, and water supplies, will be available to serve all phases of development and include ongoing operations and maintenance.
  - ▶ **Policy DE-237:** Areas within the SRA and Fire Hazard Severity Zones shall be evaluated to determine the appropriate type, density, and locations of new development or reconstruction, and ensure adequate circulation, infrastructure, and services are available consistent with the latest Fire Safe Regulations.
  - ▶ **Policy DE-238:** New development not located in a fire protection district should mitigate impacts on first responders to emergency calls and should be required to contribute its fair share cost of providing emergency services.
  - ▶ **Policy DE-241:** The County shall work with local communities and property owners to engage in and facilitate the removal of highly invasive flammable weeds (gorse, French broom, eucalyptus, etc.).

#### Mendocino County Code of Ordinances - Mendocino County Cannabis Regulation

The Mendocino County Cannabis Regulation (MCCR) contains the following requirements related to wildfire:

##### Section 10A.17.070

Unless specifically exempted, in addition to compliance with all other requirements of this Chapter, all Cannabis Cultivation Business License (CCBL) holders shall comply with the requirements of this Section.

- ▶ (N) Maintain the applicable "Defensible Space" protocols and distances, as established by the California Department of Forestry and Fire Protection around structures located on the legal parcel.
- ▶ (V) CCBL Holders shall obtain as may be required clearance from the California Department of Forestry and Fire Protection (CalFire) related to compliance with the requirements of Public Resources Code Section 4290 and any implementing regulations.

#### Mendocino County Community Wildfire Protection Plan

The Mendocino County Fire Safe Council, described below, assisted with the development of the first comprehensive Mendocino County Community Wildfire Protection Plan (MCCWPP) in 2005 and its update and revision in 2015. The MCCWPP identifies and prioritizes areas for hazardous fuel reduction treatments and recommends the types of methods of treatment that

will protect Mendocino County. It also recommends measures to reduce the ignitibility of structures throughout the area addressed by the MCCWPP. The creation of the MCCWPP was primarily a cooperative effort of the Mendocino County Fire Safe Council and CAL FIRE's Mendocino Unit, with input from local government fire departments and engaged citizens (MCFSC 2023a).

#### Mendocino County Multi-Jurisdictional Hazard Mitigation Plan

The 2020 County Multi-Jurisdictional Hazard Mitigation Plan (adopted in 2021) analyzes the nature, history, location, extent, and probability of future events for identified hazards throughout Mendocino County. Hazards include dam failure, earthquake, flood, a hazardous materials event, landslide, tsunami, urban conflagration, and wildland fire. The plan also provides a blueprint for reducing potential hazards by developing a list of mitigation goals and potential actions to address the risks facing Mendocino County. Mitigation actions consist of preventive actions, property protection techniques, natural resource protection strategies, structural projects, emergency services, and public information and awareness activities (Mendocino County 2021).

#### Mendocino County Fire Vulnerability Assessment and Emergency Evacuation Preparedness Plan

The Mendocino County Fire Vulnerability Assessment and Emergency Evacuation Preparedness Plan consists of three components: the Fire Vulnerability Assessment, the Public Outreach Plan, and the Evacuation Plan. The Vulnerability Assessment identifies high fire hazard areas in the County. It reviews existing adaptation methods and actions for addressing wildfire vulnerabilities and provides specific mitigation strategies for dealing with wildfire vulnerabilities. The Evacuation Plan establishes strategies for managing evacuations relating to wildland fire threats that include maintenance and vegetation clearance of evacuation routes. The Public Outreach Plan identifies methods for educating local communities about fire safety and emergency evacuation.

#### 2023 Mendocino Unit Fire Plan

The 2023 Mendocino Unit Fire Plan was collaboratively developed with interested parties, federal, state, city, and County agencies within the unit. It identifies and prioritizes prefire and postfire management strategies and tactics meant to reduce the loss of values at risk within the Unit. The plan is intended to be used as a planning and assessment tool only. It is the responsibility of those implementing the projects to ensure that all environmental compliance and permitting processes are met, as necessary. The overall goal of the Mendocino Unit Fire Plan is to reduce total costs and losses from wildland fires within the Mendocino Unit by protecting assets at risk through focused prefire management prescriptions and increased initial attack success (CAL FIRE 2023a). To make the Unit Fire Plan a success, it must focus on the following goals outlined in the 2018 Strategic Fire Plan for California:

1. Identify and evaluate wildland fire hazards and recognize life, property, and natural resource assets at risk, including watershed, habitat, social and other values of functioning ecosystems. Facilitate the collaborative development and sharing of all analyses and data collection across all ownerships for consistency in type and kind.
2. Promote and support local land use planning processes as they relate to: (a) protection of life, property, and natural resources from risks associated with wildland fire, and (b) individual landowner objectives and responsibilities.
3. Support and participate in the collaborative development and implementation of local, county, and regional plans that address fire protection and landowner objectives.

4. The Unit will support and enable the expansion of cultural to introduce beneficial fire across Mendocino County. The Unit will also encourage and effectively leverage private landowner interest in prescribed fire as a land management tool.
5. Increase fire prevention awareness, knowledge and actions implemented by individuals and communities to reduce human loss, property damage and impacts to natural resources from wildland fires.
6. Integrate fire and fuels management practices with landowner/land manager priorities across jurisdictions.
7. Determine the level of resources necessary to effectively identify, plan and implement fire prevention using adaptive management strategies.
8. Determine the level of fire suppression resources necessary to protect the values and assets at risk identified during planning processes.
9. Implement postfire assessments and programs for the protection of life, property, and natural resource recovery (CAL FIRE 2018).

#### Jackson Demonstration State Forest Management Plan

The Forest Management Plan directs the management of Jackson Demonstration State Forest for the next 10 to 15 years, or until a subsequent plan or major revision is approved. The Plan and the projects undertaken will also be evaluated by the Board of Forestry and Fire Protection every 5 years. The Plan's purposes are to guide the integrated use and protection of the Forest's resources, to meet requirements of legislation and Board of Forestry and Fire Protection policy, and to address local, regional, and statewide issues (CAL FIRE 2016).

### 3.17.2 Environmental Setting

#### WILDFIRE BEHAVIOR AND CONTROLLING FACTORS

Wildfire behavior is a product of several variables, primarily weather, vegetation, topography, and human influences, which intermix to produce local and regional fire regimes that affect how, when, and where fires burn. The fire regime in any area is defined by several factors, including fire frequency, intensity, severity, and area burned. Each of these are important for an understanding of how the variables that affect fire behavior produce fire risks. Fire frequency refers to the number of fires that occur in a given area over a given period of time; fire intensity refers to the speed at which fire travels and the heat that it produces; fire severity involves the extent to which ecosystems and existing conditions are affected or changed by a fire; and area burned is the size of the area burned by wildfire.

#### Human Influence on Wildfire

Human influence on wildfire is broad and can be substantial. It includes direct influences, such as the ignition and suppression of fires, and indirect influences through climate change and alterations in land use patterns that support modified vegetative regimes and increased development in the wildland urban interface (WUI) (refer to "Climate Change and Wildfire" below for more discussion on the indirect effect of climate change on wildfire).

Anthropogenic influence more directly controls fire frequency (i.e., number of ignitions) than size of a burn because humans are responsible for most of the ignitions. Once started, fires spread, and behavior becomes a function of fuel characteristics, terrain, and weather

conditions (Syphard et al. 2008). Human-induced wildfire ignitions can change fire regime characteristics in two ways: 1) changing the distribution and density of ignitions, and 2) changing the seasonality of burning activity (Balch et al. 2017). A study of wildfires across the U.S. for the 20-year period between 1992 and 2012 showed that 82 percent of wildfires during that period were started by human causes (Balch et al. 2017), while in California specifically, humans account for starting approximately 95 percent of wildfires (Syphard et al. 2007; Syphard and Keeley 2015).

Human ignitions include a multitude of sources, including escapes from debris and brush-clearing fires, electrical equipment malfunctions, campfire escapes, smoking, fire play (e.g., fireworks), vehicles, and arson. Consequently, areas near human development, especially in the WUI or in areas near campgrounds and roads, generate fires at a more frequent rate than very remote or urban areas (Syphard et al. 2007; Mann et al. 2016; Balch et al. 2017). Circumstances in California have made the environment particularly vulnerable to human-caused fires with expansion of the WUI and introduction of more people in areas susceptible to wildfire at all times of the year. A 2018 study indicates that the number of houses in the WUI increased nationwide by 41 percent between 1990 and 2010 (Radeloff et al. 2018).

Exposure to particulate matter generated by wildfire events can result in significant health problems including aggravated asthma, increase susceptibility to respiratory infections, and cause heart attacks and arrhythmias in people with heart disease (Sacramento Metropolitan Air Quality Management District 2019).

### Climate Change and Wildfire

Wildfires are a significant threat in California, particularly in recent years as the landscape responds to climate change and decades of fire suppression. It is estimated that since 1985, more than 50 percent of the increase in the area burned by wildfire in the western U.S. is attributable to anthropogenic climate change (Abatzoglou and Williams 2016). As climate change persists, it will produce increasing temperatures and drier conditions that will generate abundant dry fuels. All wildfires (those initiated by both natural and manmade sources) tend to be larger under drier atmospheric conditions and when fed by drier fuel sources (Balch et al. 2017).

Additionally, climate change has led to exacerbation of wildfire conditions during a longer period of the year as the spring season has warmed—driving an earlier spring snowmelt, and as winter precipitation has overall decreased. Further, wildfire activity is closely related to temperature and drought conditions, and in recent decades, increasing drought frequency and warming temperatures have led to an increase in wildfire activity (Schoennagel et al. 2017). In particular, the western U.S., including California, has seen increases in wildfire activity in terms of area burned, number of large fires, and fire season length (Abatzoglou and Williams 2016). These conditions have resulted in large, destructive, and deadly wildfires.

Climate change will continue to produce conditions that facilitate a longer fire season, which, when coupled with human-caused changes in the seasonality of ignition sources, will produce longer-lasting, and bigger fires during more times of the year. According to California's Fourth Climate Change Assessment, Statewide Summary Report (Bedsworth et al. 2018), if GHG emissions continue to rise, the frequency of extreme wildfires burning over 25,000 acres could increase by 50 percent by 2100 and the average area burned statewide could increase by 77 percent by the end of the century (Bedsworth et al. 2018). Refer to Section 3.8, "Greenhouse Gas Emissions and Climate Change," for additional discussion of climate change trends and the effects of climate change on the environment.

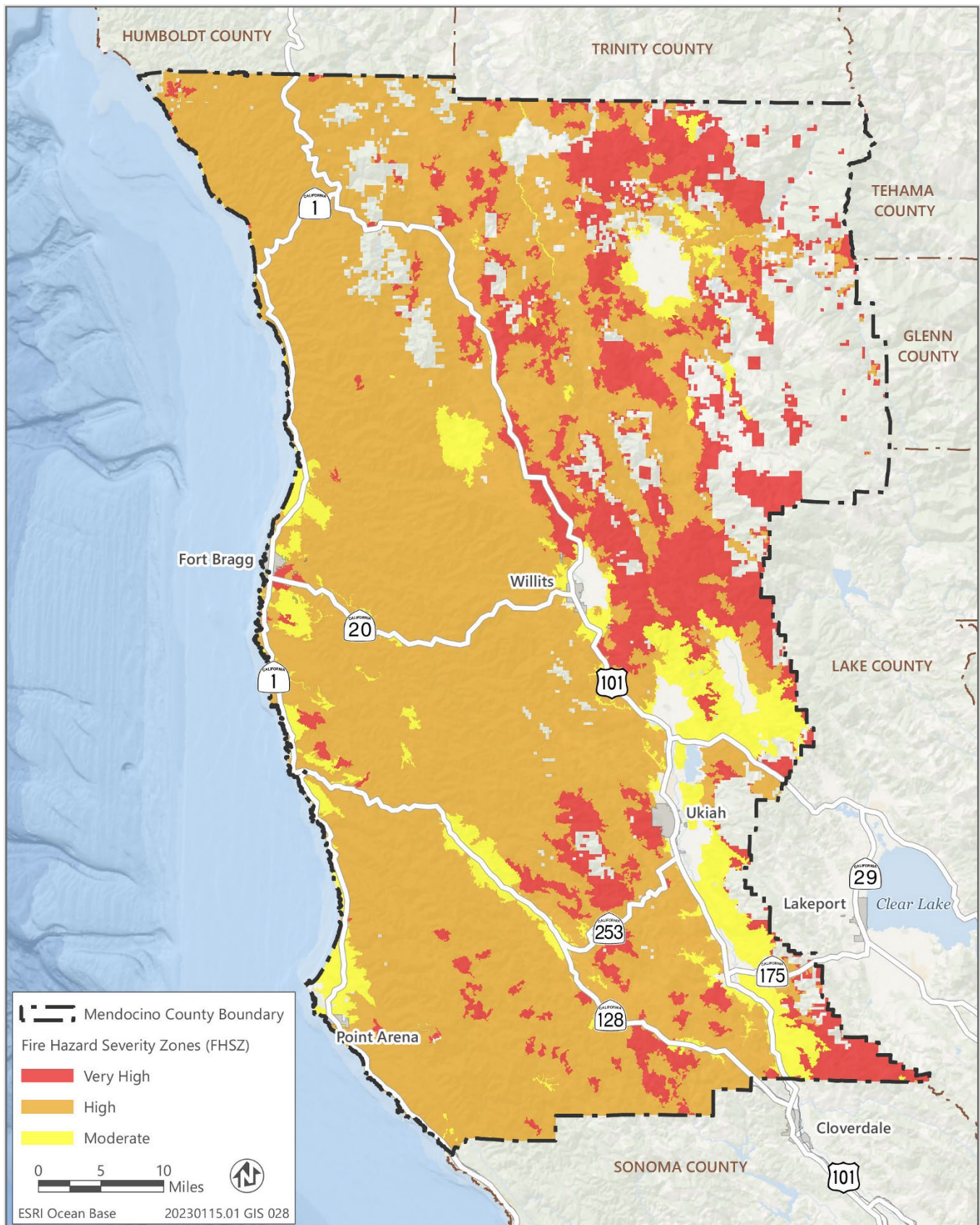
## WILDFIRE CONDITIONS IN THE COUNTY

Mendocino County possesses many vegetative fuel types including grass, oak woodlands, brush, mixed chaparral, timber, and cut-over slash. Brush consists primarily of chamise on the south- and west-facing slopes and mixed chaparral on the north- and east-facing slopes. The County also contains several forests such as Mendocino National Forest, bordered by Glenn and Tehama Counties, to the northeast portion of the County, and Jackson Demonstration State Forest, extending west in the central portion of the County. Mendocino National Forest is approximately 913,306 acres and approximately 65 miles long and 35 miles wide, spreading across portions of Mendocino, Colusa, Lake, Glen, Tehama, and Trinity Counties. Jackson Demonstration State Forest is approximately 48,652 acres and provides research and demonstration opportunities for a variety of natural resource management objectives, including sustainable timber production, public recreation, fish and wildlife habitat, and watershed protection. Jackson Demonstration State Forest is the largest of CAL FIRE's 10 demonstration state forests.

Mendocino County has dry summers where little to no rain falls from early June through late October. The weather can also vary greatly between different portions of the County on the same day. The County experiences 40 to 100 inches of annual rainfall, depending on the location, elevation, and weather patterns, and the declared fire season in Mendocino County typically lasts from early June to mid or late October. The fire season is a time of increased risk of conflagration to residential and other development within the County. Conflagration is an extensive fire that destroys a great deal of land or property. Wind is also a significant factor in the spread of fire, as fires spread faster, and embers are carried with the wind to adjacent exposed areas. In densely populated areas, flying ember production is the principal driver of wildfire. A related concern in built-out areas is the relative density of vegetative fuels that can serve as sites for new spot fires within the urban core and spread to adjacent structures.

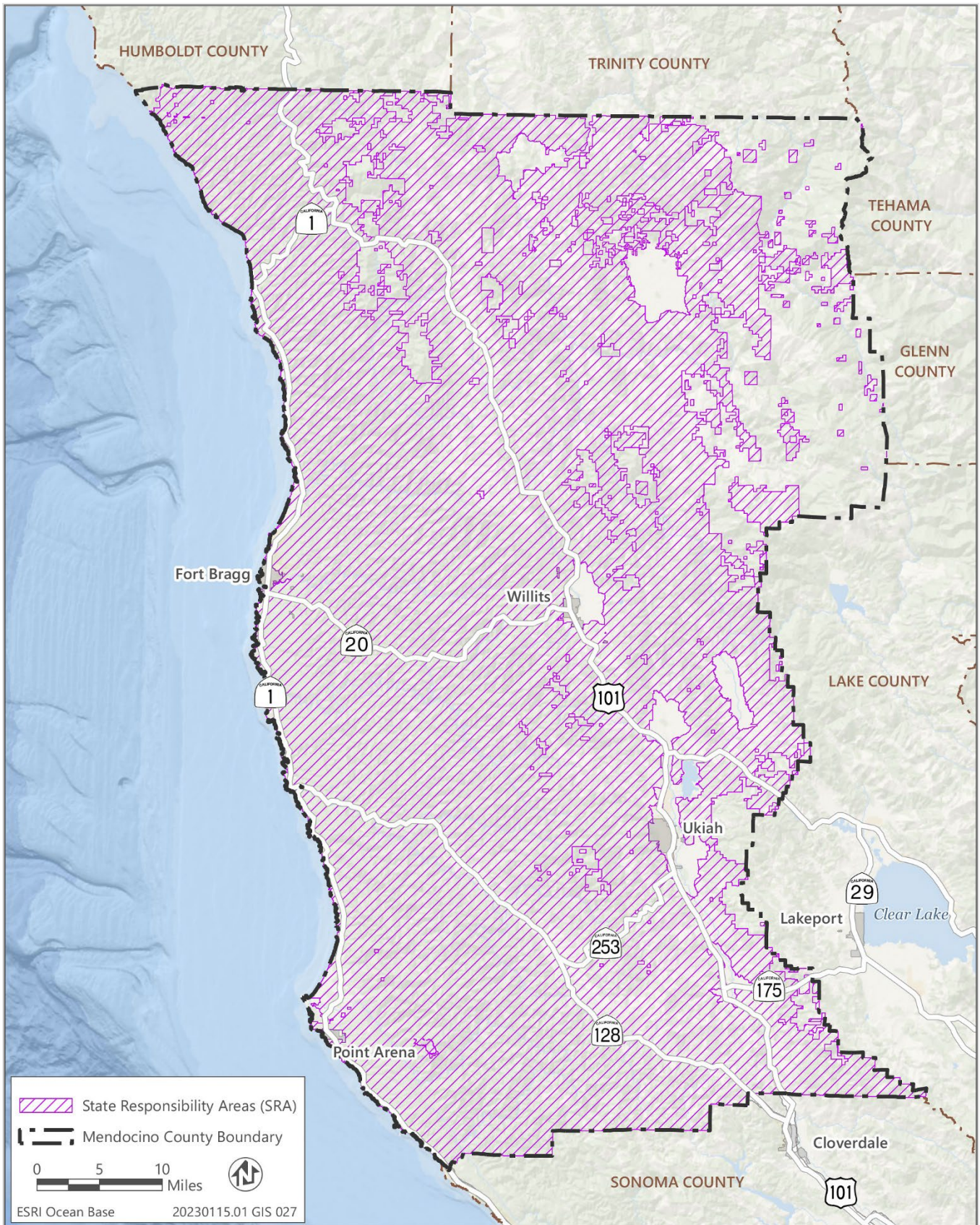
As described in Section 3.5, "Biological Resources," Mendocino County contains approximately 1,776,855 acres of vegetative communities, the largest being Redwoods. Forests and grasslands are located throughout Mendocino County, side by side with residences and small communities. Even some of the more urban areas, such as the lands surrounding Ukiah, are at risk from wildland fires. The potential fire hazard is exacerbated by the hot, dry summers typically experienced throughout most of the County and by the mountainous terrain. Figure 3.17-1 identifies CAL FIRE's Fire Hazard Severity Zones (FHSZs) within SRAs throughout the County.

As shown in Figure 3.17-2, most of the land in the County is located within SRAs. As noted above, SRAs are areas of the state where CAL FIRE has the primary financial responsibility for the prevention and suppression of wildland fires.



Source: Data downloaded from CAL FIRE in 2023; adapted by Ascent in 2023.

**Figure 3.17-1 Fire Hazard Severity Zones in Mendocino County**



Source: Data downloaded from CAL FIRE in 2023; adapted by Ascent in 2023.

**Figure 3.17-2 State Responsibility Areas in Mendocino County**

Mendocino County and the surrounding region has experienced the following significant fires over the past 10 years, some of which overlapped with neighboring counties, each burning over 1,000 acres in the region (Mendocino County 2021; CAL FIRE 2023b):

- ▶ 2006: Noble Fire (1,014 acres),
- ▶ 2006: Hunter Fire (13,477 acres),
- ▶ 2008: Lost Pipe (1,187 acres),
- ▶ 2008: Low Gap Fire (1,347 acres),
- ▶ 2008: Jack Smith Fire (1,538 acres),
- ▶ 2008: Monkey Rock Fire (1,849 acres),
- ▶ 2008: Navarro Fire (1,901 acres),
- ▶ 2008: Middle Fire (2,067 acres),
- ▶ 2008: Indian Fire (2,096 acres),
- ▶ 2008: Butch Fire (2,367 acres),
- ▶ 2008: Big Fire (2,490 acres),
- ▶ 2008: Mill Fire (3,042 acres),
- ▶ 2008: Orr Series Fire (3,416 acres),
- ▶ 2008: Mallo Series Fire (4,466 acres),
- ▶ 2008: Cliff Fire (4,658 acres),
- ▶ 2008: Cowshed Series Fire (4,992 acres),
- ▶ 2008: Hardy Series Fire (5,354 acres),
- ▶ 2008: Sugarloaf Fire (7,079 acres),
- ▶ 2008: Red Mountain Series Fire (7,513 acres),
- ▶ 2012: Scotts Fire (4,509 acres),
- ▶ 2012: Pass Fire (4,804 acres),
- ▶ 2012: North Pass Fire (41,818 acres),
- ▶ 2014: Lodge Complex Fire (12,533 acres),
- ▶ 2017: Redwood Valley Incident Fire (36,523 acres),
- ▶ 2018: River Fire (48,920 acres),
- ▶ 2018: Ranch Fire (410,202 acres),
- ▶ 2020: Oak Fire (1,100 acres),
- ▶ 2020: August Complex Fire (includes Doe Fire) (1,032,648 acres),

The August Complex Fire made State history as the largest fire on record, with the Mendocino Fire Complex, consisting of the River and Ranch Fire, being the third largest fire in state history.



