PUBLIC DRAFT
INITIAL STUDY and ENVIRONMENTAL CHECKLIST

FOR

MENDOCINO COUNTY
MEDICAL CANNABIS CULTIVATION REGULATION

AMENDING THE MENDOCINO COUNTY CODE TO ADD CHAPTER 10A.17, MEDICAL CANNABIS CULTIVATION REGULATION, TO TITLE 10A AGRICULTURE CODE, AND TO ADD CHAPTER 20.242, MEDICAL CANNABIS CULTIVATION SITE, TO TITLE 20, DIVISION I, ZONING CODE.

November 7, 2016

Lead Agency:
County of Mendocino

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I. PROJECT SUMMARY

Date: November 7, 2016

Project Title: Mendocino County Medical Cannabis Cultivation Regulation

Lead Agency: County of Mendocino

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860 North Bush Street, Ukiah, CA 95482
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Location: **Mendocino County**

Coastal Zone: No

Affected Parcel(s): Mendocino County

Mendocino County General Plan Land Use Designation: Regulations affect all General Plan Land Use Classifications.

Mendocino County Zoning Designation: Regulations affect all Zoning Districts.

Anticipated Permits and Approvals: Mendocino County Board of Supervisors adoption of proposed Medical Cannabis Cultivation Regulation and County issuance of cultivation permits pursuant to the proposed Medical Cannabis Cultivation Regulation.

CEQA Requirement:
The Lead Agency is Mendocino County. The purpose of this Initial Study (IS) is to provide a basis for determining whether to prepare an Environmental Impact Report (EIR) or a Negative Declaration for the Mendocino County Medical Cannabis Regulation. The proposed project is subject to the requirements of the California Environmental Quality Act (CEQA). This IS is intended to satisfy the requirements of CEQA (Public Resources Code, Div 13, Sec 21000-21177) and the State CEQA Guidelines (California Code of Regulations, Title 14, Sec 15000-15387).CEQA encourages lead agencies and applicants to modify their projects to avoid significant adverse impacts (CEQA Section 20180(c) (2) and State CEQA Guidelines Section 15070(b) (2)).

Section 15063(d) of the State CEQA Guidelines states that an IS shall contain the following information in brief form:

1) A description of the project including the project location;
2) Identification of the environmental setting;
3) Identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist—or other form—are briefly explained to provide evidence to support the entries;
4) Discussion of means to mitigate significant effects identified, if any;

5) Examination of whether the project would be consistent with existing zoning, plans, and other applicable land use controls; and
6) The name of the person or persons who prepared and/or participated in the Initial Study.

II. PROJECT DESCRIPTION

INTRODUCTION

The Mendocino County Board of Supervisors intends to adopt the Medical Cannabis Cultivation Regulation (MCCR), a comprehensive ordinance regulating the cultivation of medical cannabis. The MCCR will consist of two chapters of the Mendocino County Code, specifically Chapter 10A.17- Medical Cannabis Cultivation Ordinance (MCCO)of the Mendocino County Code, which is administered by the Agricultural Commissioner's Office and Chapter 20.242 Medical Cannabis Cultivation Site, of the Mendocino County Zoning Ordinance Inland (Zoning), administered through Planning and Building Services (see Attachment A). The MCCR is the local complement to a variety of actions currently being taken by the State of California to provide a legal framework for the medical cannabis industry (see Regulatory Setting Section, below).

In brief, MCCR includes provisions to establish a comprehensive local ordinance generally including (but not limited to) the following:

1) The phased review and permitting of medical cannabis operations:
   a. Phase 1 consists of the review and permitting of eligible operations in existence as of January 1, 2016 and extends from adoption of the ordinance to January 1, 2018,
   b. Phase 2 extends from January 1, 2018 to January 1, 2020 and consists of the review and permitting of new medical cannabis operations, restricted to Type 1A and Type 2A permit types, which are applications for indoor cultivation using only artificial light, with a maximum growing area of 5,000 square feet (Type 1A) or 10,000 square feet (Type 2A), that will only be allowed in Industrial zoning districts, and
   c. Phase 3 begins on January 1, 2020 and consists of the review of all types of cultivation applications which will only be allowed in Agricultural zoning districts and—with a completed watershed assessment—in Rural Residential, Upland Residential, and Rangeland zoning districts;
2) Appropriate locations for the cultivation of medical cannabis at a variety of intensities and in a variety of growing conditions;
3) Appropriate County entitlements and permitting for the cultivation of medical cannabis in a variety of intensities and methodologies;
4) Track and Trace requirements for permitting medical cannabis (from seed to sale) and zip tie confirmation for plants grown under the personal use and primary caregiver exemptions;
5) The application and review process for cultivation and other related permits;
6) Performance standards regarding the cultivation of medical cannabis including licensing requirements, requirements to comply with State regulations, water quality requirements, support limitations on pesticide use, handling and storage of hazardous materials, and inspection mechanisms;
7) Establishment of a "third party" inspection process to monitor ongoing compliance;
8) Establishment of an enforcement mechanism; and
9) Certification of medical cannabis products as "Mendocino County Grown."