## CURRENT FIRE MANAGEMENT AND PROTECTION MEASURES

Mendocino County is served by a total of 22 local fire service agencies and city fire departments, as well as CAL FIRE and the USFS, each of which have mutual aid agreements to assist each other in handling fire and other emergency calls. Fire protection in Mendocino County is provided by local fire districts, the cities of Ukiah and Fort Bragg, the California Department of Forestry and Fire Protection, and the US Forest Service.

Fire service agencies have mutual-aid agreements to assist each other in handling fire and other emergency calls. The County of Mendocino Office of Emergency Services coordinates emergency response in Mendocino County through the Fire and Rescue Mutual Aid Coordinator. The Fire and Rescue Mutual Aid Coordinator functions within the California Fire Service and Rescue Emergency Mutual Aid System. Several private companies provide air ambulance services, vital to many of the County's remote areas. To address fire response and risk reduction, the County relies on the CAL FIRE Mendocino Unit Strategic Fire Plan, the MCCWPP, and the 2020 Mendocino County Multi-Hazard Mitigation Plan. These plans provide additional resources on current and future initiatives to be undertaken by the County to alleviate wildfire risks (Mendocino County 2021).

### US Forest Service: Mendocino National Forest

As noted above, the Mendocino National Forest covers a large portion of the County, particularly in the northeast. The Mendocino National Forest has a diverse fire and aviation management program that is committed to the management of all aspects of wildland fire operations, outlined within the CAL FIRE 2023 Mendocino Unit Fire Plan. The goal of the Mendocino Fire Plan is to reduce total costs and losses from wildland fires within the Mendocino Unit by protecting assets at risk through focused prefire management prescriptions and increased initial attack success. The CAL FIRE Mendocino Unit Aviation Program consists of the Ukiah Air Attack Base and the Howard Forest Helitack Base. The Mendocino Unit (MEU) Aviation Program serves the communities of Mendocino, Lake, Sonoma, and Trinity Counties. The Mendocino National Forest is also served by the Aviation Program as they are in the direct Initial Attack zone of influence. In addition to initial and extended attack of wildland fires, this includes planning, fuels management, prescribed burning, prevention, suppression, and using state-of-art tools and technology in dynamic and changing environments (CAL FIRE 2023a).

### CAL FIRE

CAL FIRE's Mendocino Unit is geographically divided into six battalions. Suppression resources during fire season include approximately 190 career personnel and approximately another 179 seasonal personnel, up to 214 with augmented staffing, on duty around the clock, staffing 10 fire stations, 16 engines, 5 bulldozers, and other equipment (CAL FIRE 2023a).

**Battalion I- Covelo:** CAL FIRE's Mendocino Unit Battalion 1 is in the northeast corner of Mendocino County. Within the Battalion is the town of Covelo, centered in Round Valley. The Round Valley floor is predominantly LRA, and fire protection is the responsibility of the Covelo Fire Protection District, although CAL FIRE responds to all calls in the district through an automatic mutual aid agreement.

**Battalion II- Willits:** State Highway 101 bisects CAL FIRE's Mendocino Unit Battalion 2, with predominately Redwood and Douglas-Fir Forest to the west and mixed pine forest, brush, and grassland to the east. Highway 20 goes west from Willits to Fort Bragg for approximately 13 miles within the Battalion. The eastern border of the Battalion is the Mendocino National Forest's Covelo and Upper Lake Districts. One CAL FIRE Station, Howard Forest, co-located

with the Mendocino Unit Headquarters, provides the initial ground attack fire protection for Battalion 2. Howard Forest Helitack Base is located at this facility and is administered by the Battalion Chief assigned to Ukiah Air Attack.

**Battalion III- Ukiah:** Battalion III is a very diverse portion of Mendocino County. It encompasses various vegetative fuel types consisting primarily of oak woodlands, brush, and mixed conifer stands. The Ukiah Valley, in Battalion III, contains the densest population centers in Mendocino County, including the City of Ukiah and surrounding communities. A significant portion of the Battalion 3 population lives in the rural communities, considered in the urban-interface zone, outside formal service districts. The Battalion borders Sonoma County to the south and Lake County to the east. It extends west almost to the community of Comptche and north past the community of Redwood Valley. The Battalion has multiple state highways located within the boundaries that are major thoroughfares in the County. Highway 101 travels north/south through the entire battalion and connects Mendocino County with Sonoma County. Highway 20 travels east/west and connects Potter Valley and portions of Redwood Valley with the Ukiah Valley. Highway 20 also connects Mendocino County with Lake County. Highway 175 travels east/west and links the southern part of the battalion to Lake County in the community of Hopland. Highway 253 connects the Ukiah Valley with Anderson Valley to the west.

**Battalion IV- Laytonville:** CAL FIRE's Mendocino Unit Battalion IV encompasses the northwest portion of Mendocino County. The Battalion has two major highway corridors: State Highway 1 runs through the northwest corner of the Battalion, where it intersects US Highway 101; and Highway 101 runs the entire length of the Battalion, a distance of 42 miles. The Battalion includes eight communities of various sizes. Several private camps are occupied primarily during the summer months. There are several BLM holdings in the Battalion, most of which require modified suppression action plans. The western portion of the battalion consists of some large timber company holdings that encompass approximately 75,000 acres. With the reduction of active logging and the decline of broadcast burning, fuel loading has increased in the area due to the natural forest succession.

**Battalion V- Boonville:** Battalion 5 is the 10th largest Battalion statewide, according to 1964 Fire Plan data. Two major highways within the Battalion bring tourist traffic from the Bay Area to the north coast: State Highway 128 forms the northern boundary of the Battalion, and State Highway 1 defines the western boundary. Vegetation within the Battalion varies from dense Redwood/Douglas-fir forests to grassy oak woodlands. The Battalion includes one city, Point Arena, and nine communities of various sizes: Gualala, Anchor Bay, Irish Beach, Manchester, Elk, Yorkville, Boonville, Philo, and Navarro. Battalion 5 fire protection for the Battalion is provided by two Stations: Boonville and Point Arena. Additionally, four local government departments -- South Coast Fire Protection District, Redwood Coast Fire Department, Anderson Valley Fire Department, and Elk Volunteer Fire Department -- provide structure protection for their communities, as well as mutual aid to CAL FIRE for wildland fire protection.

**Battalion VI- Fort Bragg:** Battalion 6 has two major highways which bring tourist traffic to the north coast. State Highway 1 spans the entire west section of the battalion along the coast and intersects with State Highway 20, then continues north and intersects with US Highway 101 at Leggett. Highway 20 connects Highway 1 to Highway 101 and links the cities of Fort Bragg and Willits. Geographically, the battalion boundaries are as follows: starting at the northwest corner from the Pacific Ocean near the town of Rockport, it runs south along the coast to the Navarro River at Highway 1 and Highway 128. It then runs east along the river and Highway 128 about 10 miles to Flynn Creek Road, then northeast to State Highway 20, then north to

Sherwood Peak. It follows Sherwood Ridge about six miles continuing northwest, following mostly along ridgelines to the Pacific Ocean. It finally intersects at a point just south of the town of Rockport, about 25 miles, forming the northeastern boundary.

### Mendocino County Fire Safe Council

The Mendocino County Fire Safe Council (MCFSC), founded in 2003, is a coalition of individuals, businesses, and public and private agencies that share the goal of preventing loss of life, destruction of property, and damage to the environment caused by wildfire within the County (MCFSC 2023b). Each neighborhood fire safe group/council identifies and prioritizes areas for hazardous fuel management and has identified the types and methods of treatments and programs that will help protect the community and its essential infrastructure. Each plan contains recommended measures that homeowners and the community can take to reduce the ignitability of structures within the corresponding neighborhood group/council area. The formal goals of MCFSC are as follows:

- ▶ Work to minimize losses to values at stake, which include but are not limited to human lives, homes, animals, and natural resources;
- ▶ Educate residents, agencies, and other stakeholders about the nature and impacts of wildfire, fire prevention strategies, and effective preparedness in the event that wildfire occurs;
- ▶ Secure and utilize funding to assist residents in education, outreach, community projects, and other activities that further the mission and objectives of the Mendocino County Fire Safe Council;
- ▶ Encourage road associations, homeowner groups, subdivisions, towns, and other community groups to create their own neighborhood fire safe councils; and
- ▶ Act as an advocate for the people of Mendocino County in the area of fire prevention.

CAL FIRE and MCFSC aim to expand their already significant collaboration over the coming years. MCFSC's base programs to increase local wildfire mitigation include the following efforts:

- ▶ Free community chipper days;
- ▶ Free defensible space assistance for income-eligible seniors and people with disabilities;
- ▶ Free comprehensive home-hardening and defensible space inspections;
- ▶ Training on how to create neighborhood first responder maps;
- ▶ Access to automated local phone-tree systems;
- ▶ Free reflective address signs; and
- ▶ A wide spectrum of community education, including a video series on home hardening.

MCFSC has also managed a series of road-clearing and fuel-break projects aimed at corridors on which ingress and egress may be particularly critical in a wildfire situation. Starting in 2020–2021, substantial projects were managed by MCFSC on both the eastern and western ends of the Ukiah Valley and in Brooktrails. In 2022, MCFSC managed projects in Brooktrails and in a portion of Orr Springs Road. In 2023–2024, MCFSC will be providing road clearing in parts of Yorkville, Willits, and Cherry Creek. CAL FIRE and MCFSC intend to continue identifying key ingress/egress routes throughout the County that would benefit from CAL FIRE and MCFSC collaboration in implementing treatment. (CAL FIRE 2023a).

### Local Fire Protection

In addition to federal and state fire protection services, local fire protection is provided by the following volunteer fire departments (MCFSC 2023c):

- ▶ Anderson Valley Fire Department,
- ▶ Albion-Little River Fire Department,
- ▶ Bell Springs Fire Department,
- ▶ Brooktrails Fire Department,
- ▶ Comptche Volunteer Fire Department,
- ▶ Covelo Fire Protection Department,
- ▶ Elk Volunteer Fire Department,
- ▶ Fort Bragg Fire Department,
- ▶ Greenwood Ridge,
- ▶ Hopland Fire Protection District,
- ▶ Leggett Valley Fire Protection District,
- ▶ Little Lake Fire Protection District,
- ▶ Long Valley Fire Protection District,
- ▶ Mendocino Volunteer Fire,
- ▶ Piercy Fire Protection District,
- ▶ Potter Valley Fire Department,
- ▶ Redwood Valley-Calpella Fire Protection District,
- ▶ Turtle Creek Fire Brigade,
- ▶ Ukiah Fire Department,
- ▶ Ukiah Valley Fire Department,
- ▶ Redwood Coast Fire Protection District,
- ▶ South Coast Fire Protection District,
- ▶ Westport Volunteer Fire Department, and
- ▶ Whale Gulch Volunteer Fire Company.

### 3.17.3 Impact Analysis and Mitigation Measures

#### METHODOLOGY

The evaluation provided in this section is based, in part, on review of the applicable documents from USFS, CAL FIRE, and Mendocino County. The project would involve the transition of existing provisional licenses for commercial cannabis cultivation sites to annual licensure and the programmatic environmental review of future licensing of new commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations in the unincorporated County. Thus, a site-specific analysis of the effect of new commercial cannabis

cultivation premises on exacerbating existing wildfire hazards cannot be accurately conducted. This analysis evaluates the effect of continued operation of existing provisionally licensed commercial cannabis cultivation premises and the development of new commercial cannabis cultivation operations Countywide on existing wildfire hazards based on published technical studies and materials provided by federal, state, and local agencies. The analysis also considers the effectiveness of existing regulations to address potential fire hazards that commercial cannabis cultivation activities could create.

## THRESHOLDS OF SIGNIFICANCE

Thresholds of significance are based on Appendix G of the State CEQA Guidelines. The project would result in a significant impact related to wildfire if it would:

- ▶ Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;
- ▶ Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment;
- ▶ Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, postfire slope instability, or drainage changes; or
- ▶ Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

## ISSUES NOT DISCUSSED FURTHER

Impacts related to the project's potential to substantially impair an adopted emergency response plan, emergency evacuation plan or otherwise impair emergency access and evacuation have been addressed under Section 3.9, "Hazards and Hazardous Materials;" Section 3.14, "Public Services and Recreation;" and Section 3.15, "Transportation." The reader is referred to those impact discussions.

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Impact 3.17-1: Exacerbate Wildfire Risks and Expose Project Occupants to Pollutant Concentrations from a Wildfire or the Uncontrolled Spread of a Wildfire

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Mendocino County is highly susceptible to wildfires. Implementation of the project could create new fire hazards from creation of new fuel and ignition sources and expose people and structures to increased wildfire hazards and unhealthy air quality conditions from smoke. Compliance with existing State and local requirements related to fire protection and management would ensure that impacts remain **less than significant**.

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As described above in Section 3.17.2, "Environmental Setting," the majority of the County is forested, has a high wildfire risk, and has experienced multiple fires over the past 10 years. The construction and operation of commercial cannabis cultivation uses under the project would introduce new ignition sources that could increase wildfire hazards associated with electrical sources, storage of flammable materials, and related commercial cannabis cultivation activities. Exposure to particulate matter generated by wildfire events can result in significant

health problems including aggravated asthma, increased susceptibility to respiratory infections, and heart attacks and arrhythmias in people with heart disease (Sacramento Metropolitan Air Quality Management District 2019).

Existing, potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would be regulated for fire avoidance and would be required to comply with existing protection measures consistent with state building and fire codes (e.g., CCR, title 24, Chapter 7A and PRC section 4291) as well as local fire protection provider requirements and regulations outlined in the MCCR related to wildfire hazards.

#### Existing Provisionally Licensed Sites

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual licensure would not create new or additional fire hazards as existing structures and operations are not anticipated to be altered through the annual licensing process. Existing provisionally licensed sites are required to continue to comply with regulations and standards outlined in PRC sections 4290 and 4291, local fire protection agency requirements, and the California Fire Code to minimize hazards of fire. Additionally, existing provisionally licensed cultivation sites would be required to continue to comply with Sections 10A.17.070(N), 10A.17.070(V), and 10A.17.090(E)(3) of the MCCR to reduce wildfire exposure risks by ensuring proper storage of potential fuel and ignition sources and by ensuring proper defensible space protocols and distances are maintained. The provision of defensible space and the associated reduction of vegetative fuels have specifically been found to be effective at reducing fire frequency, fire severity, and annual area burned over an extended period of time. Where treatments have occurred, the pattern of wildfire progression may be limited to low-intensity underbrush and surface burning, which can create safe conditions for firefighters to successfully suppress fires in areas near structures, or around areas of high resource value (Kim et al. 2013; Martinson and Omi 2013; Tubbesing et al. 2019). Continued compliance would avoid existing provisionally licensed commercial cannabis cultivation sites from exacerbating existing wildfire hazards and related impacts. As a result, this impact would be less than significant because existing provisionally licensed sites would retain the extent of their existing licensed commercial cannabis cultivation.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation operations features would still be required to comply with the regulations and standards outlined in PRC sections 4290 and 4291, local fire protection agency requirements, and the California Fire Code to minimize hazards of fire. As described above, MCCR Sections 10A.17.070(N), 10A.17.070(V), and 10A.17.090(E)(3) contain requirements that would reduce wildfire exposure risks by ensuring proper storage of potential fuel and ignition sources and by ensuring proper defensible space protocols and distances are maintained. For these reasons, this impact would be less than significant.

#### Future Licensed Sites

New licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would be required to comply with PRC section 4290 and 4291 and CCR, title 24, section 701A.3 (additional building standards for new building

construction located in any Fire Hazard Severity Zone within SRAs, any local agency Very-High Fire Hazard Severity Zone, or any Wildland-Urban Interface Fire Area), local fire protection agency requirements, and California Fire Code to minimize hazards of fire. Additionally, new licensed cultivation sites would be required to comply with Sections 10A.17.070(N), 10A.17.070(V), and 10A.17.090(E)(3) of the MCCR to reduce wildfire exposure risks by ensuring proper storage of potential fuel and ignition sources and by ensuring proper defensible space protocols and distances are maintained. The County Multi-Jurisdictional Hazard Mitigation Plan also includes provisions for the maintenance and vegetation of evacuation routes.

As noted above, the provision of defensible space and the associated reduction of vegetative fuels have specifically been found to be effective at reducing fire frequency, fire severity, and annual area burned over an extended period of time. Where treatments have occurred, the pattern of wildfire progression may be limited to low-intensity underbrush and surface burning, which can create safe conditions for firefighters to successfully suppress fires in areas near structures, or around areas of high resource value (Kim et al. 2013; Martinson and Omi 2013; Tubbesing et al. 2019). Compliance with the above standards would avoid new licensed commercial cannabis cultivation sites from exacerbating existing wildfire hazards and related impacts. As a result, this impact would be less than significant.

### Summary

As described above, existing provisionally licensed, potential expansion of existing provisionally licensed, and future commercial cannabis cultivation sites would be required to comply with regulations and standards stated in related to fire hazards which would avoid exacerbating existing wildfire hazards and related impacts. Impacts would be **less than significant**.

### Mitigation Measures

No mitigation is required for this impact.

**Impact 3.17-2: Require the Installation or Maintenance of Associated Infrastructure (Such as Roads, Fuel Breaks, Emergency Water Sources, Power Lines, or Other Utilities) That May Exacerbate Fire Risk or That May Result in Temporary or Ongoing Impacts to the Environment**

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Implementation of the project would include the development of on-site and off-site infrastructure improvements to support new commercial cannabis cultivation uses that could create new fire hazards, largely due to the presence of new electrical infrastructure that could create new ignition points. This impact would be **potentially significant**.

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The potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations under the project could include improvements such as buildings, water storage structures, extension of electrical facilities (e.g., onsite solar or backup generators) and infrastructure improvements by Pacific Gas and Electric Company and Ukiah Public Utilities, maintenance of fuel breaks, and roadway improvements (on-site and off-site) that could introduce new ignition sources that could increase wildfire hazards. The majority of the County is forested and within FHSZs in the SRA.

### Existing Provisionally Licensed Site

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual

licensure would not create new or additional fire hazards from the development of new infrastructure as existing structures and operations are not anticipated to be altered through the annual licensing process. Existing provisionally licensed sites are required to continue to comply with existing local and state regulations and standards identified in Impact 3.17-1 related to access and defensible space for existing operations. As a result, this impact would be less than significant because existing provisionally licensed sites would retain the extent of their existing licensed commercial cannabis cultivation.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation operations features would still be required to comply with the existing local and state regulations and standards identified in Impact 3.17-1 related to access and defensible space for existing operations. However, potential extension of electrical facilities (overhead power lines) and on-site construction activities could create new ignition sources. Thus, the impact would be potentially significant.

#### Future Licensed Sites

As discussed in Impact 3.17-1, new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would be subject to local and state requirements related to building construction and ensuring proper defensible space protocols and distances to address fire hazards. However, potential extension of electrical facilities (overhead power lines) and on-site construction activities could create new ignition sources. Thus, the impact would be potentially significant.

#### Summary

As described above, existing provisional licensed commercial cannabis cultivation sites would not result in project activities that would exacerbate fire risk associated with new infrastructure. The construction and operation of expanded existing provisionally licensed cultivation and new licensed commercial cannabis cultivation sites could involve the extension of electrical facilities (overhead power lines) and on-site construction activities could create new ignition sources. Therefore, this impact would be **potentially significant**.

#### Mitigation Measures

##### Mitigation Measure 3.17-2a: Implement Fire Prevention Measures for New Electrical Infrastructure

The DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to place new electrical power lines to the premises underground, if feasible. If electric infrastructure cannot be placed underground, fuel breaks along power lines and any stand-alone electrical facilities in a manner that would avoid ignition of adjacent vegetation to the satisfaction of Mendocino County, local fire protection agency, and/or CAL FIRE.

##### Mitigation Measure 3.17-2b: Implement Fire Prevention Measures for On-Site Construction

The DCC shall require provisional licensees requesting to expand their sites prior to transitioning to annual licensure, new annual license applicants for commercial cannabis cultivation, and new annual license applicants for associated processing and distribution uses to prepare and implement a fire protection plan that includes the following provisions:



- ▶ Fire watch personnel responsible for watching for the occurrence of fire during and after equipment use shall be identified.
- ▶ Equipment shall be located so that exhausts do not discharge against combustible materials.
- ▶ Equipment shall not be refueled while in operation and not until after a cooldown period.
- ▶ Water and tools dedicated to firefighting shall be on hand in the area of onsite construction and maintenance activities at all times.

Fire protection plans created by local jurisdictions shall be submitted to the DCC as part of licensing requirements.

#### Significance after Mitigation

Implementation of Mitigation Measures 3.17-2a and 3.17-2b would require that the installation and operation of any new electrical infrastructure is properly maintained and that the use of outdoor motorized equipment for cultivation facility construction be conducted in a manner that would reduce the potential for new and/or exacerbated fire risk. Therefore, the impact would be **less than significant**.

#### Impact 3.17-3: Expose People or Structures to Significant Risks, Including Downslope or Downstream Flooding or Landslides, as a Result of Runoff, Postfire Slope Instability, or Drainage Changes

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Previous wildfires in Mendocino County have resulted in the loss of vegetation on sloped terrain. This condition could result in soil erosion and slope failure within the unincorporated County. Operation and development of licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations in these areas could exacerbate this condition and increase the risk of further erosion and slope failure. However, compliance with SWRCB Order WQ 2023-0102-DWQ, MCCR section 10A.17.070(L), and the Mendocino County Code of Ordinances would reduce risks associated with postfire slope instability or drainage changes. This impact would be **less than significant**.

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As noted in Section 3.7, “Geology, Soils, and Mineral Resources,” and Section 3.10, “Hydrology and Water Quality,” MCCR section 10A.17.070(L), the State Water Resources Control Board (SWRCB) Order WQ 2023-0102-DWQ, and County Code of Ordinances Chapters 12.12 and 15.24 contain requirements for soil stability and erosion control for commercial cannabis cultivation sites. These requirements include preparation of plans that address site erosion and sediment control, disturbed areas stabilization, site closure procedures, and monitoring and reporting requirements. In addition, the SWRCB Order contains requirements for land development maintenance, erosion control, drainage features, stream crossing installation and maintenance, soil disposal and spoils management, and roadway design and maintenance.