PROJECT OBJECTIVES

1) Establish local regulations for the cultivation of cannabis intended exclusively for medical use within the unincorporated areas of Mendocino County consistent with existing State Law;
2) Establish a program in coordination with the State of California's future implementation of the Medical Cannabis Regulation and Safety Act (MCRSA) which was adopted in 2015 and took effect on January 1, 2016, but which will not be fully implemented until 2018;
3) Promote the health, safety, and general welfare of the residents and businesses within the unincorporated area of Mendocino County by balancing the needs of medical patients and their caregivers, the needs of neighbors and communities to be protected from public safety and nuisance impacts, and the need to limit harmful environmental impacts that may be associated with cannabis cultivation;
4) Offer persons wishing to cultivate cannabis the option to do so within the parameters set forth in the MCRSA, including but not limited to the provisions of Business and Professions Code Section 19315, 19316, 19320, 19322, 19332 and 19360, and Health and Safety Code Section 11362.777;
5) Provide a local permitting structure for medical cannabis cultivation; and
6) Provide a mechanism for current medical cannabis cultivators to identify permits required and site improvements necessary to bring their operations into compliance with applicable State and local regulations as a condition of the issuance of permits.

PROJECT SETTING AND LOCATION

The proposed Mendocino County MCCR applies throughout unincorporated areas of Mendocino County (County), exclusive of areas within the Coastal Zone. It establishes ten (10) permit types for the cultivation of medical cannabis. Mendocino County Zoning Ordinance Section 20.242.050 establishes the appropriate locations for each permit type. The following zoning districts have been identified as appropriate locations for one or more of the ten permit types:

1) RR2 (Rural Residential – 2 acre minimum)[1];
2) RR5 (Rural Residential – 5 acre minimum);
3) RR10 (Rural Residential – 10 acre minimum);
4) AG (Agriculture);
5) UR (Upland Residential);
6) RL (Rangeland);
7) FL (Forest Land);
8) TPZ (Timber Protection Zone);
9) I1 (Limited Industrial);
10) I2 (General Industrial); and
11) P-I (Pinoleville Industrial).

Note that no new cultivation operations (established after January 1, 2016) are permitted in the FL and TPZ Districts.

[1] The specified acre minimums in the Rural Residential District are directly from the existing Mendocino Zoning Ordinance (Inland) and establish minimum subdivision lot size and maximum residential density in each of the Districts. They do not establish a minimum lot size or acreage restriction for cannabis cultivation sites.

The total area within Mendocino County made available for medical cannabis cultivation is approximately 1,788,000 acres including FL and TPZ Districts and approximately 889,000 excluding FL and TPZ Districts. The total area available based on the zoning districts are described in more detail in Table 1 below:

Table 1. Area of Zoning Districts Potentially Available for Cannabis Cultivation

	PHASE 1		PHASE 2		PHASE 3	
	Existing Cultivation Only		New Indoor Cultivation Only		New Cultivation: All Types	
ZONING	AVAILABLE ACRES*	AVAILABLE PARCELS**	AVAILABLE ACRES*	AVAILABLE PARCELS**	AVAILABLE ACRES*	AVAILABLE PARCELS**
RR-2	1,931	1,136			1,931	1,136
RR-5	8,460	1,970			8,460	1,970
RR-10	10,050	1,263			10,050	1,263
AG	56,738	3,124			56,738	3,124
UR	94,771	3,793			94,771	3,793
RL	714,842	8,073			714,842	8,073
FL	62,415	1,540				
TPZ	836,850	5,959				
I1	584	203	584	203	584	203
I2	1,342	193	1,342	193	1,342	193
PI	69	24	69	24	69	24
TOTAL:***	**1,788,052**	**27,278**	**1,995**	**420**	**888,787**	**19,779**

*Acreage numbers are based on GIS polygon calculations and are estimates only.
** Available parcels counts GIS Assessor's Parcel Numbers which differ from legal lots of record.
***Minimum parcel sizes, maximum cultivation areas, mandatory setbacks and other restrictions significantly reduce the actual area potentially available for development.