#### Existing Provisionally Licensed Sites

Continued operation of the existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations sites transitioning to annual licensure would not expand into postfire land areas because existing structures and operations are not anticipated to be altered through the annual licensing process. Therefore, there would be no impact from existing provisionally licensed sites because they would retain the extent of their existing licensed commercial cannabis cultivation.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation operations features would be required to comply with MCCR section 10A.17.070(L), County Code of Ordinances Chapters 12.12 and 15.24 and SWRCB Order WQ 2023-0102-DWQ, which include implementation of soil stability and erosion control features for cultivation uses that require the use of soil erosion and sedimentation controls (best management practices (BMPs)) for soil stability and the implementation of a Site Erosion and Sediment Control Plan and Disturbed Area Stabilization Plan for higher risk sites. Examples of BMPs for soil erosion control that may be used include the use of ground cover vegetation (grasses), detention/water quality control basins, drainage control features that are rock lined and that reduce stormwater flow velocities, and other similar features. For these reasons, this impact would be less than significant.

#### Future Licensed Sites

New licensed commercial cannabis cultivation and associated processing and/or distribution transport-only uses located on postfire land areas could further destabilize soil and slope conditions from site construction. New licensed commercial cannabis cultivation sites would be required to comply with MCCR section 10A.17.070(L), County Code of Ordinances Chapters 12.12 and 15.24 and SWRCB Order WQ 2023-0102-DWQ, which include implementation of soil stability and erosion control features for cultivation sites. As discussed above, the SWRCB Order WQ 2023-0102-DWQ contains requirements for commercial cannabis cultivation that requires the use of soil erosion and sedimentation control BMPs for soil stability as well as implementation of a Site Erosion and Sediment Control Plan and Disturbed Area Stabilization Plan for higher risk sites. Through compliance with these regulations, significant risks related to postfire slope instability or drainage changes would be minimized. Thus, this impact would be less than significant.

#### Summary

As described above, existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites would be required to comply with local and state requirements and standards all of which include measures to reduce significant risks related to postfire slope instability or drainage changes. Therefore, this impact would be **less than significant**.

#### Mitigation Measures

No mitigation is required for this impact.

#### Impact 3.17-4: Expose People or Structures to Loss, Injury, or Death Involving Wildland Fires

Construction and operation of licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could be located in wildfire hazard areas and increase wildfire risks. Implementation of the project would ensure compliance with California Fire Code requirements and would ensure that commercial cannabis uses incorporate fire protection measures that would avoid an increased risk of wildfire and increased exposure to wildfire hazards and associated affects from a wildfire event. Therefore, this impact would be **less than significant**.

As noted above, the majority of the County is forested, has a high wildfire risk, and has experienced multiple fires over the past ten years. The construction and operation of licensed

commercial cannabis cultivation sites under the project would introduce new ignition sources that could increase wildfire hazards associated with electrical sources, storage of flammable materials, and related commercial cannabis cultivation activities.

### Existing Provisionally Licensed Sites

As addressed in Impact 3.17-1, continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations transitioning to annual licensure would not create new or additional fire hazards because existing structures and operations are not anticipated to be altered through the annual licensing process. Existing provisionally licensed sites are required to continue to comply with local regulations and standards to reduce wildfire exposure risks by ensuring proper storage of potential fuel and ignition sources and by ensuring proper defensible space protocols and distances are maintained. The provision of defensible space and the associated reduction of vegetative fuels have specifically been found to be effective at reducing fire frequency, fire severity, and annual area burned over an extended period of time. Where treatments have occurred, the pattern of wildfire progression may be limited to low-intensity underbrush and surface burning, which can create safe conditions for firefighters to successfully suppress fires in areas near structures, or around areas of high resource value (Kim et al. 2013; Martinson and Omi 2013; Tubbesing et al. 2019). Continued compliance with local and state requirements and standards would avoid existing provisionally licensed commercial cannabis cultivation sites from exacerbating existing wildfire hazards and related loss of structures, injury, and death. As a result, this impact would be less than significant, as they would retain the extent of their existing licensed commercial cannabis cultivation.

However, it is anticipated that some of the existing provisionally licensed commercial cannabis cultivation sites have expanded their cultivation activities since issuance of their provisional license or will propose to expand their cultivation activities as they transition to annual licensure. These expanded commercial cannabis cultivation operations features would still be required to comply with the existing local and state regulations and standards identified in Impact 3.17-1 related to access and defensible space for existing operations. Continued compliance with local and state requirements and standards would avoid existing provisionally licensed commercial cannabis cultivation sites from exacerbating existing wildfire hazards and related loss of structures, injury, and death. For these reasons, this impact would be less than significant.

### Future Licensed Sites

As discussed in Impact 3.17-1, new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would be subject to local and state requirements related to building construction, ensuring proper defensible space protocols and distances and ensuring proper storage of potential fuel and ignition. As described under “Existing Provisionally Licensed Sites,” the provision of defensible space and the associated reduction of vegetative fuels have specifically been found to be effective at reducing fire frequency, fire severity, and annual area burned over an extended period of time. Compliance with local and state requirements would avoid new licensed commercial cannabis cultivation sites from exacerbating existing wildfire hazards and related loss of structures, injury, and death. As a result, this impact is would be less than significant.

### Summary

As described above, existing provisionally licensed, potential expansion of existing provisionally licensed, and future commercial cannabis cultivation sites would be required to

comply with regulations and standards stated related to fire hazards, which would avoid exacerbating existing wildfire hazards and related loss of structures, injury, and death. Impacts would be **less than significant**.

#### Mitigation Measures

No mitigation is required for this impact.

## 4 CUMULATIVE IMPACTS

### 4.1 INTRODUCTION TO THE CUMULATIVE ANALYSIS

This Draft EIR provides an analysis of the cumulative impacts of the project taken together with other past, present, and probable future projects producing related impacts, as required by section 15130 of the State CEQA Guidelines. The goal of such an exercise is twofold: first, to determine whether the overall long-term impacts of all such projects would be cumulatively significant, and second, to determine whether the incremental contribution to any such cumulatively significant impacts by the project would be “cumulatively considerable” (and thus significant). (See State CEQA Guidelines, sections 15130(a)–(b), 15355(b), 15064(h), and 15065(c); see also *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 120.) In other words, the required analysis intends first to create a broad context in which to assess cumulative impacts, viewed on a geographic scale beyond the project site itself, and then to determine whether the project’s incremental contribution to any significant cumulative impacts from all projects would be itself significant (i.e., “cumulatively considerable”).

Cumulative impacts are defined in State CEQA Guidelines, section 15355 as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” A cumulative impact occurs from “the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time” (State CEQA Guidelines, section 15355(b)).

Consistent with State CEQA Guidelines, section 15130, the discussion of cumulative impacts in this Draft EIR focuses on significant and potentially significant cumulative impacts. Section 15130(b) of the State CEQA Guidelines provides, in part, the following:

The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact.

### 4.2 CUMULATIVE SETTING

#### 4.2.1 Geographic Scope

The geographic area that could be affected from implementation of the project varies depending on the type of environmental resource being considered. This geographic area provides the context for consideration of cumulative impacts. The general geographic area associated with various environmental effects defines the boundaries of the area used for compiling the list of projects considered in this cumulative impact analysis. Table 4-1 presents the general geographic areas associated with the different resources addressed in this Draft EIR and evaluated in those sections of this cumulative analysis.

**Table 4-1 Geographic Scope of Cumulative Impacts**

Resource Topic	Geographic Area
Aesthetics	Primarily site-specific and Mendocino County for overall viewsheds
Agriculture and Forestry Resources	Mendocino County
Air Quality	Regional for criteria pollutants in the North Coast Air Basin; generally, site-specific or in a larger localized area for odor and toxic air contaminants
Archaeological, Historical, and Tribal Cultural Resources	Mendocino County
Biological Resources	Mendocino County
Energy	Mendocino County and Pacific Gas and Electricity Company energy grid
Geology, Soils, and Mineral Resources	Site-specific
Greenhouse Gas Emissions and Climate Change	Global
Hazards and Hazardous Materials	Site-specific
Hydrology and Water Quality	Site-specific, watershed, and Ukiah Valley Groundwater Basin
Land Use and Planning	Mendocino County and site-specific
Noise and Vibration	Site-specific and localized (e.g., along transportation corridors)
Population, Employment, and Housing	Mendocino County
Public Services and Recreation	Mendocino County
Transportation	Mendocino County
Utilities and Service Systems	Mendocino County
Wildfire	Mendocino County

Source: Compiled by Ascent in 2024.

## 4.2.2 Land Use Conditions/Activities in the County

The Mendocino County General Plan Update EIR (State Clearinghouse No. 2008062074, certified in 2009) examined the impacts associated with planned growth of 77,160 residents and 34,510 residential dwelling units in the unincorporated area by 2030 (Mendocino County 2008). In 2011, subsequent to the adoption of the General Plan, Mendocino County adopted the Ukiah Valley Area Plan, which changed land use designations in the Ukiah Valley Area to promote mixed land uses and infill development (Mendocino County 2011).

Additional growth may occur in the County as a result of planned land uses within the incorporated cities. The General Plan EIR examined the potential for cumulative effects associated with buildout of planned growth in the unincorporated County area and growth in the incorporated cities (see page 5.0-2 of the Mendocino County General Plan Update EIR).

The following existing and planned land use conditions are related to cumulative setting conditions:

- ▶ Slow population growth is anticipated for the County. The California Department of Finance estimates Mendocino County's 2024 total population at 88,782 and projects that the County's 2050 population will be 89,697 (California Department of Finance 2022).
- ▶ Development of the unincorporated area and communities of the County has resulted in conversion of natural habitat to rural and urban uses and decreased surface water flows to support water supply demands. Residents in the communities of the County would continue to use existing surface water and groundwater supply sources.

- ▶ Existing and planned County and California Department of Transportation roadway maintenance projects would continue as planned.
- ▶ Historic and ongoing agricultural and grazing activities have converted habitat and required diversion of surface water and groundwater supplies for irrigation.
- ▶ Historic and ongoing timber production has resulted in the modification of forest resources, caused impacts on wildlife and associated habitat conditions, and degraded water quality and fisheries conditions in County watersheds.
- ▶ Historic and ongoing mining activities have resulted in habitat removal and modification of hydrologic conditions that have affected wildlife and associated habitat conditions and degraded water quality.
- ▶ Forest management activities consisting of fuels management, forest thinning, fuel breaks, and other, similar actions by the US Forest Service (USFS), the California Department of Forestry and Fire Protection (CAL FIRE), and local fire districts are ongoing and would occur into the future. These forest management activities have the potential to affect special-status plant and wildlife species and habitat, as well as watershed conditions.
- ▶ Existing cannabis cultivation and related activities have adversely affected natural habitats, biological resources, and water resources in the County (described further below).
- ▶ Commercial cannabis activities occur in Humboldt, Sonoma, and Trinity Counties and will continue in the future.

### 4.2.3 Existing Cannabis Cultivation Operations in Mendocino County

Mendocino County approved its local commercial cannabis cultivation regulations on March 27, 2017, and subsequently began processing County cannabis cultivation licenses. The state began accepting initial applications for temporary licensure in December 2017 and the first temporary licenses for commercial cannabis uses became effective on January 1, 2018. Based on Mendocino County records as of April 2023, 1,708 commercial cannabis license applications have been submitted since 2017 (see Figure 3.0-1). Of these County license applications, 1,319 application submittals have been submitted to DCC since 2018. Currently 623 provisional licenses and 19 annual licenses have been issued by the state and are considered active (see Figure 3.0-1).

It is acknowledged that there are unlicensed cannabis cultivation sites located in the County, including illegal cannabis cultivation sites located on state and federal lands. A complete inventory of unlicensed cannabis cultivation sites in the County has not been prepared by either Mendocino County or DCC. In September 2023, Ascent conducted a survey of approximately 30,000 acres of unincorporated, privately owned lands using geographic information system (GIS) mapping and satellite imagery to estimate the potential number of unlicensed cannabis cultivation sites in relation to licensed cannabis cultivation sites that appear to be operating. Using this sampling, Ascent identified that for every licensed cannabis cultivation site, there were approximately six unlicensed cultivation sites. According to this ratio, the unincorporated area of the County could contain roughly 3,850 unlicensed cannabis cultivation sites. This estimate is consistent with similar evaluations conducted in Trinity County and Humboldt County. Trinity County conducted an evaluation and mapping using satellite imagery and GIS mapping data in 2016 to estimate the extent of existing cultivation sites in the County. It was estimated, based on this mapping and County licenses through December 2018 (286 licenses), that Trinity County contained approximately 3,641 unlicensed cannabis cultivation sites (Trinity County

2020). In 2018, Humboldt County estimated the extent of total cannabis cultivation to range from 10,000 to 15,000 sites and that sites with County cannabis cultivation permit site applications consisted of 8 to 13 percent of this total (Humboldt County 2018).

Moreover, California Department of Fish and Wildlife scientists have collected cultivation data in Mendocino County from 2016 to 2022. Figures 3-2 and 3-3 provide a summary of the changes in total cultivation area in the county from 2016 to 2022.

As discussed in Sections 3.1 through 3.17, historic and ongoing unlicensed/illegal cannabis cultivation practices have resulted in damage to streams and wildlife. Unlicensed cannabis cultivation operations on public and private lands have led to illegal water diversions, unpermitted removal of sensitive vegetation, and direct mortality to protected species from exposure to rodenticides and insecticides. In addition, these practices (e.g., clearing trees, grading, and constructing roads) have been conducted in a manner that causes large amounts of sediment to flow into streams during rains. The unlicensed cannabis cultivators have also discharged pesticides, fertilizers, fuels, trash, and human waste around the sites that then washes into waters of the state. Furthermore, year-round diversion of flows by unlicensed cannabis cultivation operations may have caused adverse effects on stream flows in some areas of the County that impacts anadromous fish species that need certain minimum depths in order to travel upstream to spawn. Water quality–related constituents of concern associated with cannabis cultivation discharges include nitrogen, pathogens (represented by coliform bacteria), phosphorus, salinity, and turbidity. Water quality can be affected by excessive use of fertilizer, soil amendments, or other sources.

Cultivation operations that do not obtain licensing from DCC and Mendocino County are considered illegal. While unlicensed/illegal cannabis cultivation operations would likely continue to occur in the County, the details on the full extent of the environmental effects of existing unlicensed/illegal cannabis operations are considered speculative and are not assessed in this evaluation of cumulative impacts. Notably, enforcement activities targeting unlicensed cultivation operations are taken by the County in coordination with other agencies, including DCC, with the intent that such cultivation operations would be brought into compliance with County and state standards or closed.

### 4.3 ANALYSIS OF CUMULATIVE IMPACTS

The following sections contain a discussion of the cumulative effects anticipated from implementation of the project, together with other land use activities in the County and region, for each of the environmental issue areas evaluated in this EIR. The analysis conforms with section 15130(b) of the State CEQA Guidelines, which specifies that the “discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact.”

When considered in relation to other reasonably foreseeable projects, cumulative impacts on some resources would be significant and more severe than those caused by the project alone.



For purposes of this EIR, the project would result in a significant cumulative effect if:

- ▶ the cumulative effects of related land use activities (past, current, and probable future projects) are not significant but the incremental impact of implementing the project would be substantial enough, when added to the cumulative effects of related projects, to result in a new cumulatively significant impact; or
- ▶ the cumulative effects of related land use activities (past, current, and probable future projects) are already significant and implementation of the project would make a considerable contribution to the effect. The standards used herein to determine a considerable contribution are that either the impact must be substantial, or it must exceed an established threshold of significance.

This cumulative analysis assumes that individual commercial cannabis operations comply with DCC and County cannabis regulations and that all mitigation measures identified in Sections 3.1 through 3.17 are adopted and implemented. The analysis herein analyzes whether, after implementation of project-specific mitigation and performance criteria that minimize environmental effects, the residual impacts of the project would cause a cumulatively significant impact or would contribute considerably to existing/anticipated (without the project) cumulatively significant effects. Where the project would contribute to existing/anticipated cumulatively significant effects, additional mitigation is recommended where feasible.

## Impact CUM-1: Contribution to Cumulative Aesthetic Impacts

The cumulative context for aesthetic resources is the unincorporated area of Mendocino County. Because of its varied topography, the County offers a range of scenic features, including forests, wilderness areas, rivers and other waterways, recreation areas, rural communities, and scenic roadways (State Route (SR) 1, SR 20, and US 101). Visual quality and scenic resources are generally site-specific and/or localized and not cumulative in nature. For example, the creation of glare or physical alteration of a site at one location is not generally worsened by the same conditions occurring at another location in a different part of the County. Based on the analysis provided in Section 3.1, "Aesthetics," this cumulative impact analysis focuses on whether the environmental effects described for Impacts 3.1-1 through 3.1-4 would be worsened under cumulative conditions.

The General Plan Update EIR did not identify any significant aesthetic impacts under the General Plan or cumulative conditions (Mendocino County 2009). Significant and unavoidable impacts were identified for the Ukiah Valley Area Plan because of the loss of open space and associated views from development (Mendocino County 2011). Thus, cumulative aesthetic impacts from the loss of open space from development has been identified by the County.

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations that transition to annual licensure would not result in additional alteration of the visual character or significant new sources of nighttime lighting or glare conditions, because existing structures and features are not anticipated to be altered through the annual licensing process. Thus, the contribution of the continued operation of these commercial cannabis cultivation sites would not create a new cumulative impact on scenic resources or the visual character of the County and would not contribute to cumulative aesthetic impacts identified for the Ukiah Valley Area Plan, because it would not create new development. Thus, this impact **would not be cumulatively considerable**.

Potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations would introduce structures and features that are similar to those used for other agricultural activities. These include water storage ponds, accessory structures (e.g., barns and nurseries), housing, fencing, and roads. These structure and feature types are common in scenic vistas and are components of the rural and agricultural landscape character of the County. Mendocino County Cannabis Regulation (MCCR) section 10A.17.040(A) requires setbacks of commercial cannabis cultivation sites from sensitive land uses that include residences and parks, and MCCR section 10A.17.040(H) requires fencing of the garden (cultivation) area that would screen public views of commercial cannabis cultivation areas. Thus, the contribution of the new licensed commercial cannabis cultivation sites would not create a new cumulative impact on scenic resources or the visual character of the County and would not contribute to cumulative aesthetic impacts identified for the Ukiah Valley Area Plan, because it would not create new development. Thus, this impact **would not be cumulatively considerable**.

Existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would be subject to compliance with the requirements outlined in MCCR section 10A.17.040(E), which would ensure that artificial lighting associated with nurseries, mixed-light, and indoor commercial cannabis cultivation operations is fully contained in structures or otherwise shielded. Compliance with the annual license would also require that outdoor lights used for safety or security purposes on commercial cannabis cultivation sites are shielded and downward facing and that artificial lighting used for commercial cannabis cultivation is shielded from sunset to sunrise to reduce nighttime glare (CCR, title 4, section 16304). Compliance with these lighting standards would offset the contribution to cumulative lighting and glare impacts in the County. Thus, the project's contribution to the cumulative impact on light and glare **would not be cumulatively considerable** for existing provisionally licensed, expansion of existing provisionally licensed, or future new licensed commercial cannabis cultivation sites.

## Impact CUM-2: Contribution to Cumulative Agriculture and Forestry Resource Impacts

The cumulative setting for agriculture and forestry resources consists of the entire County. As stated in Section 3.2, "Agriculture and Forestry Resources," Mendocino County is ranked 34th among the state counties regarding gross value for agricultural production in 2021, including timber production. In 2021, the value of the farm goods produced in the County was approximately \$200.6 million, and the value of the farm goods produced in the state was \$22.5 billion. There are approximately 745,314 acres committed to agricultural uses in the County and more than 1.3 million acres of forest resources.

The General Plan Update EIR does not identify any significant agricultural resource impacts under General Plan or cumulative conditions (Mendocino County 2009). Significant and unavoidable impacts associated with farmland loss were identified for the Ukiah Valley Area Plan from planned development (Mendocino County 2011). Thus, cumulative impacts associated with the loss of agricultural land from development have been identified by the County. No cumulative impacts on forestry resources have been identified.

As described for Impact 3.2-1, cannabis is defined by the state (Business and Professions Code section 26060(a)) as an agricultural product; therefore, existing provisionally licensed,

potential expansion of existing provisionally licensed, and future licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations in agricultural areas would not result in conversion to a nonagricultural use. The commercial cannabis cultivation process for cannabis involves the same practices as those used for other agricultural products generated currently in the County. These similar practices include:

- ▶ cultivation of the crop through a growth medium (soil), light, water, and nutrients and
- ▶ harvesting and processing of the crop for sale.

The MCCR further regulates the extent of new licensed commercial cannabis cultivation uses that are allowed on agriculturally zoned lands. Table 2 of the MCCR prohibits Specialty Mixed-Light (County license Type 1B) and Small Indoor (County license Type 2A) commercial cannabis cultivation licensed uses in agriculturally zoned land areas. The Mendocino County Policies and Procedures for Agricultural Preserves and Williamson Act Contracts considers commercial cannabis cultivation compatible with agricultural uses on any Williamson Act contracted lands under section 9.5(E). Thus, the contribution of existing provisionally licensed, expansion of existing provisionally licensed, and future new licensed commercial cannabis cultivation sites to cumulative agricultural resource impacts **would not be cumulatively considerable**.

The discussion of Impact 3.2-2 states that existing provisionally licensed commercial cannabis cultivation sites are allowed in timber production zone (TPZ) areas and can remain in operation under the MCCR, whereas new licensed commercial cannabis cultivation sites are not allowed in TPZ areas. Both existing and new cultivation sites are subject to MCCR section 10A.17.040(K), which prohibits the removal of any commercial species trees as defined by CCR, title 14, section 895.1. Thus, the contribution of existing provisionally licensed, expansion of existing provisionally licensed, and future new licensed commercial cannabis cultivation sites to cumulative impacts on forest resources **would not be cumulatively considerable**.

### Impact CUM-3: Contribution to Cumulative Air Quality Impacts

The cumulative setting for air quality is the North Coast Air Basin. As identified in Section 3.3, "Air Quality," the Mendocino County portion of the basin is in attainment for criteria air pollutants. Only the Humboldt County portion of the basin is in nonattainment (for the state 24-hour standard for respirable particulate matter with an aerodynamic diameter of 10 micrometers or less (PM<sub>10</sub>) standard). The General Plan Update EIR identifies significant and unavoidable impacts associated with construction and operational impacts with criteria air pollutants and toxic air contaminants (TACs) under General Plan and cumulative conditions (Mendocino County 2009). Significant and unavoidable air quality impacts from planned development were also identified for the Ukiah Valley Area Plan (Mendocino County 2011). The Mendocino County General Plan Update Draft EIR estimates that the following emissions for 2023 would occur from implementation of the land uses under the General Plan (Mendocino County 2008):

- ▶ reactive organic gases: 8,208.28 pounds per day (lb/day),
- ▶ oxides of nitrogen: 7,385.58 lb/day, and
- ▶ PM<sub>10</sub>: 5,158.77 lb/day.