While the above acreage may imply extensive opportunity for cultivation in the County, under the proposed cultivation ordinance, the permitted cannabis cultivation area will be substantially limited as only one cultivation area will be allowed on each legal parcel and the size of each cultivation area will be limited by the type of cultivation permit to 2,500, 5,000, or 10,000 square feet, accordingly. Therefore, "Available Acres" includes the gross acreage of all parcels potentially eligible for permits while a maximum 10,000 square feet of cultivation (less than a ¼ acre) or 22,000 square feet in nursery (cannabis in vegetative state only) on any parcel will be eligible for a permit. Similarly, the number of "Available Parcels" is based on the number of separate Assessor's Parcel Numbers (APNs) assigned in each zoning district. Actual cultivation permits will be based on legal lots of record which may vary from the number of APNs.

Proposed agricultural code amendments, County Code Section 10A.17.030D, exempts certain small cultivation sites from the permit requirements, which generally apply throughout the County. As such, the limitations in the proposed zoning code amendments, which restrict the issuance of permits to certain locations, do not apply to such exempt cultivation sites that could occur in any zone, provided the cultivation site meets mandatory setbacks and similar restrictions. Exempt cultivation sites are limited to a maximum of 200 square feet of cannabis cultivation on any parcel. Further, such cultivation sites must: meet all of the applicable standards regarding setbacks from sensitive uses and energy efficiency; avoid

light, glare, noise, and odors affecting neighboring properties; and be fenced or otherwise secured. Exempt cultivation sites that avoid creating nuisance effects on neighboring properties are equivalent to other permitted indoor and outdoor gardening and horticulture activities, and they are not expected to contribute to a site specific or cumulative impact.

Baseline Conditions

Pursuant to CEQA Guidelines Section 15125, the Project Description is required to identify the existing baseline set of physical characteristics. This is typically a snapshot of conditions at a single point in time that apply to the project location prior to implementation. For purposes of this Initial Study, the baseline date will be established to be August 26, 2016, the date on which the County submitted requests for early consultation to Responsible and Trustee agencies and other interested parties.

It is not feasible to establish baseline conditions at every potentially-affected site for a project as geographically extensive and diverse as the proposed ordinance. Except as described below in the *Prior Effects of Cannabis Cultivation* section, the analysis in the Initial Study will assume the regional location and setting in the unincorporated area affected have not changed substantially since the adoption of the Mendocino County General Plan and certification of the General Plan Update EIR (SCH 2008062074) in 2009 or, where applicable, the Ukiah Valley Area Plan EIR (SCH 2003072038) in 2011. The existing baseline condition includes, but is not limited to, the following excerpts from the General Plan Update EIR:

Mendocino County General Plan EIR: Regional Location and Setting

Project Location

Mendocino County is located along the Pacific Coast in the northwestern portion of California. Mendocino County is bordered 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.

Project Setting

Mendocino County is approximately 2,247,000 acres in size including the incorporated cities. The County consists of a series of northwest-southeast trending mountainous ridges and narrow valleys. Most of the valleys are alluvial; of these valleys, Round Valley is the largest. The County lies within the Coast Ranges, which are characterized by a series of northwest-trending mountain ranges, intervening canyons and valleys. Mountain elevations in the County are typically within the range of 2,000 to 4,000 feet.

Climate throughout the County does not vary significantly. Mean annual temperatures range between approximately 53 degrees Fahrenheit and 58 degrees Fahrenheit, with average minimum temperatures ranging from approximately 39 degrees Fahrenheit to 42 degrees Fahrenheit and average maximum temperatures ranging from 72 degrees Fahrenheit to 74 degrees Fahrenheit (www.worldclimate.com 2008). However, there are instances where maximum temperatures reach above 100 degrees Fahrenheit in the inland valleys, and minimum temperatures reach below freezing, especially during nighttime hours. Rainfall mostly occurs during the months of October through April, with average rainfall between 33 inches and 45 inches.

The majority of land in the County is privately owned. The majority of these lands are within timber production zones. The other private land is either agricultural preserves or smaller privately owned residential, commercial, industrial, or agricultural use properties. The majority of the developed land is located in the unincorporated community areas (i.e., Anderson Valley, Hopland, Redwood Valley, Potter

Valley, Laytonville, and the Round Valley/Covelo area). US Highway 101 (US 101) is the main north-south thoroughfare through Mendocino County. State Routes 20, 128, 162, 253, and 271 all connect to US 101.

Mendocino County is a biologically diverse region. Predominant vegetation types include valley grassland and oak woodland in the lowlands and valley areas, and mixed chaparral, hardwood forest, and coniferous forest in the mountainous areas. There are numerous rivers and creeks that traverse the County. The seven major rivers—the Ten Mile, Noyo, Big, Albion, Navarro, Garcia, and Gualala rivers—start in the mountainous areas of the western edge of the county and flow west out to the Pacific Ocean. The Eel River watershed drains the northern portion of the County, while the Russian River basin drains the southern portion.