Thus, cumulative air quality air pollutant impacts from development and land uses activities have been identified for the County.

## CUMULATIVE AIR POLLUTANT EMISSIONS

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations that transition to annual licensure would not result in additional air pollutant emissions, because existing structures and features are not anticipated to be altered through the annual licensing process and therefore would not contribute to cumulative air pollutant conditions. Thus, the contribution of the continued operation of these commercial cannabis cultivation sites that do not alter their activities to cumulative air quality pollutant impacts and TAC impacts **would not be cumulatively considerable**.

As addressed in Section 3.3, “Air Quality,” given the minimal construction activities, the lack of major sources of TACs, and the setback requirements, the construction and operation of potential expansion of existing provisionally licensed and future licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would not expose receptors to substantial TAC concentrations. Thus, expansion of existing provisionally licensed and new licensed commercial cannabis cultivation uses **would not be cumulatively considerable**.

As described in the discussions of Impacts 3.3-1 and 3.3-2, no significant project-level air quality impacts are expected from potential expansion of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations and construction and operation of a typical outdoor, mixed-light, indoor, or commercial nursery commercial cannabis cultivation use that could be licensed. License applications for expansion of existing provisionally licensed and new commercial cannabis cultivation sites would be processed separately as they are received. Given these circumstances, the cumulative analysis is a programmatic review (State CEQA Guidelines, section 15168) and not a project review (State CEQA Guidelines, section 15161).

For analysis and disclosure purposes, this EIR estimated potential future new licensed commercial cannabis cultivation and associated processing or distribution transport-only operations that may occur in the County over the next 20 years for cumulative conditions. Construction and operation air pollutant emission modeling using the California Emissions Estimator Model (CalEEMod) Version 2022.1.1.17 computer program. Cumulative modeling was based on the number and size of these new facilities identified in Table 3.0-1, as well as climatic conditions in the County. Construction-related emissions were estimated for individual license types and scaled based on the number of cultivation and noncultivation sites that could be constructed simultaneously. This EIR estimates that a total of 1,075 new licensed cannabis cultivation and associated processing and/or distribution transport-only sites may occur over the next 20 years.

In order to estimate the number of new commercial cannabis cultivation sites that may be constructed in a year, it is conservatively estimated that as many as 12 commercial cannabis cultivation sites could be under construction at the same time. Table 4-2 presents the levels of criteria air pollutants and precursors that would be emitted by this level of construction activity. Refer to Appendix C for detailed modeling input parameters and results.

**Table 4-2 Cumulative Criteria Air Pollutant and Precursor Emissions Associated with Construction of 12 New Licensed Commercial Cannabis Cultivation Sites Simultaneously**

License Type	ROG (lb/day)	NO <sub>x</sub> (lb/day)	PM <sub>10</sub> (Exhaust) (lb/day)	PM <sub>2.5</sub> (Exhaust) (lb/day)
Outdoor	6	56	3	1
Mixed Light	8	71	3	
Indoor	1	10	3	
Nursery	2	20	1	
<b>Total</b>	<b>17</b>	<b>157</b>	<b>7</b>	<b>7</b>

Notes: ROG = reactive organic gases; NO<sub>x</sub> = oxides of nitrogen; PM<sub>10</sub> = respirable particulate matter with aerodynamic diameter of 10 micrometers or less; PM<sub>2.5</sub> = fine particulate matter with aerodynamic diameter of 2.5 micrometers or less; lb/day = pounds per day.

Source: Modeling conducted by Ascent in 2024.

Table 4-3 presents total levels of criteria air pollutants and precursors associated with operation of 1,075 new licensed commercial cannabis operations at 20 years. Refer to Appendix C for detailed modeling input parameters and results.

**Table 4-3 Cumulative Criteria Air Pollutant and Precursor Emissions Associated with Operation of 1,075 Licensed New Commercial Cannabis Cultivation Sites**

Emissions Sectors	ROG (lb/day)	NO <sub>x</sub> (lb/day)	PM <sub>10</sub> (lb/day)	PM <sub>2.5</sub> (lb/day)
Mobile	70	81	1,450	157
Area	854	2	<1	<1
Energy	0	0	0	0
<b>Total</b>	<b>925</b>	<b>83</b>	<b>1,450</b>	<b>157</b>

Notes: ROG = reactive organic gases; NO<sub>x</sub> = oxides of nitrogen; PM<sub>10</sub> = respirable particulate matter with aerodynamic diameter of 10 micrometers or less; PM<sub>2.5</sub> = fine particulate matter with aerodynamic diameter of 2.5 micrometers or less; lb/day = pounds per day.

Source: Modeling conducted by Ascent in 2023.

As identified in Section 3.3, “Air Quality,” existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites would be required to comply with Mendocino County Air Quality Management District (MCAQMD) Rule 1-430 (Fugitive Dust Emissions), which prohibits activities that allow or may allow unnecessary amounts of particulate matter to become airborne; MCCR section 10A.17.070(U), which requires license holders to obtain all approvals and permits required by MCAQMD pursuant to state and federal laws, MCAQMD regulations, adopted air quality plans, MCAQMD policies, and other applicable statutes; and CCR, title 4, section 16305(b), which requires licensees that generate greenhouse gas (GHG) in excess of the local utility provider’s GHG emission intensity threshold to obtain carbon offsets to cover the excess of carbon emissions from the previous annual licensed period.

MCAQMD has issued a recommendation that lead agencies use the adopted Bay Area Air Quality Management District’s (BAAQMD’s) CEQA thresholds in Mendocino County. The BAAQMD’s “plan level” thresholds of significance are applied to this cumulative impact analysis given the programmatic nature of the project. Table 3-3 of the BAAQMD 2022 CEQA Guidelines identifies the following thresholds for plan level (BAAQMD 2022):

- ▶ consistency with current air quality control measures and

- ▶ project vehicle miles traveled (VMT) or a vehicle trip increase less than or equal to the projected population increase.

As described above, existing provisionally licensed, potential expansion of existing provisionally licensed, and future licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations would be required to comply with MCAQMD rules and policies, state cannabis regulations, and CCR requirements that address air quality. Section 3.13, "Population, Employment, and Housing," and Section 3.15, "Transportation," state that the County has slow population growth and that expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites would not substantially alter population and employment growth and therefore would not increase VMT. Thus, the contribution of existing provisionally licensed, expansion of existing provisionally licensed, and future new licensed commercial cannabis cultivation sites to cumulative impacts on air pollutant emissions **would be less than cumulatively considerable**.

## CUMULATIVE ODOR IMPACTS

To the extent that potential land uses in the cumulative context may occur, the level of odor-producing uses in adjacent communities is anticipated to be minimal. In addition, odor impacts are not typically additive, because areas affected by isolated local odor sources typically do not overlap with other areas affected by other isolated local odor sources. However, it is acknowledged that existing unlicensed/illegal commercial cannabis cultivation sites are a source of odors during the harvest season.

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations that transition to annual licensure is part of the existing ambient air quality and odor conditions and is not anticipated to be altered through the annual licensing process. Additionally, existing licensed sites would continue to be required to meet the odor control standards established in MCCR sections 10A.17.040(C) and 10A.17.070(P). Therefore, this impact **would be less than cumulatively considerable**.

As described for Impact 3.3-2, potential expansion of existing provisionally licensed and development of future licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would result in significant impacts on current odor conditions created by existing provisionally licensed commercial cannabis cultivation sites and unlicensed/illegal commercial cannabis cultivation sites. Cannabis odors, especially during the final stages of the growing cycle (i.e., typically beginning in August and continuing through the harvest season, in September and October), may be detectable at a distance of 2 miles depending on weather. Odor control can be accomplished for nurseries, mixed-light and indoor commercial cannabis cultivation operations that use buildings and greenhouses through the use of equipment such as active carbon filters, biofilters, plasma ion technology, air filters, and other manufactured odor control/masking substances (e.g., gels and sprays designed to mask odors), and other air filter technology consistent with MCCR section 10A.17.0070(P). Odor control for outdoor and mixed-light commercial cannabis cultivation operations not involving the use of buildings or greenhouses is primarily limited to buffers from sensitive land uses in order to comply with the requirements of MCCR section 10A.17.040(C) to not propagate objectionable odors which cause injury, detriment, nuisance, or annoyance. Section 10A.17.040 of the MCCR establishes a range of buffers (100 feet to 1,000 feet) between commercial cannabis cultivation and residential and other sensitive land uses.

Whether the odor is acceptable or at a level which it may be defined as objectionable at various strengths and distances as perceived by individual sensitive receptors varies. Emission modeling conducted has identified that cannabis odors may be detected as far as two miles away. While odor control equipment for outdoor and mixed-light commercial cannabis cultivation operations contained within buildings or greenhouses would mitigate odor impacts, detectable cannabis odors from outdoor and mixed-light commercial cannabis cultivation operations not contained within buildings cannot be completely eliminated in all circumstances. All commercial cannabis cultivation sites are subject to compliance with the odor control performance standards of MCCR section 10A.17.040(C). MCCR section 10A.17.160 provides for enforcement of licensed commercial cannabis cultivation sites that fail to comply with the odor control performance standards that could include administrative processes to achieve code compliance or available civil remedies, such as injunctive relief.

Compliance with MCCR sections 10A.17.040(C), 10A.17.070(P), 10A.17.160, 20.240.070(C), and 20.240.070 (D) would provide all feasible measures to address and minimize odor impacts as well as corrective actions for licensed commercial cannabis cultivation sites that routinely generate nuisance odor impacts off-site. However, it is possible that nuisance odor impacts would occur occasionally before abatement for expansion of existing provisionally licensed and new licensed outdoor and mixed-light commercial cannabis cultivation sites not contained within buildings or greenhouses. There are no feasible mitigation measures for completely avoiding the potential for occasional odor nuisance impacts because there is no reliable method to contain odors on-site under all atmospheric conditions during harvest season. An increase in the number and potentially the density of commercial cannabis cultivation uses throughout the County that are a significant source of cannabis odor increases the potential commercial cannabis cultivation-related odor sources throughout the County. Thus, the contribution of expansion of existing provisionally licensed and future new licensed commercial cannabis cultivation sites to cumulative odor impacts would be **cumulatively considerable and significant and unavoidable**.

## Impact CUM-4: Contribution to Cumulative Archaeological, Historical, and Tribal Cultural Resources Impacts

The cumulative context for historical resources is Mendocino County, where common patterns of historic-era settlement have occurred over roughly the past two centuries. The cumulative context for archaeological resources, human remains, and tribal cultural resources is the former territory of the Pono, Coash Yuki, Yuki, Huchnom, Sinkyone and Wailaki, and Cahto tribes, which stretches out into neighboring counties.

The General Plan Update EIR identifies less-than-significant cultural resource impacts under General Plan and cumulative conditions (Mendocino County 2009). Significant and unavoidable impacts associated with undiscovered cultural resources were identified for the Ukiah Valley Area Plan from planned development (Mendocino County 2011). Thus, cumulative cultural resource impacts from development and land uses activities have been identified for the County.

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations that transition to annual licensure would not result in new impacts on potentially cultural resources, because such provisionally licensed commercial cannabis cultivation sites are not anticipated to be altered through the annual licensing process and thus would not contribute to cumulative

cultural resource impacts. Therefore, the contribution to cumulative cultural resources impacts **would not be cumulatively considerable** for existing provisionally licensed sites.

Ground-disturbing activities associated with the potential expansion of existing provisionally licensed and future licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations, in combination with other development in the region, could cause a substantial adverse change in the significance of a cultural resource (see Section 3.4, “Archaeological, Historical, and Tribal Cultural Resources”). These impacts could contribute to significant cumulative cultural resource impacts. Implementation of Mitigation Measures 3.4-1 would address the project’s contribution by requiring site-specific historical evaluations upon licensing and would require implementation of protective measures for the significant resources identified. Archaeological resource impacts would be offset through compliance with Attachment A (Section 1, General Requirements and Prohibitions) of the State Water Resources Control Board (SWRCB) General Order (Order WQ 2023-00102-DWQ) Terms 19, 20, 21, and 22, which require protection of the archaeological or tribal cultural resource. The project could also contribute to the disturbance of human remains as a result of project-related construction activities. However, compliance with California Health and Safety Code section 7050.5 and PRC section 5097 would ensure that treatment and disposition of the remains occur in a manner consistent with the California Native American Heritage Commission guidance. No tribal cultural resources were identified during the County’s consultation process with tribes identified in Section 3.4.2, “Environmental Setting.” Thus, upon implementation Mitigation Measure 3.4-1, the contribution of expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites to cumulative impacts on historic resources **would be less than cumulatively considerable**.

## Impact CUM-5: Contribution to Cumulative Biological Resource Impacts

The cumulative setting for biological resources includes Mendocino County and adjacent migration and movement corridors, including rivers and streams and the Pacific Flyway for migratory birds. Additionally, the cumulative context includes the Pacific Ocean to account for migration of anadromous fish (e.g., steelhead, Chinook salmon, coho salmon). Although Mendocino County is one of the most rural counties in the state, past development in the region, including timber harvest (beginning in the mid-19th century) and commercial cannabis cultivation, has resulted in substantial loss and degradation of native habitat, including old-growth redwood and Douglas fir forest, and the degradation of aquatic habitat and water quality of County watersheds.

Although Mendocino County is not anticipated to see significant population growth and associated development, some development activities and maintenance of roadways and infrastructure are anticipated. Historic and ongoing unlicensed commercial cannabis cultivation activities have resulted in significant impacts on the biological resources and conditions in the region. Overall, because of these conditions and other land use activities (e.g., agriculture), there are significant cumulative effects on special-status wildlife, special-status plants, natural communities, waters of the United States, waters of the state, and migratory corridors in the County.

The General Plan Update EIR identifies significant and unavoidable impacts associated with construction and operational impacts on wetlands, riparian habitat, and other sensitive habitats under General Plan and cumulative conditions (Mendocino County 2009). Thus, cumulative



biological resource impacts from development and land uses activities have been identified for the County.

## CUMULATIVE IMPACTS ON SPECIAL-STATUS PLANT SPECIES AND HABITAT

Existing structures and other features on provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations are not anticipated to be substantially altered through the annual licensing process and would continue to be subject to the biological resource protection requirements of SWRCB Order WQ 2023-0102-DWQ, the California Department of Fish and Wildlife (CDFW) Lake and Streambed Alteration Agreement requirements therein (Term 3), and MCCR section 10A.17.100(A)(2) that requires Mendocino County to consult with CDFW prior to commercial cannabis cultivation license issuance, which would avoid contributions to cumulative biological resource impacts. Thus, the contribution to cumulative biological resource impacts associated with the annual licensing of existing commercial cannabis cultivation sites **would not be cumulatively considerable**.

Licensing of new commercial cannabis cultivation uses and associated processing and/or distribution transport-only operations and the potential expansion of existing provisionally licensed commercial cannabis cultivation sites could involve ground disturbance, vegetation removal, and conversion of wetland habitat, which could result in the direct loss of special-status plants or their habitat (see Section 3.5, "Biological Resources," Impact 3.5-1). This would contribute to significant cumulative impacts in Mendocino County. Implementation of Mitigation Measures 3.5-1a, 3.5-1b, and 3.5-1c as well as compliance with the SWRCB Order WQ 2023-0102-DWQ and MCCR section 10A.17.100(A)(2) identified above would offset the project's contribution to this impact because it would require applicants to identify and avoid special-status plants and avoid the establishment of invasive species. Thus, upon implementation of these mitigation measures, the contribution of expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites to cumulative impacts on special-status plant species and habitat **would be less than cumulatively considerable**.

## CUMULATIVE IMPACTS ON SPECIAL-STATUS WILDLIFE SPECIES AND HABITAT

Existing structures and other features on provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations are not anticipated to be substantially altered through the annual licensing process and would continue to be subject to the biological resource protection requirements of SWRCB Order WQ 2023-0102-DWQ, the CDFW Lake and Streambed Alteration Agreement requirements therein (Term 3), and the MCCR sections 10A.17.040(E), 10A.17.070(F), 10A.17.070 (Q), 10A.17.090 (E)(3), 10A.17.100(A)(2) that requires Mendocino County to consult with CDFW prior to commercial cannabis cultivation license issuance, which would avoid contributions to cumulative biological resource impacts. Thus, the contribution to cumulative biological resource impacts associated with the annual licensing of existing commercial cannabis cultivation sites **would not be cumulatively considerable**.

Licensing of new commercial cannabis cultivation uses and associated processing and/or distribution transport-only operations and the potential expansion of existing provisionally licensed commercial cannabis cultivation sites could result in impacts related to disturbance to or loss of special-status wildlife species and habitat (see Section 3.5, "Biological Resources," Impact 3.5-2). This would contribute to significant cumulative impacts because the project

could involve ground disturbance, vegetation removal, and overall conversion of wildlife habitat in Mendocino County where adverse effects on special-status wildlife species and habitat would be significant. Mitigation Measures 3.5-2a through 3.5-2p would address these impacts because they would require actions including preconstruction surveys, establishment of protective buffers, and other avoidance measures consistent with the protection measures set forth in SWRCB Order WQ 2023-0102-DWQ and the MCCR identified above. These mitigation measures would offset the project's contribution to cumulative special-status wildlife species and habitat impacts. Thus, upon implementation of these mitigation measures, the contribution of expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites to cumulative impacts on special-status wildlife species and habitat **would be less than cumulatively considerable**.

## CUMULATIVE IMPACTS ON SPECIAL-STATUS FISHERIES

Existing structures and other features on provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations are not anticipated to be substantially altered through the annual licensing process and would continue to be subject to the biological resource protection requirements of SWRCB Order WQ 2023-0102-DWQ; the CDFW Lake and Streambed Alteration Agreement requirements therein (Term 3); the MCCR sections 10A.17.080(C)(1)(a) and 10A.17.080(C)(1)(b) and 10A.17.100(A)(2) that requires Mendocino County to consult with CDFW prior to commercial cannabis cultivation license issuance; CCR, title 4, section 15011(a)(11); and waiver of waste discharge requirements specific to agricultural lands, which would avoid contributions to cumulative biological resource impacts. Thus, the contribution to cumulative biological resource impacts associated with the annual licensing of existing commercial cannabis cultivation sites **would not be cumulatively considerable**.

Licensing of new commercial cannabis cultivation uses and associated processing and/or distribution transport-only operations and the potential expansion of existing provisionally licensed commercial cannabis cultivation sites could result in impacts related to disturbance to or loss of special-status fisheries (see Section 3.5, "Biological Resources," Impact 3.5-3). New licenses would be subject to SWRCB Order WQ 2023-0102-DWQ and CDFW Lake and Streambed Alteration Agreement requirements therein (Term 3), the MCCR sections 10A.17.080(C)(1)(a) and 10A.17.080(C)(1)(b), CCR, title 4, section 15011(a)(11), and waiver of waste discharge requirements specific to agricultural lands. As such, this impact would be less than significant with no mitigation required. Thus, the contribution of expansion of existing provisionally licensed and future new licensed commercial cannabis cultivation sites to cumulative impacts on special-status fisheries **would be less than cumulatively considerable**.

## CUMULATIVE IMPACTS ON SENSITIVE NATURAL COMMUNITIES, RIPARIAN HABITAT, OLD-GROWTH HABITAT, OR OTHER SENSITIVE HABITATS

Existing structures and other features on provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations are not anticipated to be substantially altered through the annual licensing process and would continue to be subject to the biological resource protection requirements of SWRCB Order WQ 2023-0102-DWQ and CDFW Lake and Streambed Alteration Agreement requirements therein (Term 3) and the MCCR sections 10A.17.040(K) 10A.17.080(B)(3)(c) and 10A.17.100(A)(2) that requires Mendocino County to consult with CDFW prior to commercial cannabis cultivation

license issuance, which would avoid contributions to cumulative biological resource impacts. Thus, the contribution to cumulative biological resource impacts associated with the annual licensing of existing commercial cannabis cultivation sites **would not be cumulatively considerable**.

Licensing of new commercial cannabis cultivation uses and associated processing and/or distribution transport-only operations and the potential expansion of existing provisionally licensed commercial cannabis cultivation sites could adversely affect riparian habitat, old-growth habitat, and other sensitive natural communities if they are present on the commercial cannabis operation sites (see Section 3.5, “Biological Resources,” Impact 3.5-4). Most of this habitat area is on lands (e.g., public lands) where new commercial cannabis operations would be prohibited under the project. Implementation of Mitigation Measure 3.5-4 as well as SWRCB Order WQ 2023-0102-DWQ and the MCCR would offset the project’s contribution to this significant cumulative impact on sensitive natural communities, riparian habitat, and wetland vegetation because it would require applicants to identify and avoid sensitive resources or provide compensation for the loss of habitat through enhancement, creation and management, conservation easements, and other appropriate measures. Thus, upon implementation of these mitigation measures, the contribution of expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites to cumulative impacts on habitat **would be less than cumulatively considerable**.

## CUMULATIVE IMPACTS ON STATE OR FEDERALLY PROTECTED WETLANDS

Existing structures and other features on provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations are not anticipated to be substantially altered through the annual licensing process and would continue to be subject to the biological resource protection requirements of SWRCB Order WQ 2023-0102-DWQ, the CDFW Lake and Streambed Alteration Agreement requirements therein (Term 3) and the MCCR section 10A.17.040 (G) and 10A.17.100(A)(2) that requires Mendocino County to consult with CDFW prior to commercial cannabis cultivation license issuance, which would avoid contributions to cumulative biological resource impacts. Thus, the contribution to cumulative biological resource impacts associated with the annual licensing of existing commercial cannabis cultivation sites **would not be cumulatively considerable**.

Licensing of new commercial cannabis cultivation uses and associated processing and/or distribution transport-only operations and the potential expansion of existing provisionally licensed commercial cannabis cultivation sites could adversely affect waters of the United States and waters of the state, such as streams, rivers, lakes, and wetlands. This would contribute to significant cumulative impacts in Mendocino County (see Section 3.5, “Biological Resources,” Impact 3.5-5). Implementation of Mitigation Measure 3.5-5 as well as SWRCB Order WQ 2023-0102-DWQ and the MCCR would offset the project’s contribution to this significant cumulative impact because it would require avoidance of impacts on waters of the United States. Thus, upon implementation this mitigation measure, the contribution of expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites to cumulative impacts to wetlands **would be less than cumulatively considerable**.

## CUMULATIVE IMPACTS ON MIGRATORY WILDLIFE CORRIDORS OR NATIVE WILDLIFE NURSERY SITES

Existing structures and other features on provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations are not anticipated to be substantially altered through the annual licensing process and would continue to be subject to the biological resource protection requirements of SWRCB Order WQ 2023-0102-DWQ and CDFW Lake and Streambed Alteration Agreement requirements therein (Term 3) and the MCCR section 10A.17.100(A)(2) that requires Mendocino County to consult with CDFW prior to commercial cannabis cultivation license issuance, which would avoid contributions to cumulative biological resource impacts. Thus, the contribution to cumulative biological resource impacts associated with the annual licensing of existing commercial cannabis cultivation sites **would not be cumulatively considerable**.

Licensing of new commercial cannabis cultivation uses and associated processing and/or distribution transport-only operations and the potential expansion of existing provisionally licensed commercial cannabis cultivation sites could adversely affect resident or migratory wildlife corridors through habitat fragmentation, degradation of aquatic habitat (e.g., streams and rivers), and blockage of important wildlife migration paths (see Section 3.5, “Biological Resources,” Impact 3.5-6). This would contribute to significant cumulative impacts in Mendocino County. Implementation of Mitigation Measures 3.5-6a and 3.5-6b as well as SWRCB Order WQ 2023-0102-DWQ and the MCCR would offset the project’s contribution to this significant cumulative impact because it would prohibit the removal of old-growth habitat and retain features critical for habitat connectivity. Thus, after implementation of Mitigation Measures 3.5-6a and 3.5-6b, the contribution of expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites to significant cumulative impacts on migratory corridors **would be less than cumulatively considerable**.

## CUMULATIVE IMPACTS RELATED TO CONFLICTS WITH ANY LOCAL POLICIES OR ORDINANCES PROTECTING BIOLOGICAL RESOURCES

Existing structures and other features on provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations are not anticipated to be substantially altered through the annual licensing process and would continue to be subject to the Mendocino County General Plan, Ukiah Valley Area Plan, Brooktrails Township Specific Plan, and Mendocino County Cannabis Regulation which would avoid contributions to cumulative biological resource impacts. Thus, the contribution to cumulative biological resource impacts associated with the annual licensing of existing commercial cannabis cultivation sites **would not be cumulatively considerable**.

Licensing of new commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations and the potential expansion of existing provisionally licensed commercial cannabis cultivation sites could conflict with local policies and ordinances protecting biological resources (see Section 3.5, “Biological Resources,” Impact 3.5-7). This would contribute to significant cumulative impacts in Mendocino County. New licensed sites would be required to follow the Mendocino County General Plan, Ukiah Valley Area Plan, Brooktrails Township Specific Plan, and Mendocino County Cannabis Regulation and SWRCB Order WQ 2023-0102-DWQ which would offset the project’s contribution to this significant cumulative impact and no conflict with the policies protecting biological resources would occur; therefore, this impact would be less than significant. Thus, the contribution of expansion of

existing provisionally licensed and new licensed commercial cannabis cultivation sites to significant cumulative impacts from conflicts with local policies **would be less than cumulatively considerable**.

## Impact CUM-6: Contribution to Cumulative Energy Impacts

The cumulative context for energy is Mendocino County and the Pacific Gas and Electricity Company grid. Energy consumption is related to construction activities and operation-related energy demand from existing and new land uses. Construction-related energy would be used during construction activities, which would not represent a long-term increase in energy demand. As noted above, Mendocino County is not anticipated to see significant population growth and associated development. The General Plan Update EIR identifies less-than-significant energy impacts under General Plan and cumulative conditions (Mendocino County 2009). Thus, no significant cumulative energy use impacts are currently expected.

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations that transition to annual licensure is not anticipated to be altered through the annual licensing process and therefore would not create additional or new energy use impacts. Additionally, existing provisionally licensed sites would continue to be required to meet the standards established in CCR, Title 4, section 16305 regarding energy sources that reduce GHG emissions and sections 10A.17.040(D) and 10A.17.070(F) of the MCCR, which limit the use of generators. Thus, the contribution to cumulative energy impacts associated with the annual licensing of existing commercial cannabis cultivation sites **would not be cumulatively considerable**.

Licensing of new commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations and the potential expansion of existing provisionally licensed commercial cannabis cultivation sites would be required to comply with the California Energy Code and CCR, title 24, section 16305, which requires licensees that would exceed the local utility provider's GHG emission intensity threshold to obtain carbon offsets to cover the excess of carbon emissions from the previous annual licensed period as well as the MCCR sections 10A.17.040(D) and 10A.17.070(F). For these reasons, energy consumption associated with construction and operation of existing provisionally licensed, expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites would not be considered wasteful, inefficient, or unnecessary. Thus, the project's contribution to this cumulative impact on energy demand **would not be cumulatively considerable**.

## Impact CUM-7: Contribution to Cumulative Geology, Soils, and Mineral Resource Impacts

Geotechnical and mineral resource impacts tend to be site specific rather than cumulative in nature, and each site would be subject to, at a minimum, site development and construction standards relative to seismic and other geologic conditions that are prevalent within the region (see Section 3.7, "Geology, Soils, and Mineral Resources," for a discussion of these standards). As a result of past and current practices, hydrologic units in Mendocino County associated with the Eel River have been designated as "impaired" because of water quality issues associated with the North Coast Regional Water Quality Control Board sedimentation total maximum daily load (see Table 3.10-7), and the units are on the 303(d) list of impaired waterways. Generally, listing of the waterways is associated with sedimentation, siltation, and turbidity. Although Mendocino County is not anticipated to see significant population growth

and associated development, some development activities, existing illegal cannabis cultivation, continued agricultural and timber operations, unstable geologic/soil conditions from post-wildfire conditions that removed vegetation and increased soil erosion and slope stability, and maintenance of roadways and infrastructure are anticipated to result in potentially significant cumulative impacts associated with geologic and soil stability.

The General Plan Update EIR identifies less-than-significant geology, soil, paleontological resource, and mineral resource impacts under General Plan and cumulative conditions (Mendocino County 2009). Significant and unavoidable impacts associated with seismic hazards and loss of paleontological resources were identified for the Ukiah Valley Area Plan from planned development (Mendocino County 2011). Thus, cumulative geology and soil impacts from development and land uses activities have been identified for the County.

## CUMULATIVE GEOLOGIC AND SOIL IMPACTS

All existing provisionally licensed, potential expansion of existing provisionally licensed, and new commercial cannabis cultivation sites and associated processing and/or processing and/or distribution transport-only operations in the County would be required to comply with MCCR sections 10A.17.070(I) and 10A.17.070(L), conditions of SWRCB Order WQ 2023-0102-DWQ, the Mendocino County Code's Grading Ordinance, and the California Building Code, or otherwise avoid water quality impacts. Compliance with existing regulations would ensure that activities at existing and future sites would not result in contribution to cumulative operational soil erosion and sedimentation impacts. As a result, the contribution of existing provisionally licensed, expansion of existing provisionally licensed, and new commercial cannabis cultivation sites to cumulative geologic and soil stability impacts **would not be cumulatively considerable**.

## CUMULATIVE PALEONTOLOGICAL RESOURCE IMPACTS

The cumulative context for the paleontological resources covers a broad regional system of which the resources are a part. Because all significant paleontological resources are unique and nonrenewable members of finite classes, all adverse effects erode a dwindling resource base. The loss of any one site affects all others in a region because these resources are best understood in the context of the entirety of the system of which they are a part. New commercial cannabis cultivation uses, in combination with other development in the region, could cause damage to or destruction of undiscovered paleontological resources (see Impact 3.7-4).

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations that transition to annual licensure would not result in new impacts associated with paleontological resources, because operations are not anticipated to be altered through the annual licensing process that could contribute to cumulative paleontological impacts. Thus, the contribution to cumulative paleontological resource impacts associated with the annual licensing of existing commercial cannabis cultivation sites **would not be cumulatively considerable**.

Licensing of new commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations and the potential expansion of existing provisionally licensed commercial cannabis cultivation sites would be required to comply with Mendocino County General Plan Policy DE-116 as part of local license approvals by Mendocino County. Policy DE-116 requires the preparation of paleontological resources studies at the County's discretion and mitigation for any resources area that cannot be avoided. Compliance with

Mendocino County General Plan Policy DE-116 as part of the processing of future licenses would offset the project's contribution to the loss of paleontological resources because it would ensure that discovered resources are evaluated and protected. Thus, the contribution of expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites to paleontological resources **would be less than cumulatively considerable**.

## Impact CUM-8: Contribution to Cumulative Greenhouse Gas Emissions and Climate Change Impacts

GHG emissions and their contribution to global climate change are inherently cumulative and are addressed in Section 3.8, "Greenhouse Gas Emissions and Climate Change." The General Plan Update EIR identifies significant and unavoidable impact associated with GHG emissions under cumulative conditions (Mendocino County 2009). Significant and unavoidable impacts associated with GHG emissions were also identified for the Ukiah Valley Area Plan from planned development (Mendocino County 2011).

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations that transition to annual licensure would not result in additional GHG emissions, because existing structures and features are not anticipated to be altered through the annual licensing process. Thus, the contribution of the continued operation of these commercial cannabis cultivation sites to cumulative GHG impacts **would not be cumulatively considerable**.

As stated in the discussion of Impact 3.8-1 in Section 3.8, "Greenhouse Gas Emissions and Climate Change," potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation and associated processing and/or distribution transport-only uses would result in significant and unavoidable GHG impacts. For analysis and disclosure purposes, construction and operation GHG emission modeling was conducted using the CalEEMod Version 2022.1.1.17 computer program. Cumulative modeling was based on the number and size of the new facilities identified in Table 3.0-1, as well as climatic conditions in the County. Construction-related emissions were estimated for individual license types and scaled based on the number of cultivation and noncultivation sites that could be constructed simultaneously. This EIR estimates that a total of 1,075 new licensed commercial cannabis cultivation and associated processing and/or distribution transport-only sites may occur over the next 20 years.

In order to estimate the number of new commercial cannabis cultivation sites that may be constructed in a year, it is conservatively estimated that as many as 12 commercial cannabis cultivation sites could be under construction at the same time. Table 4-4 presents GHG emissions that would be emitted by this level of construction activity. Refer to Appendix C for detailed modeling input parameters and results.

**Table 4-4 Cumulative Greenhouse Gas Emissions Associated with Construction of 12 New Licensed Commercial Cannabis Cultivation Sites Simultaneously**

License Type	MTCO <sub>2e</sub> /year
Outdoor	237
Mixed Light	176
Indoor	77
Nursery	73
<b>Total</b>	<b>565</b>

Notes: MTCO<sub>2e</sub>/year = metric tons of carbon dioxide equivalent.

Source: Modeling conducted by Ascent in 2024.

Table 4-5 presents total GHG emissions associated with operation of 1,075 new licensed commercial cannabis operations at 20 years. Refer to Appendix C for detailed modeling input parameters and results.

**Table 4-5 Cumulative Greenhouse Gas Emissions Associated with Operation of 1,075 Licensed New Commercial Cannabis Cultivation Sites**

License Type	MTCO <sub>2e</sub> /year
Outdoor	42,680
Mixed Light	89,679
Indoor	1,111
Nursery	4,920
<b>Total</b>	<b>138,390</b>

Notes: MTCO<sub>2e</sub>/year = metric tons of carbon dioxide equivalent.

Source: Modeling conducted by Ascent in 2024.

As shown above, the cumulative GHG emissions associated with potential new licensed commercial cannabis cultivation sites would be considerable under cumulative conditions. Even with implementation of Mitigation Measure 3.8-1 and CCR, title 4, section 16305 renewable energy requirements, the contribution of expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites to cumulative GHG impacts would be **cumulatively considerable and significant and unavoidable**.

### Impact CUM-9: Contribution to Cumulative Hazardous and Hazardous Material Impacts

Although some hazardous materials releases can cover a large area and interact with other releases (e.g., atmospheric contamination, contamination of groundwater aquifers), incidents of hazardous materials contamination are more typically isolated to a small area, such as leaking underground storage tank sites or release at individual businesses. The cumulative context for hazards and hazardous materials includes historic and existing land uses and existing unlicensed/illegal commercial cannabis cultivation countywide that contribute to the potential for contamination and other hazardous conditions. These relatively isolated areas of contamination typically do not interact in a cumulative manner with other sites of hazardous materials contamination. Impacts related to emergency vehicle access and evacuation are considered



site-specific and are not cumulative. The potential for airport hazards is associated with site-specific conditions in relation to particular airports and are not considered cumulative impacts.

The General Plan Update EIR identifies less-than-significant hazard impacts under General Plan and cumulative conditions (Mendocino County 2009). Thus, no significant cumulative hazard impacts are currently expected.

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations that transition to annual licensure would not result in new impacts on public health associated with the hazardous materials, because operations are not anticipated to be altered through the annual licensing process. Existing provisionally licensed cannabis operations would continue to be required to comply with state and local regulations, including CCR, title 4, division 19 and MCCR section 10A.17.040(A)(1). Compliance with existing applicable rules and regulations would prevent any impacts related to hazardous materials from existing provisionally licensed commercial cannabis operations that could contribute to cumulative hazard conditions. Thus, the contribution to cumulative hazards impacts associated with the annual licensing of existing commercial cannabis cultivation sites **would not be cumulatively considerable**.

Potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations impacts related to hazards and hazardous materials, as discussed in Section 3.9, "Hazards and Hazardous Materials," are associated with the transport, use, or disposal of hazardous materials; exposure to existing on-site hazardous conditions; and hazards to the public or environment related to upset and accident conditions. Licensed commercial cannabis cultivation sites would be required to comply with existing state and local regulations (CCR, title 4, division 19 and the MCCR) intended to protect the public from potential hazards associated with the routine transport, use, or disposal of hazardous materials or upset and accident conditions, which would offset cumulative contributions to hazard impacts. This would include compliance with MCCR section 10A.17.090I(8), which requires site review and database searches for the potential of on-site contamination and demonstration that any on-site contamination is remediated in compliance with any cleanup or abatement order. Thus, the contribution of expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites to hazard impacts **would be less than cumulatively considerable**.

## Impact CUM-10: Contribution to Cumulative Hydrology and Water Quality Impacts

The cumulative context for hydrology and water quality is the surface water (the Eel River, the Navarro River, the South Fork of the Eel River, the Russian River and its tributaries and the North Fork, Middle Fork, and South Fork) and groundwater in Mendocino County. Flooding conditions along these watersheds are shown in Figure 3.10-2. As discussed in Section 3.10, "Hydrology and Water Quality," the Eel River hydrologic unit is considered impaired due to various issues, such as temperature, nutrients, and presence of heavy metals (see Table 3.10-7). These water quality impacts have been the result of historic timber activities, road construction, agricultural activities, and development activities in the County and region. In addition to the designation of impaired watersheds, the County includes designated Cannabis Priority Watersheds, which contain a high concentration of commercial cannabis cultivation that have the potential to cause environmental impacts.

The watersheds for the following waterways are Cannabis Priority Watersheds in Mendocino County (see Figures 3.10-1 and 3.10-4):

- ▶ Mattole River,
- ▶ Middle South Fork Eel River,
- ▶ East Fork Russian River,
- ▶ Headwaters Russian River,
- ▶ Navarro River, and
- ▶ Dry Creek.

The cumulative condition for groundwater includes current and potential future uses of groundwater by local community service districts and individual users. Generally, groundwater is available in many parts of the County, particularly in areas that overlay the six groundwater basins: Anderson Valley, Laytonville Valley, Little Lake Valley, Potter Valley, Covelo Round Valley, and Ukiah Valley Groundwater Basins. The Ukiah Valley Groundwater Basin is subject to the Ukiah Valley Basin Groundwater Sustainability Plan. Groundwater is present outside of these areas and occurs in fractured bedrock conditions.

The General Plan Update EIR identifies significant and unavoidable groundwater resource impacts under General Plan and cumulative conditions (Mendocino County 2009). Significant and unavoidable impacts associated with drainage were also identified for the Ukiah Valley Area Plan from planned development (Mendocino County 2011). Thus, cumulative hydrology and water quality impacts from development and land uses activities have been identified for the County.

## CUMULATIVE WATER QUALITY AND FLOODPLAIN IMPACTS

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations that transition to annual licensure would not result in additional impacts on surface water and groundwater quality, because operations are not anticipated to be altered through the annual licensing process. Cultivation activities associated with these sites would continue to be subject to the water quality control requirements of Attachment A (General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ, which requires a site evaluation for any future site expansion activities, and MCCR section 10A.17.040(G), which prohibits activities associated with commercial cannabis cultivation to cause eroded materials or contaminated runoff to be deposited into any stream, creek, river, or body of water. Compliance with these standards would offset contributions to cumulative impacts. Thus, the contribution to cumulative water quality and floodplain alteration impacts associated with the annual licensing of existing cannabis cultivation sites **would not be cumulatively considerable**.

As identified in the discussion of Impact 4.10-1, potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations may include ground disturbance, vegetation removal, and grading, which could lead to accelerated erosion and sedimentation that causes poor water quality from high turbidity, total suspended solids, and total dissolved solids in local waterways, thus contributing to further degraded conditions in already impaired waterways and alteration of floodplain conditions. Licensed commercial cannabis cultivation sites would be required to comply with the water quality and site stability requirements of SWRCB Order WQ 2023-0102-DWQ, County Code of Ordinances Chapter

18.70, and MCCR section 10A.17.040(G), which prohibits activities associated with commercial cannabis cultivation to cause eroded materials or contaminated runoff to be deposited into any stream, creek, river, or body of water. Compliance with these requirements would offset contributions to cumulative water quality and floodplain impacts. Thus, the contribution of expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites to water quality and floodplain impacts **would be less than cumulatively considerable**.

## CUMULATIVE GROUNDWATER RESOURCE IMPACTS

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations that transition to annual licensure would not result in additional impacts on groundwater, because operations are not anticipated to be altered through the annual licensing process and thus would not contribute to cumulative groundwater demands. Thus, the contribution to cumulative groundwater resource impacts associated with the annual licensing of existing commercial cannabis cultivation sites **would not be cumulatively considerable**.

As identified in Impact 3.10-2, groundwater levels in the County are generally stable with substantial capacity identified in the County's groundwater basins to accommodate the potential new licensed commercial cannabis cultivation operation total water demand of 672.08 acre-feet annually in addition to the existing licensed commercial cannabis cultivation water demand of approximately 387 acre-feet annually. New wells are subject to issues of a permit from the County, per Mendocino County Ordinance Chapter 16.04. Furthermore, MCCR section 10A.17.080(C)(1)(b) would require a watershed assessment to establish that sufficient groundwater supply is available to serve the proposed commercial cannabis cultivation site. Future new licensed commercial cannabis cultivation located in the Ukiah Valley Groundwater Basin would contribute to groundwater demands on this basin that are addressed in the Ukiah Valley Basin Groundwater Sustainability Plan. The plan identifies a groundwater sustainable yield of 6,500 acre-feet annually, which includes approximately 5,983 acre-feet annually of groundwater pumping from municipal and agricultural uses through the next 20 years (UVBGSA 2021). The projected water demand for all assumed new licensed commercial cannabis cultivation sites (661.38 acre-feet per year) would be within the remaining sustainable yield. (Note that all new commercial cannabis cultivation uses are not anticipated to be sited solely within the Ukiah Valley Groundwater Basin.)

Thus, the contribution of expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites to groundwater resource impacts **would be less than cumulatively considerable**.

## CUMULATIVE SURFACE WATER RESOURCE IMPACTS

Continued operation of existing provisionally licensed commercial cannabis cultivation uses that sites that transition to annual licensure would not result in additional impacts on surface water resources, because operations are not anticipated to be altered through the annual licensing process. Continued operation of these existing commercial cannabis cultivation sites would still be required to comply with SWRCB Order WQ 2023-0102-DWQ standards for water diversions, which protect fish spawning, migration, and rearing for endangered anadromous salmonids, as well as flows needed to maintain natural flow variability in each watershed. Thus, the contribution to cumulative surface water resource impacts associated with the annual

licensing of existing commercial cannabis cultivation sites **would not be cumulatively considerable.**

As identified in the discussion of Impact 3.10-3, potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would be required to comply with MCCR section 10A.17.080(C)(1)(b), which would require a watershed assessment as well as compliance with the flow standards and diversion requirements set forth under SWRCB Order WQ 2023-0102-DWQ standards for water diversions. SWRCB's flow standards and diversion requirements were developed to protect fish spawning, migration, and rearing for endangered anadromous salmonids, as well as flows needed to maintain natural flow variability within each watershed. The diversion requirements would ensure that the individual and cumulative effects of water diversions and discharges associated with commercial cannabis cultivation do not affect instream flows necessary for fish spawning, migration, and rearing for endangered anadromous salmonids, as well as flows needed to maintain natural flow variability (SWRCB 2017a). The policy was scientifically peer-reviewed by four experts. The peer review determined that water quality, instream flow, and diversion requirements of the policy were based on sound scientific knowledge, methods, and data (SWRCB 2017b). Thus, the contribution of expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites to surface water resource impacts **would be less than cumulatively considerable.**

## Impact CUM-11: Contribution to Cumulative Land Use and Planning Impacts

The cumulative setting for land use is Mendocino County. It is anticipated that any development and public projects would be reviewed for consistency with adopted land use plans, policies, and regulations by the County in accordance with the requirements of CEQA, the State Zoning and Planning Law, and the State Subdivision Map Act, all of which require findings of plan and policy consistency before approval of entitlements for development. Most land use impacts are localized impacts that affect individual communities, neighborhoods, and specific sites and are not generally considered cumulative in nature. Impacts related to dividing a community are an example of this. The potential for growth inducement impacts are addressed in Chapter 6, "Other CEQA Sections."

The General Plan Update EIR identifies less-than-significant land use impacts under General Plan and cumulative conditions (Mendocino County 2009). Thus, no significant cumulative land use impacts are currently expected.

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations that transition to annual licensure would retain their existing land use character and would not conflict with the Mendocino County General Plan or MCCR, because existing structures and features are not anticipated to be substantially altered through the annual licensing process. These existing licensed commercial cannabis cultivation uses would also not contribute to the physical division of any existing community in the County. Thus, the contribution of the continued operation of these commercial cannabis cultivation sites to cumulative land use impacts **would not be cumulatively considerable.**

Potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations

would be subject to zoning and performance standards of the MCCR that include restrictions of commercial cannabis cultivation uses to certain zoning districts (MCCR Table 2), and MCCR section 10A.17.040(A) requires setbacks of cultivation sites from identified sensitive land uses. Thus, the contribution of the expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites to cumulative land use impacts **would not be cumulatively considerable**.

## Impact CUM-12: Contribution to Cumulative Noise Impacts

Noise and vibration impacts are generally experienced locally and are not cumulative in nature. Stationary noise sources attenuate (reduce) over distance from the source. Increases in vehicle traffic could contribute to cumulative traffic noise along roadways within the County.

The General Plan Update EIR identifies significant and unavoidable traffic noise impacts under cumulative conditions (Mendocino County 2009). Thus, cumulative traffic noise impacts from development and land uses activities have been identified for the County.

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations that transition to annual licensure is part of the existing baseline traffic noise conditions and is not anticipated to be altered through the annual licensing process and thus could not contribute to cumulative traffic noise conditions. Thus, the contribution of the continued operation of these commercial cannabis cultivation sites to cumulative traffic noise impacts **would not be cumulatively considerable**.

As described in the discussion of Impact 3.12-4, potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations have the potential to introduce new vehicle trips to County roadways, which may result in increased noise levels associated with additional vehicle trips, but only for relatively short periods, particularly during harvesting and transport of cannabis products. It is widely accepted that people can begin to detect sound level increases of 3 decibels in typical noisy environments, which corresponds to a doubling of sound energy. Thus, regarding traffic noise specifically, a noticeable increase in traffic noise could occur with a doubling in the volume of traffic on a roadway.

The extent of potential expansion of existing provisionally licensed commercial cannabis cultivation sites and exact location of individual new commercial cannabis cultivation sites and in the unincorporated County is unknown at this time; thus, the roadways upon which project-generated trips would travel cannot be known. However, the project is not anticipated to substantially increase vehicle trips along any one road, because cannabis activities would be dispersed across a relatively wide area in the County. Given the vast area where new cannabis sites could be located and the uncertainty regarding the number of future licenses and operations, it is not possible to estimate potential traffic noise impacts on specific road segments at this time. Therefore, any estimate of traffic noise increases associated with the project in relation to cumulative conditions would be speculative.

According to State CEQA Guidelines, section 15144, “drafting an EIR or preparing a Negative Declaration necessarily involves some degree of forecasting. While foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can.” Additionally, State CEQA Guidelines, section 15145 states that “if, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact.” As

detailed above, the lack of reliable data, variety of possible scenarios and circumstances, and number of assumptions that would need to be made make it too speculative to determine the contribution of cumulative traffic noise impacts of expansion of existing provisionally licensed and new licensed commercial cannabis cultivation uses. Therefore, no significance conclusion is provided for this issue.

## Impact CUM-13: Contribution to Cumulative Population and Housing Impacts

The cumulative setting for land use is Mendocino County. The Mendocino County General Plan Update EIR states that implementation of the General Plan would result in the planned growth of 77,160 residents and 34,510 residential dwelling units in the unincorporated area by 2030 (Mendocino County 2008). The California Department of Finance estimates Mendocino County 2024 total population at 88,782 and projects the County's 2050 population would be 89,697 (California Department of Finance 2022).

The General Plan Update EIR identifies less-than-significant growth and housing impacts under General Plan and cumulative conditions (Mendocino County 2009). Significant and unavoidable impacts associated with growth were also identified for the Ukiah Valley Area Plan from planned development (Mendocino County 2011). Thus, cumulative growth impacts from development and land uses activities have been identified for the County.

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations that transition to annual licensure would not result in new impacts to population or employment growth as operations are not anticipated to be altered through the annual licensing process and thus would not contribute to cumulative growth conditions. Thus, the contribution of the continued operation of these commercial cannabis cultivation sites to cumulative growth impacts **would not be cumulatively considerable**.

As identified in the discussion of Impact 3.13-1, it is estimated that potential new licensed commercial cannabis cultivation uses could generate 1,903 employees over the next 20 years. Many of the experienced commercial cannabis cultivation employees necessary during commercial cannabis cultivation and harvest activities are already present within the County and adjoining counties (Humboldt, Trinity, and Sonoma), as evidenced by the level of commercial cannabis cultivation and noncultivation uses in these counties that would be available under cumulative conditions for both potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations. The issuance of new licenses would also not require the elimination of housing, nor would it prohibit the construction of future housing identified in the Mendocino County General Plan. Thus, future new licensed commercial cannabis cultivation and associated processing and/or distribution transport-only uses are not expected to induce unplanned population growth under cumulative conditions that would result in new significant environmental impacts not addressed in the General Plan Update EIR and this EIR. The contribution of the new licensed commercial cannabis cultivation sites to cumulative growth impacts **would not be cumulatively considerable**.

## Impact CUM-14: Contribution to Cumulative Public Services and Recreation Impacts

The cumulative context for public services and recreation is Mendocino County. Changes in County land use conditions, maintenance activities, and needs for upgrades of law enforcement, local fire protection services, and recreational facilities and parks could result in the need for physical alterations and construction of facilities. This significant cumulative impact is addressed by the County and local fire districts when such projects are proposed. However, it is acknowledged that illegal cannabis cultivation operations have created increased fire risk in the County through the creation of new fuel sources (e.g., storage of equipment fuel and debris piles) and ignition sources (e.g., lighting and power facilities and wiring that are not installed to applicable electrical and fire requirements).

The General Plan Update EIR identifies significant and unavoidable fire protection and law enforcement service impacts under General Plan and cumulative conditions (Mendocino County 2009). Significant and unavoidable impacts associated with public schools, general governmental services, fire protection and fire hazards, and park and recreation were also identified for the Ukiah Valley Area Plan from planned development (Mendocino County 2011). Thus, cumulative public service impacts from development and land uses activities have been identified for the County.

Because anticipated growth would not exceed existing housing/growth projections identified for the County (refer to Section 3.13, "Population, Employment, and Housing"), existing provisionally licensed, potential expansion of existing provisionally licensed, and new commercial cannabis cultivation sites and associated processing and/or processing and/or distribution transport-only operations are not expected to result in an increased demand for schools, libraries, or other public facilities (e.g., general governmental services such as administration and public health) such that would trigger new or expanded facilities that could create physical environmental impacts under project or cumulative conditions. As a result, existing provisionally licensed, expansion of existing provisionally licensed, and new commercial cannabis cultivation uses' contribution to cumulative schools, libraries, or other public facilities impacts **would not be cumulatively considerable**.

As identified in Section 3.14, "Public Services and Recreation," existing provisionally licensed, potential expansion of existing provisionally licensed, and new commercial cannabis cultivation sites and associated processing and/or processing and/or distribution transport-only operations are not expected to result in a direct loss of park and recreational facilities as MCCR section 10A.17040(A)(1) prohibits commercial cannabis cultivation from occurring within 1,000 feet of a youth-oriented facility, a school, or a park. Commercial cannabis cultivation uses are agricultural in nature and would not trigger the need for new or modified park facilities under project or cumulative conditions. Therefore, no impact on parks and recreation is expected to occur. As a result, existing provisionally licensed, expansion of existing provisionally licensed, and new commercial cannabis cultivation sites' contribution to cumulative park and recreation impacts **would not be cumulatively considerable**.

As described for Impacts 3.14-1 and 3.14-2, continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations that transition to annual licensure would not create new or additional fire hazards or increases to law enforcement service demands as existing structures and operations are not anticipated to be altered through the annual licensing process. Existing provisionally licensed sites are required to continue to comply with regulations and standards

outlined in PRC sections 4290 and 4291, local fire protection agency requirements, and the California Fire Code (CCR, title 24, section 701A.3). Law enforcement service demands would be offset through compliance with CCR, title 4, section 15042 and MCCR section 10A.17.090 that requires security measures for the facility be sufficient to ensure the safety of members and employees and protect the sites from theft. Compliance with these requirements ensures that protected measures are provided that would not exacerbate existing and cumulative fire and law enforcement service demands and would avoid the need for expanded services. Thus, the contribution of the continued operation of these commercial cannabis cultivation sites to cumulative fire and law enforcement service impacts **would not be cumulatively considerable**.

The discussions of Impacts 3.14-1 and 31.4-2 identify that potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would be required to comply with PRC sections 4290 and 4291; CCR, title 24, section 701A.3 (additional building standards for new building construction located in any Fire Hazard Severity Zone within State Responsibility Areas (SRAs), any local agency Very-High Fire Hazard Severity Zone, or any Wildland-Urban Interface Fire Area); local fire protection agency requirements; and California Fire Code to minimize hazards of fire. Additionally, new licensed commercial cannabis cultivation sites would be required to comply with sections 10A.17.070(N), 10A.17.070(V), and 10A.17.090(e)(3) of the MCCR to reduce wildfire exposure risks by ensuring proper storage of potential fuel and ignition sources and by ensuring proper defensible space protocols and distances are maintained. Law enforcement service impacts would be offset through compliance with CCR, title 4, section 15042 and MCCR section 10A.17.090 that requires security measures for the facility be sufficient to ensure the safety of members and employees and protect the sites from theft. Licensed commercial cannabis cultivation sites approved by the County would also be subject to General Plan Policies DE-229, DE-244, and DE-247. These regulations and General Plan policies require collaboration with law enforcement agencies for coordination of land use and development processes, emphasizing the County's commitment to providing funding to address safety issues associated with commercial cannabis cultivation. Thus, the contribution of the expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites to fire and law enforcement service impacts **would not be cumulatively considerable**.

## Impact CUM-15: Contribution to Cumulative Transportation Impacts

The cumulative context for transportation is Mendocino County. The General Plan Update EIR identifies significant and unavoidable level of service operational impacts under General Plan and cumulative conditions (Mendocino County 2009). As described in Section 3.15, "Transportation," Senate Bill (SB) 743, passed in 2013, requires the California Governor's Office of Planning and Research (OPR) to develop new State CEQA guidelines that address traffic metrics under CEQA. As stated in the legislation, upon adoption of the new guidelines, "automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to this division, except in locations specifically identified in the guidelines, if any." OPR published its proposal for the comprehensive updates to the State CEQA Guidelines in November 2017 which included proposed updates related to analyzing transportation impacts pursuant to SB 743. These updates indicated that VMT would be the primary metric used to identify transportation impacts. In December of 2018, OPR and the California Natural Resources Agency submitted the updated CEQA Guidelines to the Office of Administrative Law for final approval to implement SB 743. The Office of Administrative Law subsequently



approved the updated State CEQA Guidelines and, as of July 1, 2020, implementation of section 15064.3 of the updated State CEQA Guidelines applies statewide. The General Plan Update EIR did not address VMT impacts.

Impacts associated with traffic safety and emergency access are a site-specific condition and do not generate cumulative impacts.

As identified in Impact 3.15-2, continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations that transition to annual licensure would not result in new VMT impacts as operations are not anticipated to be altered through the annual licensing process. Accordingly, the transition of the existing provisional licenses to annual licenses would not exceed 110 new daily trips consistent with the OPR Technical Advisory's screening criteria for small projects, and this portion of the project would not conflict or be inconsistent with State CEQA Guidelines, section 15064.3 or contribute to cumulative VMT conditions in the County. Thus, the contribution of the continued operation of these commercial cannabis cultivation sites to cumulative VMT impacts **would not be cumulatively considerable**.

Because the extent of potential expansion of existing provisionally licensed commercial cannabis cultivation sites and the exact location of individual future licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only within the unincorporated County is unknown at this time, the travel patterns and trip lengths cannot be known or forecasted at this time. Therefore, any estimate of average trip length for trips associated with the project would be too speculative. It is likely that subsequent, individual new licensed commercial cannabis cultivation sites would each generate less than 110 or more trips per day and would therefore result in a less than significant VMT impact, consistent with OPR Technical Advisory screening criteria for small projects. Although VMT associated with individual commercial cannabis cultivation licensed sites would not likely result in substantial increases in VMT at the project level, the uncertainty related to trip lengths associated with individual commercial cannabis cultivation sites makes accurately quantifying the change in total VMT under conditions is too speculative to determine at the program level.

According to State CEQA Guidelines, section 15144, "drafting an EIR or preparing a Negative Declaration necessarily involves some degree of forecasting. While foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can." Additionally, State CEQA Guidelines, section 15145 states that "if, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact." As detailed above, the lack of reliable data, variety of possible scenarios and circumstances, and number of assumptions that would need to be made make it too speculative to determine the cumulative VMT impact of expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites. Therefore, no significance conclusion can be made.

## Impact CUM-16: Contribution to Cumulative Utilities and Service Systems Impacts

Public utilities (water supply and wastewater services) provided by community service districts and other local service providers are limited to the local service districts and are generally not considered a cumulative impact. Solid waste services are provided countywide and could have cumulative impacts.

The General Plan Update EIR identifies significant and unavoidable water supply and infrastructure impacts under General Plan and cumulative conditions (Mendocino County 2009). Significant and unavoidable impacts associated with water supply and wastewater services were also identified for the Ukiah Valley Area Plan from planned development (Mendocino County 2011). Thus, cumulative utility and services impacts from development and land uses activities have been identified for the County.

## INFRASTRUCTURE IMPROVEMENT IMPACTS

As identified in Section 3.16, "Utilities and Service Systems," existing provisionally licensed, potential expansion of existing provisionally licensed, and new commercial cannabis cultivation sites and associated processing and/or processing and/or distribution transport-only operations may construct and/or improve water, wastewater, stormwater drainage, electric power, natural gas, and telecommunication facilities as needed based on site-specific conditions. Extension of these infrastructure facilities are expected to be limited as are generally available along roadway frontage of the parcels or may be accommodated on the site (e.g., drainage ditches, detention basins, solar energy generation) and would not contribute to cumulative conditions. As a result, the existing provisionally licensed, expansion of existing provisionally licensed, and new commercial cannabis cultivation uses' contribution to cumulative infrastructure impacts **would not be cumulatively considerable**.

## CUMULATIVE WASTEWATER SERVICE IMPACTS

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations that transition to annual licensure would not create new or additional wastewater treatment impacts as existing structures and operations are not anticipated to be altered through the annual licensing process. Existing provisionally licensed sites are required to continue to comply with Terms 27 and 38 of Attachment A of SWRCB Order WQ 2023-0102-DWQ that address the proper disposal of cannabis wastewater that would address contribution to cumulative wastewater service impacts. As a result, the existing provisionally licensed and new commercial cannabis cultivation uses' contribution to cumulative park and recreation impacts **would not be cumulatively considerable**.

As identified in the discussion of Impact 3.16-1, potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing or distribution transport-only uses would be required to receive approval for an individual septic facility and comply with the standards set forth in the Mendocino County Code of Ordinances, section 9.12.080 and MCCR section 10A.17.090(E)(5) that requires will serve confirmation from wastewater service providers. Potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites would also be prohibited from discharging cannabis wastewater into on-site wastewater treatment systems (Term 27 of Attachment A of SWRCB Order WQ 2023-0102-DWQ) and indoor commercial cannabis cultivation uses would be through a connection to a permitted wastewater treatment collection system that accepts cannabis wastewater. If the permitted wastewater treatment collection system cannot accept cannabis wastewater, the indoor commercial cannabis cultivation and processing or distribution transport-only operation must collect the cannabis wastewater in storage tanks and disposed of by a permitted wastewater handler at a permitted wastewater treatment facility that accepts cannabis wastewater (Term 38 of Attachment A of SWRCB Order WQ 2023-0102-DWQ). Compliance with these standards would ensure that wastewater generated by the

potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites is treated properly and would offset contributions to cumulative wastewater service impacts. Thus, the contribution of the potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites to wastewater service impacts **would not be cumulatively considerable**.

## CUMULATIVE WATER SUPPLY SERVICE IMPACTS

Continued operation of existing provisionally licensed commercial cannabis cultivation sites that transition to annual licensure would not result in additional impacts to water supply as operations are not anticipated to be altered through the annual licensing process. Existing provisionally licensed commercial cannabis cultivation sites would be required to continue to comply with SWRCB Order WQ 2023-0102-DWQ Attachment A, section 3, “Numeric and Narrative Instream Flow Requirements,” which would address contribution to cumulative water supply impacts. As a result, the existing provisionally licensed and new commercial cannabis cultivation sites’ contribution to cumulative water supply service impacts **would not be cumulatively considerable**.

As identified in the discussion of Impact 3.16-2, potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would be subject to the water supply documentation, verification of adequate source of supply, and use restrictions requirements provided under CCR, title 4, section 16311; SWRCB Order WQ 2023-0102-DWQ Attachment A, Section 3, Numeric and Narrative Instream Flow Requirements; and MCCR sections 10A.17.070(H), 10A.17.080(B), and 10A.17.090(E). These standards would ensure that water supply sources are adequate and provided to commercial cannabis cultivation uses without contributing to cumulative water supply service impacts. As identified in Section 3.10, “Hydrology and Water Quality,” there are groundwater supply sources that are stable that could accommodate future licensed cannabis uses. Thus, the contribution of the expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites to water supply service impacts **would not be cumulatively considerable**.

## CUMULATIVE SOLID WASTE SERVICE IMPACTS

As identified in the discussion of Impact 3.16-3, existing provisionally licensed, potential expansion of existing provisionally licensed, and new commercial cannabis cultivation sites and associated processing and/or processing and/or distribution transport-only operations would be required to comply with DCC regulations regarding the proper handling of cannabis waste through implementation of a cannabis waste management plan required under CCR, title 4, section 17223. Most licensed sites compost on-site, although licensees are allowed to self-haul cannabis waste to a fully permitted waste facility. Several transfer station facilities in the County could accommodate non-cannabis waste. Mendocino County operates 10 transfer stations that haul to nine landfills. Additionally, based on the availability of these facilities, and compliance with CCR, title 4, section 17223 regulations, it is not expected that implementation of the project would require construction or expansion of solid waste facilities that could trigger environmental impacts under cumulative conditions. As a result, the existing provisionally licensed, expansion of existing provisionally licensed, and new commercial cannabis cultivation sites’ contribution to cumulative infrastructure impacts **would not be cumulatively considerable**.

## Impact CUM-17: Contribution to Cumulative Wildfire Impacts

The cumulative context for wildfire hazards consists of the forest conditions of Mendocino County such as Mendocino National Forest and Jackson State Forest, Sonoma, Lake, Glenn, Tehama, Trinity, and Humboldt Counties. Mendocino County contains approximately 1,776,855 acres of vegetative communities. Figure 3.17-1 identifies the Fire Hazard Severity Zones (FHSZs) in the County, as designated by CAL FIRE. As shown in Figure 3.17-2, most of the land in the County is located in SRAs. Mendocino County and the surrounding region has experienced significant fires over the past 10 years, some of which overlapped with neighboring counties, each burning over 1,000 respective areas in the region. As identified above, the cumulative setting includes forest management activities consisting of fuels management, forest thinning, fuel breaks, and other similar actions by USFS, CAL FIRE, and local fire districts are ongoing and would occur into the future. It is acknowledged that illegal cannabis cultivation operations have created increased fire risk in the County through the creation of new fuel sources (e.g., storage of equipment fuel and debris piles) and ignition sources (e.g., lighting and power facilities and wiring that are not installed to applicable electrical and fire requirements). Exposure to wildfire hazards under cumulative conditions would be significant.

The General Plan Update EIR identifies significant and unavoidable fire protection and fire hazard and law impacts under General Plan and cumulative conditions (Mendocino County 2009). Significant and unavoidable impacts associated with fire protection and fire hazards were also identified for the Ukiah Valley Area Plan from planned development (Mendocino County 2011). Thus, cumulative wildfire impacts from development and land uses activities have been identified for the County.

Continued operation of existing provisionally licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations that transition to annual licensure would not create new or additional fire hazards as existing structures and operations are not anticipated to be altered through the annual licensing process and thus would not contribute to cumulative wildfire hazards. Existing provisionally licensed sites are required to continue to comply with regulations and standards outlined in PRC section 4290 and 4291, local fire protection agency requirements, and the California Fire Code to minimize hazards of fire. Additionally, existing provisionally licensed commercial cannabis cultivation sites would be required to continue to comply with sections 10A.17.070(N), 10A.17.070(V), and 10A.17.090(E)(3) of the MCCR to reduce wildfire exposure risks by ensuring proper storage of potential fuel and ignition sources and by ensuring proper defensible space protocols and evacuation routes/emergency accesses are maintained. As a result, the existing provisionally licensed commercial cannabis cultivation sites' contribution to cumulative wildfire hazard impacts **would not be cumulatively considerable**.

As identified in the discussion of Impacts 3.17-1 through 3.17-4, potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would be required to comply with PRC sections 4290 and 4291; CCR, title 24, section 701A.3 (additional building standards for new building construction located in any Fire Hazard Severity Zone within SRAs, any local agency Very-High Fire Hazard Severity Zone, or any Wildland-Urban Interface Fire Area); local fire protection agency requirements; and California Fire Code to minimize hazards of fire. Additionally, new licensed commercial cannabis cultivation sites would be required to comply with sections 10A.17.070(N), 10A.17.070(V), and 10A.17.090(E)(3) of the MCCR to reduce wildfire exposure risks by ensuring proper storage of potential fuel and ignition sources and by

ensuring proper defensible space protocols and distances are maintained. The Mendocino County Multi-Jurisdictional Hazard Mitigation Plan also includes provisions for the maintenance and vegetation of evacuation routes. The provision of defensible space and the associated reduction of vegetative fuels have specifically been found to be effective at reducing fire frequency, fire severity, and annual area burned over an extended period of time. Where treatments have occurred, the pattern of wildfire progression may be limited to low-intensity underbrush and surface burning, which can create safe conditions for firefighters to successfully suppress fires in areas near structures, or around areas of high resource value (Kim et al. 2013; Martinson and Omi 2013; Tubbesing et al. 2019). Compliance with the above standards would avoid new licensed commercial cannabis cultivation sites from exacerbating existing wildfire hazards and would offset contributions to cumulative wildfire hazard impacts. Thus, the contribution of the new licensed commercial cannabis cultivation sites to cumulative wildfire hazard impacts **would not be cumulatively considerable**.

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# 5 ALTERNATIVES

## 5.1 INTRODUCTION

State CEQA Guidelines section 15126.6(a) requires EIRs to describe:

a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.

This section of the State CEQA Guidelines also provides guidance regarding what the alternatives analysis should consider. Subsection (b) further states that the purpose of the alternatives analysis is as follows:

Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.

The State CEQA Guidelines require that the EIR include information about each alternative sufficient to allow meaningful evaluation, analysis, and comparison with the project. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative must be discussed but in less detail than the significant effects of the project as proposed (State CEQA Guidelines, section 15126.6(d)).

The State CEQA Guidelines further require that the “no project” alternative be considered (State CEQA Guidelines, section 15126.6(e)). The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving a proposed project with the impacts of not approving the proposed project. If the no project alternative is the environmentally superior alternative, CEQA requires that the EIR “shall also identify an environmentally superior alternative among the other alternatives” (State CEQA Guidelines, section 15126(e)(2)).

In defining “feasibility” (e.g., “feasibly attain most of the basic objectives of the project”), State CEQA Guidelines, section 15126.6(f)(1) states, in part:

Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether

the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives.

In determining what alternatives should be considered in the EIR, it is important to consider the objectives of the project, the project's significant effects, and unique project considerations. These factors are crucial to the development of alternatives that meet the criteria specified in section 15126.6(a). Although, as noted above, EIRs must contain a discussion of "potentially feasible" alternatives, the ultimate determination as to whether an alternative is feasible or infeasible is made by the lead agency's decision-making body. (See PRC sections 21081.5, 21081(a)(3).)

## 5.2 CONSIDERATIONS FOR SELECTION OF ALTERNATIVES

### 5.2.1 Attainment of Project Objectives

As described above, one factor that must be considered in selection of alternatives is the ability of a specific alternative to attain most of the basic objectives of the project (State CEQA Guidelines, section 15126.6(a)). Chapter 2, "Project Description," articulated the following project objectives:

- ▶ Implement the California Department of Cannabis Control's (DCC's) cultivation licensure program in the County, in an effort to minimize the public health and safety risks associated with unlicensed commercial cannabis activity while promoting a robust and economically viable legal cannabis industry in the County;
- ▶ Effectively transition qualified existing provisional cannabis cultivation licenses to annual licenses through a streamlined cannabis licensing process to ensure that such provisional cannabis cultivation license holders complete the annual license process by the statutory timeframes identified in Business and Professions Code, section 26050.2;
- ▶ Provide a mechanism for future cannabis cultivation license applicants to obtain annual licenses through a streamlined cannabis licensing process;
- ▶ Ensure that cannabis cultivation by licensees is conducted in accordance with applicable state and local laws related to land conversion, air quality, electricity usage, water usage, water quality, biological resources, agricultural discharges, and similar matters;
- ▶ Protect natural and built resources in Mendocino County; and
- ▶ Minimize potential adverse effects of cannabis cultivation activities on the environment.

### 5.2.2 Environmental Impacts of the Project

Sections 3.1 through 3.17 and Chapter 4, "Cumulative Impacts," of this Draft EIR identify the environmental impacts of the project. Potentially feasible alternatives were developed with consideration of avoiding or lessening the significant adverse effects of the project. The following list identifies the significant or potentially significant impacts associated with the project.

#### AIR QUALITY

- ▶ The cultivation and processing of cannabis by existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis



cultivation sites could generate objectionable odors created by the growing and processing of cannabis that could adversely affect residents and other sensitive land uses. This impact would be **significant and unavoidable** (Impact 3.3-3) and **cumulatively considerable and significant and unavoidable** (CUM-3).

## ARCHAEOLOGICAL, HISTORIC, AND TRIBAL CULTURAL RESOURCES

- ▶ Potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations associated with the implementation of the project could be located on lands that contain or are near historic resources. This could result in damage to or destruction of a historic building or structure, thereby resulting in a substantial adverse change in the significance of a historical resource as defined in section 15064.5. Although mitigation (Mitigation Measure 3.4-1) would assist in reducing this impact, it is uncertain whether all historic resources could be retained. This impact would be **significant and unavoidable** (Impact 3.4-1).

## BIOLOGICAL RESOURCES

- ▶ Potential land use conversion and development from potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and distribution transport-only operations as part of implementation of the project could result in disturbance to or loss of special-status plant species if they are present. Mitigation Measures 3.5-1a through 3.5-1c have been recommended to reduce this impact to **less than significant** (Impact 3.5-1).
- ▶ Land use conversion and development from potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and distribution transport-only operations as part of implementation of the project could result in impacts on or loss of special-status wildlife species and habitat. Mitigation Measures 3.5-2a through 3.5-2p have been recommended to reduce this impact to **less than significant** (Impact 3.5-2).
- ▶ Potential land use conversion and development that may occur from potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and distribution transport-only operations could adversely affect riparian habitat, old-growth habitat, and other sensitive natural communities if they are present on the site. Mitigation Measure 3.5-4 has been recommended to reduce this impact to **less than significant** (Impact 3.5-4).
- ▶ Land use conversion and development from potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and distribution transport-only operations could adversely affect state or federally protected wetlands, such as streams, rivers, lakes, and wetlands. Mitigation Measure 3.5-5 has been recommended to reduce this impact to **less than significant** (Impact 3.5-5).
- ▶ Potential land use conversion and development from potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and distribution transport-only operations could adversely affect resident or migratory wildlife corridors, as well as nursery sites, through habitat fragmentation; degradation of aquatic habitat (e.g., streams and rivers); disturbance from

increased noise and human presence, as well as increased trash, which may attract predators and discourage wildlife use of surrounding natural habitat; and blockage of important wildlife migration paths. No significant wildlife movement impacts from existing licensed cannabis cultivation sites obtaining annual licenses are expected. Mitigation Measures 3.5-6a and 3.5-6b have been recommended to reduce this impact to **less than significant** (Impact 3.5-6).

## GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

- ▶ Potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and distribution transport-only operations would result in greenhouse gas (GHG) emissions that could conflict with state GHG reduction targets and decarbonization efforts. Although mitigation (Mitigation Measure 3.8-1) would assist in reducing this impact, it is uncertain whether GHG emissions would be adequately reduced. This impact would be **significant and unavoidable** (Impact 3.8-1) and **cumulatively considerable and significant and unavoidable** (CUM-8).

## NOISE AND VIBRATION

- ▶ The use of heavy-duty construction equipment related to potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and distribution transport-only operations can generate increased vibration levels. Although it is not anticipated that construction vibration levels would exceed Federal Transit Administration standards for structural damage, it cannot be guaranteed at this time that construction of indoor cultivation facilities would be located far enough from sensitive receptors to prevent adverse effects on humans. Mitigation Measure 3.12-2 has been recommended to reduce this impact to **less than significant** (Impact 3.12-2).

## 5.3 ALTERNATIVES CONSIDERED BUT NOT EVALUATED FURTHER

As described above, State CEQA Guidelines section 15126.6(c) provides that the range of potential alternatives to the project shall include alternatives that could feasibly accomplish most of the basic objectives of the project and that could avoid or substantially lessen one or more of the significant effects. Alternatives that fail to meet the fundamental project purpose need not be addressed in detail in an EIR (*In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings* (2008) 43 Cal.4th 1143, 1165–1167).

In determining what alternatives should be considered in the EIR, it is important to acknowledge the objectives of the project, the project's significant effects, and unique project considerations. These factors are crucial to the development of alternatives that meet the criteria specified in section 15126.6(a). Although, as noted above, EIRs must contain a discussion of "potentially feasible" alternatives, the ultimate determination as to whether an alternative is feasible or infeasible is made by lead agency decision maker(s). (See PRC section 21081(a)(3).) At the time of action on the project, the decision maker(s) may consider evidence beyond that found in this EIR in addressing such determinations. The decision maker(s), for example, may conclude that a particular alternative is infeasible (i.e., undesirable) from a policy standpoint and may reject an alternative on that basis provided that the decision maker(s) adopts a finding, supported by substantial evidence, to that effect and provided that such a finding reflects a reasonable balancing of the relevant economic,

environmental, social, and other considerations supported by substantial evidence (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 401, 417; *California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 998).

The EIR should also identify any alternatives that were considered by the lead agency but were rejected during the planning or scoping process and briefly explain the reasons underlying the lead agency's determination.

The following alternative was considered but is not evaluated further in this Draft EIR.

### 5.3.1 Ban on Commercial Cannabis Cultivation in Mendocino County

Under this alternative, DCC would implement a ban on the issuance of licenses for commercial cannabis cultivation in Mendocino County. This alternative would also result in the cessation of existing licensed commercial cannabis cultivation operations currently allowed by Mendocino County under the Mendocino County Cannabis Regulation (MCCR). It is anticipated that illegal cannabis operations would continue to some extent in the County because of the size and forested condition of the County, which make it difficult to detect cannabis cultivation operations.

This alternative is not considered to be feasible, because DCC lacks the jurisdiction to prohibit licensing of cannabis cultivation allowed in a county. It would also not be consistent with any of the objectives of the project.

## 5.4 ALTERNATIVES SELECTED FOR DETAILED ANALYSIS

The following alternatives are evaluated in this Draft EIR:

- ▶ **Alternative 1: No Project Alternative.** This alternative would consist of continued operation of existing provisional and annual licensed cannabis cultivation sites in Mendocino County. However, no new provisional or annual licenses for cannabis cultivation sites and associated processing and/or distribution transport-only operations would be issued.
- ▶ **Alternative 2: Siting Limitation for Cannabis Cultivation Sites Alternative.** This alternative would restrict the licensing of new cannabis cultivation sites to land areas in the unincorporated area outside the Cannabis Priority Watersheds designated by the State Water Resources Control Board (SWRCB): Mattole River, Middle South Fork Eel River, East Fork Russian River, Headwaters Russian River, Navarro River, and Dry Creek.

For purposes of comparison with impacts that would occur under these alternatives, conclusions for each technical area are characterized as "impacts" that are greater than, similar to, or less than those of the project to describe conditions that are worse than, similar to, or better than those of the project.

### 5.4.1 Alternative 1: No Project Alternative

Alternative 1, the No Project Alternative, would consist of continued operation of existing provisional and annual licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations in Mendocino County, as shown in Figure 2-2. However, no new licenses for commercial cannabis cultivation sites would be issued. Thus, licensed commercial cannabis cultivation uses allowed in Mendocino County

would be limited to 623 sites until licenses expire or are not renewed. After licensed commercial cannabis cultivation sites cease operation, a site closure report would be implemented consistent with SWRCB Order WQ 2023-0102-DWQ, which identifies how sites would be decommissioned to prevent sediment and turbidity discharges that degrade water quality.

## AESTHETICS

As stated in Section 3.1, “Aesthetics,” and Chapter 4, “Cumulative Impacts,” construction and operation of existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations would not result in significant project and cumulative impacts on scenic resources, visual character, or nighttime lighting and glare. As under the project, existing licensed cannabis cultivation operations under Alternative 1 would be subject to compliance with the requirements outlined in MCCR section 10A.17.040(E), which would ensure that artificial lighting associated with nurseries, mixed-light operations, and indoor cultivation operations would be fully contained in structures or otherwise would be shielded. CCR, title 4, division 19, section 16304 would also require that outdoor lights used for safety or security purposes for cultivation sites be shielded and downward facing and that cultivation-related artificial lighting be shielded from sunset to sunrise to reduce nighttime glare. The magnitude of this impact would be **less** under Alternative 1 than under the project because Alternative 1 would reduce the extent of land disturbance and lighting use associated with cultivation through the prohibition of new commercial cannabis cultivation licensing.

## AGRICULTURE AND FORESTRY RESOURCES

As described in Section 3.2, “Agriculture and Forestry Resources,” cannabis is defined by the state (Business and Professions Code section 26060(a)) as an agricultural product; therefore, existing provisionally licensed, potential expansion of existing provisionally licensed, and future licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations would not result in conversion to a nonagricultural use. The Mendocino County Policies and Procedures for Agricultural Preserves and Williamson Act Contracts state that commercial cannabis cultivation is compatible with agricultural uses on any Williamson Act contracted lands under section 9.5(E). Thus, no impacts were identified under project or cumulative conditions. The magnitude of Alternative 1’s agricultural impact would be **similar** to that of the project because Alternative 1 would permit and regulate cannabis uses to the same extent (use types and limits on total cultivation licensing) as the project.

The discussion of Impact 3.2-2 states that existing licensed commercial cannabis cultivation sites are allowed in timber production zone (TPZ) areas and can remain in operation under the MCCR, whereas new licensed commercial cannabis cultivation sites are not allowed in TPZ areas. Both existing and new cultivation sites are subject to MCCR section 10A.17.040(K), which prohibits the removal of any commercial species trees as defined by CCR, title 14, section 895.1. Thus, no impacts were identified under project or cumulative conditions. The magnitude of this impact would be **less** under Alternative 1 than under the project because Alternative 1 would reduce the extent of potential forest loss associated with cultivation through the prohibition of new commercial cannabis cultivation licensing.

## AIR QUALITY

Section 3.3, “Air Quality,” identifies no significant air pollutant or toxic air contaminant impacts under the project. However, significant and unavoidable project and cumulative odor impacts have been identified for potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations. As under the project, existing commercial cannabis cultivation operations under Alternative 1 would be subject to compliance with Mendocino County Air Quality Management District (MCAQMD) Rule 1-430 (Fugitive Dust Emissions), which prohibits activities that allow or may allow unnecessary amounts of particulate matter to become airborne; MCCR section 10A.17.070(U), which requires license holders to obtain all approvals and permits required by MCAQMD pursuant to state and federal laws, MCAQMD regulations, adopted air quality plans, MCAQMD policies, and other applicable statutes; and CCR, title 4, division 19, section 16305(b), which requires licensees that generate GHG emissions in excess of the local utility provider’s GHG emission intensity threshold to obtain carbon offsets to cover the excess of carbon emissions from the previous annual licensed period. Additionally, existing licensed sites would continue to be required to meet the odor control standards established in MCCR sections 10A.17.040(C) and 10A.17.070(P).

The magnitude of both air pollutant and odor impacts would be **less** under Alternative 1 than under the project because Alternative 1 would reduce the extent of cultivation (and associated air pollutant emissions and odors) through the prohibition of new commercial cannabis cultivation licensing.

## ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

The discussion of Impact 3.4-1 states that new licensed commercial cannabis cultivation sites and associated processing and distribution transport-only operations would result in significant and unavoidable historic resource impacts. No other significant cultural resource impacts were identified for project or cumulative conditions. The magnitude of this impact would be **less** under Alternative 1 than under the project because Alternative 1 would reduce the extent of land disturbance associated with cultivation through the prohibition of new commercial cannabis cultivation licensing.

## BIOLOGICAL RESOURCES

As stated in Section 3.5, “Biological Resources,” the project would have significant impacts on habitat conditions, special-status plant and animal species, sensitive natural communities, and wildlife movement from potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations. Mitigation has been identified to reduce these impacts to a less-than-significant level under project and cumulative conditions (Mitigation Measures 3.5-1a through 3.5-1c, 3.5-2a through 3.5-2p, 3.5-4, 3.5-5, and 3.5-6a through 3.5-6c). As under the project, existing licensed commercial cannabis cultivation sites under Alternative 1 would be subject to the biological resource protection requirements of SWRCB Order WQ 2023-0102-DWQ and the MCCR. The magnitude of this impact would be **less** under Alternative 1 than under the project because Alternative 1 would reduce the extent of land disturbance associated with cultivation through the prohibition of new commercial cannabis cultivation licensing.

## ENERGY

Section 3.6, “Energy,” and Chapter 4, “Cumulative Impacts,” state that the potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would not result in significant project or cumulative impacts on energy use. As under the project, existing licensed commercial cannabis cultivation sites under Alternative 1 would continue to be required to meet the standards established in CCR, title 4, division 19, section 16305, regarding energy sources that reduce GHG emissions, and sections 10A.17.040(D) and 10A.17.070(F) of the MCCR, which limit the use of generators. The magnitude of energy use would be **less** under Alternative 1 than under the project because Alternative 1 would reduce the extent of cultivation through the prohibition of new commercial cannabis cultivation licensing.

## GEOLOGY, SOILS, AND MINERAL RESOURCES

No significant project or cumulative geologic impacts were identified in Section 3.7, “Geology, Soils, and Mineral Resources,” or Chapter 4, “Cumulative Impacts.” As under the project, existing licensed commercial cannabis cultivation sites under Alternative 1 would continue to be required to comply with MCCR sections 10A.17.070(I) and 10A.17.070(L), conditions of SWRCB Order WQ 2023-0102-DWQ, and the Mendocino County Code’s Grading Ordinance. The magnitude of this impact would be **less** under Alternative 1 than under the project because Alternative 1 would reduce the extent of land disturbance associated with cultivation through the prohibition of new commercial cannabis cultivation licensing.

## GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

As stated in Section 3.8, “Greenhouse Gas Emissions and Climate Change,” and Chapter 4, “Cumulative Impacts,” the potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would result in project and cumulative significant and unavoidable impacts associated with GHG emissions even with implementation of Mitigation Measure 3.8-1. As under the project, existing licensed commercial cannabis cultivation sites under Alternative 1 would continue to be required to comply with renewable energy requirements under CCR, title 4, division 19, section 16305. The magnitude of GHG emission impacts would be **less** under Alternative 1 than under the project because Alternative 1 would reduce the extent of cultivation through the prohibition of new commercial cannabis cultivation licensing.

## HAZARDS AND HAZARDOUS MATERIALS

Section 3.9, “Hazards and Hazardous Materials,” and Chapter 4, “Cumulative Impacts,” state that existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would not result in significant project or cumulative hazard impacts. As under the project, existing licensed commercial cannabis cultivation sites under Alternative 1 would continue to be required to comply with state and local regulations, including the CCR and MCCR. Compliance with existing applicable rules and regulations would prevent any impacts related to hazardous materials from existing licensed commercial cannabis cultivation sites that could contribute to cumulative hazard conditions. The magnitude of this impact would be **less** under Alternative 1 than under the project because Alternative 1 would reduce the extent of land disturbance (and associated potential for release of

contamination) associated with cultivation through the prohibition of new commercial cannabis cultivation licensing.

## HYDROLOGY AND WATER QUALITY

No significant project or cumulative hydrology and water quality impacts were identified in Section 3.10, “Hydrology and Water Quality,” or Chapter 4, “Cumulative Impacts.” As under the project, existing licensed commercial cannabis cultivation sites under Alternative 1 would continue to be required to comply with Attachment A (section 1, General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ, which requires a site evaluation for any future site expansion activities, and MCCR section 10A.17.040(G), which prohibits activities associated with commercial cannabis cultivation to cause eroded materials or contaminated runoff to be deposited into any stream, creek, river, or body of water. The magnitude of this impact would be **less** under Alternative 1 than under the project because Alternative 1 would reduce the extent of land disturbance and extent (and associated water resource impacts) associated with cultivation through the prohibition of new commercial cannabis cultivation licensing. For existing licensed commercial cannabis cultivation sites that cease operations under Alternative 1, a site closure report would be prepared and implemented consistent with SWRCB Order WQ 2023-0102-DWQ, which describes how sites would be decommissioned to prevent sediment and turbidity discharges that degrade water quality.

## LAND USE AND PLANNING

As stated in Section 3.11, “Land Use and Planning,” the existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would be subject to the zoning and performance standards of the MCCR, which restrict cannabis cultivation uses to certain zoning districts (MCCR Table 2), and MCCR section 10A.17.040(A) requires cultivation sites to be set back from identified sensitive land uses. Thus, no project or cumulative impacts were identified. The magnitude of this impact would be **similar** under Alternative 1 and the project because licensed commercial cannabis cultivation sites would continue to be subject to Mendocino County land use requirements.

## NOISE AND VIBRATION

The discussion of Impact 3.12-2 states that the potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could result in construction vibration impacts that would be mitigated through implementation of Mitigation Measure 3.12-2. No other significant project or cumulative noise impacts were identified. The magnitude of construction vibration impacts would be **less** under Alternative 1 than under the project because Alternative 1 would reduce the extent of cultivation (and associated construction noise impacts) through the prohibition of new commercial cannabis cultivation licensing.

## POPULATION, EMPLOYMENT, AND HOUSING

As stated in Section 3.13, “Population, Employment, and Housing,” existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only

operations are not expected to induce unplanned population growth under cumulative conditions. The magnitude of impacts would be **less** under Alternative 1 than under the project because Alternative 1 would reduce the extent of cultivation (and associated employment generation) through the prohibition of new commercial cannabis cultivation licensing.

## PUBLIC SERVICES AND RECREATION

Section 3.14, “Public Services and Recreation,” states that existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would not result in significant project public service and recreation impacts. Also, no cumulative impacts related to public services and recreation were identified. As under the project, existing licensed commercial cannabis cultivation sites under Alternative 1 would continue to be required to comply with PRC sections 4290 and 4291, local fire protection agency requirements, and the California Fire Code (CCR, title 24, part 2, section 701A.3). Law enforcement service demands would continue to be addressed through compliance with CCR, title 4, division 19, section 15042 and MCCR section 10A.17.090, which requires security measures for facilities. The magnitude of this impact would be **less** under Alternative 1 than under the project because Alternative 1 would reduce the extent of cultivation (and associated demand for public services) through the prohibition of new commercial cannabis cultivation licensing.

## TRANSPORTATION

Section 3.15, “Transportation,” and Chapter 4, “Cumulative Impacts,” state that the potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would not result in significant transportation, safety, or emergency impacts. Also, no cumulative impacts related to transportation, safety, or emergency were identified. The magnitude of this impact would be **less** under Alternative 1 than under the project because Alternative 1 would reduce the extent of cultivation (and associated changes in traffic conditions) through the prohibition of new commercial cannabis cultivation licensing.

## UTILITIES AND SERVICE SYSTEMS

Section 3.16, “Utilities and Service Systems,” states that existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would not result in significant project utility and service system impacts. Also, no cumulative impacts related to utilities and service systems were identified. As under the project, existing licensed commercial cannabis cultivation operations under Alternative 1 would continue to be required to comply with terms 27 and 38 of Attachment A (section 1, General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ, which addresses the proper disposal of cannabis wastewater. Future new licensed cannabis cultivation sites under this alternative would be subject to the water supply documentation, verification of adequate source of supply, and use restriction requirements provided under CCR, title 4, division 19, section 16311; SWRCB Order WQ 2023-0102-DWQ Attachment A (section 3 Numeric and Narrative Instream Flow Requirements); and MCCR sections 10A.17.070(H), 10A.17.080(B), and 10A.17.090(E). Also, CCR, title 4, division 19, section 17223 addresses cannabis waste handling. The magnitude of this impact would be **less** under Alternative 1 than under the project because



Alternative 1 would reduce the extent of cultivation (and utility service demands) through the prohibition of new commercial cannabis cultivation licensing.

## WILDFIRE

Section 3.17, “Wildfire,” and Chapter 4, “Cumulative Impacts,” state that the potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would not result in significant wildfire hazard impacts. Also, no cumulative impacts related to wildfire were identified. The magnitude of this impact would be **less** under Alternative 1 than under the project because Alternative 1 would reduce the extent of cultivation (and associated changes in conditions that could lead to wildfire) through the prohibition of new commercial cannabis cultivation licensing.

### 5.4.2 Alternative 2: Siting Limitation for Cannabis Cultivation Sites Alternative

This alternative would restrict the licensing of new commercial cannabis cultivation sites and associated processing and distribution transport-only uses to land areas in the unincorporated area outside the Cannabis Priority Watersheds designated by SWRCB: Mattole River, Middle South Fork Eel River, East Fork Russian River, Headwaters Russian River, Navarro River, and Dry Creek watersheds, as shown in Figure 3.10-4. As described in Section 3.10, “Hydrology and Water Quality,” Cannabis Priority Watersheds are designated because they have a high concentration of cannabis cultivation. It is expected that the 1,075 future new licensed commercial cannabis cultivation sites assumed for the project would still be used over the next 20 years and would be located in areas of the County outside these watersheds.

## AESTHETICS

As stated in Section 3.1, “Aesthetics,” and Chapter 4, “Cumulative Impacts,” construction and operation of existing provisionally licensed, potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations would not result in significant project and cumulative impacts on scenic resources, visual character, or nighttime lighting and glare. As under the project, licensed commercial cannabis cultivation sites under Alternative 2 would be subject to compliance with the requirements outlined in MCCR section 10A.17.040(E), which would ensure that artificial lighting associated with nurseries, mixed-light operations, and indoor cultivation operations would be fully contained in structures or otherwise would be shielded. CCR, title 4, division 19, section 16304 would also require that outdoor lights used for safety or security purposes for cultivation sites be shielded and downward facing and that cultivation-related artificial lighting be shielded from sunset to sunrise to reduce nighttime glare. The magnitude of this impact would be **similar** under Alternative 2 compared with the project because Alternative 2 would consist of the same number of new licensed commercial cannabis cultivation sites as the project.

## AGRICULTURE AND FORESTRY RESOURCES

As described in Section 3.2, “Agriculture and Forestry Resources,” cannabis is defined by the state (Business and Professions Code section 26060(a)) as an agricultural product; therefore,

existing provisionally licensed, potential expansion of existing provisionally licensed, and future licensed commercial cannabis cultivation and associated processing and/or distribution transport-only operations would not result in conversion to a nonagricultural use. The Mendocino County Policies and Procedures for Agricultural Preserves and Williamson Act Contracts state that commercial cannabis cultivation is compatible with agricultural uses on any Williamson Act contracted lands under section 9.5(E). Thus, no impacts were identified under project or cumulative conditions. The magnitude of Alternative 2's agricultural impact would be **similar** to that of the project because Alternative 2 would permit and regulate cannabis uses to the same extent (use types and limits on total cultivation licensing) as the project.

The discussion of Impact 3.2-2 states that existing licensed commercial cannabis cultivation sites are allowed in TPZ areas and can remain in operation under the MCCR, whereas new licensed commercial cannabis cultivation sites are not allowed in TPZ areas. Both existing and new cultivation sites are subject to MCCR section 10A.17.040(K), which prohibits the removal of any commercial species trees as defined by CCR, title 14, section 895.1. The magnitude of this impact would be **similar** under Alternative 2 compared with the project because Alternative 2 would consist of the same number of new licensed commercial cannabis cultivation sites as the project.

## AIR QUALITY

Section 3.3, "Air Quality," identifies no significant air pollutant or toxic air contaminant impacts under the project. However, significant and unavoidable project and cumulative odor impacts have been identified for potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations. As under the project, existing commercial cannabis cultivation operations under Alternative 2 would be subject to compliance with MCAQMD Rule 1-430 (Fugitive Dust Emissions), which prohibits activities that allow or may allow unnecessary amounts of particulate matter to become airborne; MCCR section 10A.17.070(U), which requires license holders to obtain all approvals and permits required by MCAQMD pursuant to state and federal laws, MCAQMD regulations, adopted air quality plans, MCAQMD policies, and other applicable statutes; and CCR, title 4, division 19, section 16305(b), which requires licensees that generate GHG emissions in excess of the local utility provider's GHG emission intensity threshold to obtain carbon offsets to cover the excess of carbon emissions from the previous annual licensed period. Additionally, existing licensed sites would continue to be required to meet the odor control standards established in MCCR sections 10A.17.040(C) and 10A.17.070(P).

The magnitude of both air pollutant and odor impacts would be **similar** under Alternative 2 compared with the project because Alternative 2 would result in the same number of licensed commercial cannabis cultivation sites (and associated air pollutant emissions and odors) as the project.

## ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

The discussion of Impact 3.4-1 states that new licensed commercial cannabis cultivation sites and associated processing and distribution transport-only operations would result in significant and unavoidable historic resource impacts. No other significant cultural resource impacts were identified for project or cumulative conditions. The magnitude of this impact would be **similar**

under Alternative 2 compared with the project because Alternative 2 would have the same extent of land disturbance associated with licensed commercial cannabis cultivation as the project.

## BIOLOGICAL RESOURCES

As stated in Section 3.5, “Biological Resources,” the project would have significant impacts on habitat conditions, special-status plant and animal species, sensitive natural communities, and wildlife movement from potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations. Mitigation has been identified to reduce these impacts to a less-than-significant level under project and cumulative conditions (Mitigation Measures 3.5-1a through 3.5-1c, 3.5-2a through 3.5-2p, 3.5-4, 3.5-5, and 3.5-6a through 3.5-6c). As under the project, existing licensed commercial cannabis cultivation sites under Alternative 2 would be subject to the biological resource protection requirements of SWRCB Order WQ 2023-0102-DWQ and the MCCR. The magnitude of this impact would be **less** under Alternative 2 than under the project because Alternative 2 would avoid the placement of new licensed commercial cannabis cultivation sites in Cannabis Priority Watersheds, avoiding impacts on the special-status plant and animal species and habitats located in these watersheds.

## ENERGY

Section 3.6, “Energy,” and Chapter 4, “Cumulative Impacts,” state that the potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would not result in significant project or cumulative impacts on energy use. As under the project, existing licensed commercial cannabis cultivation sites under Alternative 2 would continue to be required to meet the standards established in CCR, title 4, division 19, section 16305, regarding energy sources that reduce GHG emissions, and sections 10A.17.040(D) and 10A.17.070(F) of the MCCR, which limit the use of generators. The magnitude of energy use would be **similar** under Alternative 2 compared with the project because implementing Alternative 2 would result in the same number of licensed commercial cannabis cultivation sites (and associated energy use) as the project.

## GEOLOGY, SOILS, AND MINERAL RESOURCES

No significant project or cumulative geologic impacts were identified in Section 3.7, “Geology, Soils, and Mineral Resources,” or Chapter 4, “Cumulative Impacts.” As under the project, existing licensed commercial cannabis cultivation sites under Alternative 2 would continue to be required to comply with MCCR sections 10A.17.070(I) and 10A.17.070(L), conditions of SWRCB Order WQ 2023-0102-DWQ, and the Mendocino County Code’s Grading Ordinance. The magnitude of this impact would be **similar** under Alternative 2 compared with the project because Alternative 2 would have the same extent of land disturbance associated with licensed commercial cannabis cultivation as the project.

## GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

As stated in Section 3.8, “Greenhouse Gas Emissions and Climate Change,” and Chapter 4, “Cumulative Impacts,” the potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution

transport-only operations would result in project and cumulative significant and unavoidable impacts associated with GHG emissions even with implementation of Mitigation Measure 3.8-1. As under the project, existing licensed commercial cannabis cultivation sites under Alternative 2 would continue to be required to comply with renewable energy requirements under CCR, title 4, division 19, section 16305. The magnitude of GHG emissions would be **similar** under Alternative 2 compared with the project because implementing Alternative 2 would result in the same extent of licensed commercial cultivation as the project.

## HAZARDS AND HAZARDOUS MATERIALS

Section 3.9, “Hazards and Hazardous Materials,” and Chapter 4, “Cumulative Impacts,” state that existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would not result in significant project or cumulative hazard impacts. As under the project, existing licensed commercial cannabis cultivation sites under Alternative 2 would continue to be required to comply with state and local regulations, including the CCR and MCCR. Compliance with existing applicable rules and regulations would prevent any impacts related to hazardous materials from existing licensed commercial cannabis cultivation sites that could contribute to cumulative hazard conditions. The magnitude of this impact would be **similar** under Alternative 2 compared with the project because Alternative 2 would result in the same extent of land disturbance (and associated potential for release of contamination) as the project.

## HYDROLOGY AND WATER QUALITY

No significant project or cumulative hydrology and water quality impacts were identified in Section 3.10, “Hydrology and Water Quality,” or Chapter 4, “Cumulative Impacts.” As under the project, existing licensed commercial cannabis cultivation sites under Alternative 2 would continue to be required to comply with Attachment A (section 1, General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ, which requires a site evaluation for any future site expansion activities, and MCCR section 10A.17.040(G), which prohibits activities associated with commercial cannabis cultivation to cause eroded materials or contaminated runoff to be deposited into any stream, creek, river, or body of water. The magnitude of this impact would be **less** under Alternative 2 than under the project because Alternative 2 would avoid the placement of new licensed commercial cannabis cultivation sites in Cannabis Priority Watersheds, avoiding impacts on surface water flow and water quality in these watersheds.

## LAND USE AND PLANNING

As stated in Section 3.11, “Land Use and Planning,” the existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would be subject to the zoning and performance standards of the MCCR, which restrict cannabis cultivation uses to certain zoning districts (MCCR Table 2), and MCCR section 10A.17.040(A) requires cultivation sites to be set back from identified sensitive land uses. Thus, no project or cumulative impacts were identified. The magnitude of this impact would be **similar** under Alternative 2 and the project because licensed commercial cannabis cultivation sites would continue to be subject to Mendocino County land use requirements.

## NOISE AND VIBRATION

The discussion of Impact 3.12-2 states that the potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations could result in construction vibration impacts that would be mitigated through implementation of Mitigation Measure 3.12-2. No other significant project or cumulative noise impacts were identified. The magnitude of construction vibration impacts would be **similar** under Alternative 2 compared with the project because Alternative 2 would have the same number of licensed commercial cannabis cultivation sites (and associated construction noise impacts) as the project.

## POPULATION, EMPLOYMENT, AND HOUSING

As stated in Section 3.13, “Population, Employment, and Housing,” existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations are not expected to induce unplanned population growth under project and cumulative conditions. The magnitude of impacts would be **similar** under Alternative 2 compared with the project because Alternative 2 would have the same number of licensed commercial cannabis cultivation sites (and associated employment generation) as the project.

## PUBLIC SERVICES AND RECREATION

Section 3.14, “Public Services and Recreation,” states that existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would not result in significant project public service and recreation impacts. Also, no cumulative impacts related to public services and recreation were identified. As under the project, existing licensed commercial cannabis cultivation sites under Alternative 2 would continue to be required to comply with PRC sections 4290 and 4291, local fire protection agency requirements, and the California Fire Code (CCR, title 24, part 2, section 701A.3). Law enforcement service demands would continue to be addressed through compliance with CCR, title 4, division 19, section 15042 and MCCR section 10A.17.090, which requires security measures for facilities. The magnitude of this impact would be **similar** under Alternative 2 compared with the project because Alternative 2 would have the same number of licensed commercial cannabis cultivation sites (and associated demand for public services) as the project.

## TRANSPORTATION

Section 3.15, “Transportation,” and Chapter 4, “Cumulative Impacts,” state that the potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would not result in significant transportation, safety, or emergency impacts. Also, no cumulative impacts related to transportation, safety, or emergency were identified. The magnitude of this impact would be **similar** under Alternative 2 compared with the project because Alternative 2 would have the same number of licensed commercial cannabis cultivation sites (and associated changes in traffic conditions) as the project.

## UTILITIES AND SERVICE SYSTEMS

Section 3.16, “Utilities and Service Systems,” states that existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would not result in significant project utility and service system impacts. Also, no cumulative impacts related to utilities and service systems were identified. As under the project, existing licensed commercial cannabis cultivation operations under Alternative 2 would continue to be required to comply with terms 27 and 38 of Attachment A (section 1, General Requirements and Prohibitions) of SWRCB Order WQ 2023-0102-DWQ, which addresses the proper disposal of cannabis wastewater. Future new licensed cannabis cultivation sites under Alternative 2 would be subject to the water supply documentation, verification of adequate source of supply, and use restrictions requirements provided under CCR, title 4, division 19, section 16311; SWRCB Order WQ 2023-0102-DWQ Attachment A (section 3, Numeric and Narrative Instream Flow Requirements); and MCCR sections 10A.17.070(H), 10A.17.080(B), and 10A.17.090(E). Also, CCR, title 4, division 19, section 17223 addresses cannabis waste handling. The magnitude of this impact would be **similar** under Alternative 2 compared with the project because Alternative 2 would have the same number of licensed commercial cannabis cultivation sites (and utility service demands) as the project.

## WILDFIRE

Section 3.17, “Wildfire,” and Chapter 4, “Cumulative Impacts,” state that the potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations would not result in significant wildfire hazard impacts. Also, no cumulative impacts related to wildfire were identified. The magnitude of this impact would be **similar** under Alternative 2 compared with the project because Alternative 2 would have the same number of licensed commercial cannabis cultivation sites (and associated conditions that could lead to wildfire) as the project.

## 5.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Table 5-1 summarizes the comparison of the impacts of the alternatives to the project. If the no project alternative is the environmentally superior alternative, CEQA requires that the EIR “shall also identify an environmentally superior alternative among the other alternatives” (State CEQA Guidelines, section 15126(e)(2)). Although Alternative 1 would be the environmentally superior alternative, Alternative 2 would also have environmental benefits over the project.

**Table 5-1 Summary of the Environmental Effects of the Alternatives Relative to Those of the Proposed Project**

<b>Environmental Topic</b>	<b>Proposed Project</b>	<b>Alternative 1: No Project Alternative</b>	<b>Alternative 2: Siting Limitation for Cannabis Cultivation Sites Alternative</b>
Aesthetics	Less than significant	Less	Similar
Agriculture and Forestry Resources	Less than significant	Less	Similar
Air Quality	Significant and unavoidable	Less	Similar
Archaeological, Historical, and Tribal Cultural Resources	Significant and unavoidable	Less	Similar
Biological Resources	Less than significant (with mitigation)	Less	Less
Energy	Less than significant	Less	Similar
Geology, Soils, and Mineral Resources	Less than significant	Less	Similar
Greenhouse Gas Emissions and Climate Change	Significant and unavoidable	Less	Similar
Hazards and Hazardous Materials	Less than significant	Less	Similar
Hydrology and Water Quality	Less than significant	Less	Less
Land Use and Planning	Less than significant	Similar	Similar
Noise and Vibration	Less than significant (with mitigation)	Less	Similar
Population, Employment, and Housing	Less than significant	Less	Similar
Public Services and Recreation	Less than significant	Less	Similar
Transportation	Less than significant	Less	Similar
Utilities and Service Systems	Less than significant	Less	Similar
Wildfire	Less than significant	Less	Similar

Source: Compiled by Ascent in 2024.

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## 6 OTHER CEQA SECTIONS

### 6.1 GROWTH INDUCEMENT

CEQA section 21100(b)(5) specifies that the growth-inducing impacts of a project must be addressed in an EIR. Section 15126.2(e) of the State CEQA Guidelines provides the following guidance for assessing growth-inducing impacts of a project:

Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristics of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

A project can induce growth directly, indirectly, or both. Direct growth inducement would result if a project involved construction of new housing. Indirect growth inducement would result, for instance, if implementing a project resulted in any of the following:

- ▶ Substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises);
- ▶ Substantial short-term employment opportunities (e.g., construction employment) that indirectly stimulates the need for additional housing and services to support the new temporary employment demand; or
- ▶ Removal of an obstacle to additional growth and development, such as removing a constraint on a required public utility or service (e.g., construction of a major sewer line with excess capacity through an undeveloped area).

Growth inducement itself is not an environmental effect but may foreseeably lead to environmental effects. If substantial growth inducement occurs, it can result in secondary environmental effects, such as increased demand for housing, demand for other community and public services and infrastructure capacity, increased traffic and noise, degradation of air or water quality, degradation or loss of plant or animal habitats, conversion of agricultural and open space land to urban uses, and other effects.

#### 6.1.1 Growth-Inducing Impacts

Implementation of the Licensing of Commercial Cannabis Cultivation in Mendocino County Project is intended to regulate cultivation and processing of cannabis in unincorporated portions of the County in a manner consistent with the existing character and goals of the County and state cannabis laws and regulations. Implementation of the project would involve identifying cultivation sites operating under provisional licenses and transitioning them to annual licensure. In addition the project would involve the issuance of annual licenses for

future cultivation sites under the existing legal framework. As identified in Chapter 2, “Project Description,” there are 623 cannabis cultivation sites in the unincorporated areas of Mendocino County that hold provisional state cannabis cultivation licenses and that may therefore operate under the Medicinal and Adult Use Cannabis Regulation and Safety Act, on a conditional basis, for a limited period under provisional licensure. Based on a review of historic County licensing data, implementation of the project (i.e., streamlining the annual licensing process) could result in a development potential of up to 1,075 new cultivation licenses and 10 new processing licenses and 40 distribution transport-only licenses in the unincorporated County.

Implementing the project would not substantially increase population growth in the surrounding region, because it is not anticipated to require construction of a large number of new housing units, as discussed in Section 3.13, “Population, Employment, and Housing.” Many of the experienced commercial cannabis cultivation employees, including those participating in commercial cannabis cultivation, harvest, processing, or distribution transport-only activities, are already present within the County and adjoining counties as evidenced by the level of commercial cannabis cultivation and noncultivation uses in these counties (e.g., Humboldt County had 1,838 applications for existing commercial cannabis cultivation sites in 2017 (Humboldt County 2017) and Trinity County had 198 licensed commercial cannabis cultivation sites in 2020 (Trinity County 2020)). The Mendocino County General Plan, specifically the Housing Element, anticipates a total countywide population of approximately 92,655 citizens by 2030. Currently the County is projected to have a total population of approximately 88,782 by 2023, and is projected to have a total population of approximately 89,697 citizens by 2050. While the County is projected to have a lower population count than anticipated in the Housing Element, the anticipated 1,903 employees to be generated as a result of future commercial cannabis cultivation sites would continue to allow the County’s population growth to fall within the projected population growth analyzed in the Housing Element. Additionally, the 1,903 expected employees does not exclude those currently living within the County.

MCCR section 10A.17.070(E) would require legal parcels with a cultivation site to have a dwelling unit, however, it does not apply to several zoning districts such as U-R, A-G, R-L, F-L, TPZ, 1-1, 1-2, and P-1 zoning districts. Additionally, MCCR section 20.242.070(C)(6) would allow dwelling units to be exempt from requirements in R-R:L-10 zoning districts upon issuance of an administrative permit. While MCCR section 10A.17.080(B)(2) would allow commercial cannabis cultivation sites to be located within R-1, R-2, R-3, S-R, R-C, R-R:L-1, R-R:L-2, and R-R:L-5 zoning districts, they may only be issued a Type C, Type C-A, or Type C-B CCBL license given that there is an already existing dwelling unit that is a principally permitted use and the site is located on a legal parcel. Future commercial cannabis cultivation sites may result in additional dwelling units to be constructed, as per compliance with MCCR section 10A.17.070(E), however, the cultivation sites would still be required to comply with zoning district requirements and allowed land uses per the General Plan. The issuance of new licenses would also not require the elimination of housing, nor would it prohibit the construction of future housing identified in the Mendocino County General Plan.. Therefore, implementing the project would not contribute to substantial population growth or be considered growth-inducing.

## 6.2 SIGNIFICANT AND UNAVOIDABLE ADVERSE IMPACTS

State CEQA Guidelines section 15126.2(c) requires EIRs to include a discussion of the significant environmental effects that cannot be avoided if the project is implemented. As documented in Sections 3.1 through 3.17, which analyze project-level impacts, most of the impacts associated with the project would be less than significant or would be reduced to a less-than-significant level after implementation of the recommended mitigation measures. Chapter 4, "Cumulative Impacts," describes whether the incremental effects of the project would be significant when viewed in connection with the effects of past projects, other current projects, and probable future projects. As described for Chapter 3, most of the impacts identified in Chapter 4 would be less than significant or would be reduced to a less-than-significant level with implementation of mitigation. The following impacts would be significant and unavoidable; that is, no feasible mitigation is available to reduce these impacts to a less-than-significant level.

### AIR QUALITY

- ▶ The cultivation and processing of cannabis by existing provisionally licensed, potential expansion of existing provisionally licensed, and new licensed commercial cannabis cultivation sites could generate objectionable odors created by the growing and processing of cannabis that could adversely affect residents and other sensitive land uses. This impact would be **significant and unavoidable** (Impact 3.3-3) and **cumulatively considerable and significant and unavoidable** (CUM-3).

### ARCHAEOLOGICAL, HISTORIC, AND TRIBAL CULTURAL RESOURCES

- ▶ Potential expansion of existing provisionally licensed sites and new licensed commercial cannabis cultivation sites and associated processing and/or distribution transport-only operations implemented under the project could be located on lands that contain or are near historic resources. This could result in damage to or destruction of a historic building or structure, thereby resulting in a substantial adverse change in the significance of a historical resource as defined in section 15064.5. Although mitigation (Mitigation Measure 3.4-1) would assist in reducing this impact, it is uncertain whether all historic resources could be retained. This impact would be **significant and unavoidable** (Impact 3.4-1).

### GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

- ▶ Operation or potential expansion of existing provisionally licensed and new licensed commercial cannabis cultivation sites and associated processing and distribution transport-only operations would result in greenhouse gas (GHG) emissions that could conflict with state GHG reduction targets and decarbonization efforts. Although mitigation (Mitigation Measure 3.8-1) would assist in reducing this impact, it is uncertain whether GHG emissions would be adequately reduced. This impact would be **significant and unavoidable** (Impact 3.8-1) and **cumulatively considerable and significant and unavoidable** (CUM-8).

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## 8.3 CHAPTER 2: PROJECT DESCRIPTION

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