Prior Effects of Cannabis Cultivation

The environmental setting includes a landscape that has been substantially altered by illegal/trespass cultivation as well as legal but unpermitted cannabis cultivation. Current cultivation sites vary widely in their circumstances, characteristics, maintenance, and prior efforts to conform to regulatory and other standards. Even where residents are conscientious in their water use or cultivation practices, they may not have the expertise or awareness to identify and address site features or activities that impact or may impact the environment.

No precise count has been made of existing cannabis cultivation sites and no formal characterization of existing sites has been made to distinguish between sites which will qualify for entitlement under the proposed MCCR and those which cannot receive permits (see *Limitations on Project Description*, below). The California Department of Fish and Wildlife (CDFW), the North Coast Regional Water Quality Control Board (NCRWQCB) and other state and local agencies have documented the effects of existing cannabis cultivation sites described in Table 2, below.

The adopted Mitigated Negative Declaration for the NCRWQCB Order R1-2015-0023, *General Waiver of Waste Discharge Requirements and General Water Quality Certification for Dischargers of Waste from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effects in the North Coast Region (herein after referred to as "Order"*), acknowledges some general reported differences between cultivation practices occurring on trespass grows on public lands versus practices occurring on private lands:

> *"For example, cultivation activities on public lands often occur in remote areas with difficult access and [have] visually indistinct features from a birds-eye view. These are often areas where people rarely go because entry is made difficult by physical barriers such as cliff faces or dense poison oak (Mallory 2011). For site access and supply in such remote areas, cultivators wear or cut trails into the landscape which leads to destruction of small vegetation and can introduce non-native species to new areas via seeds or spores on the cultivator's clothing or equipment. Additionally, there are often significant differences regarding chemical use practices in cannabis cultivation on public lands, as cannabis monocultures on public lands are especially susceptible to mold, mites, and wildlife. Many reports cite widespread usage of chemicals for cannabis cultivation on public lands."*

The adopted Mitigated Negative Declaration for the Order acknowledges, "though different in some ways, development and land use of land for cannabis cultivation on public and private lands share a number of similarities in environmental impacts as well."

In the absence of site specific data on cultivation sites throughout the County, and while acknowledging the wide range of cultivation practices and their potential environmental impacts, for the purposes of this Initial Study, the Lead Agency assumes that existing operations, which may qualify for permits under the proposed MCCR, are generally physically similar to, but are presumed not to be as intense, both in size of operations and severity of impacts, as illegal/trespass sites that will not qualify under the proposed cannabis cultivation and zoning regulation. Therefore, the environmental impacts of existing cultivation sites which may qualify for permits pursuant to the proposed MCCR are assumed to be less significant than those of illegal/trespass sites and such impacts will be further reduced as existing sites are brought into compliance with permit requirements.

CEQA case law indicates that illegal and unpermitted uses currently in operation when the existing conditions baseline is set are included in the baseline (Kenneth F. Fat v. County of Sacramento (2002) 97 Cal.App.4th 1270). For the purposes of this Initial Study, we rely on existing physical conditions to establish the baseline. A description of the baseline which does not include the existing widespread cultivation of cannabis, whether potentially legal or clearly illegal, would ultimately be misleading and speculative and will not be used in this case.

Based on documented inspections of existing cultivation sites, the current environmental setting at cultivation sites for which a permit may be sought pursuant to the MCCR, may include any or all of the conditions listed in Table 2. Additional site specific impacts may also occur.

Table 2. Impacts to the Environmental Baseline from Existing Illegal/Trespass Cultivation Sites and Unpermitted Cultivation Sites

Impact Area	Existing Environmental Conditions
Aesthetics	• Unpermitted tree removals and other site improvements or development features with potential impact on scenic vistas/resources such as ridgeline views. • Aesthetic impacts on roadway segments designated as heritage corridors and eligible as scenic highways. • Light trespass and light pollution from security-related and cultivation-related lighting.
Agriculture and Forestry Resources	• Areas cleared of timber for the installation of roadways, water storage, and cultivation sites. • Large scale conversion of forest lands to other uses. • Inefficient use of soils by siting cultivation operations based on factors such as privacy and remoteness in addition to considerations of soil characteristics for agriculture such as terrain, soil fertility, sun exposure, and water availability. • Cultivation sites out of compliance with acreage limitations under the Forest Practices Act and zoning regulations. • Increased risk of fire.

Table 2. Impacts to the Environmental Baseline from Existing Illegal/Trespass Cultivation Sites and Unpermitted Cultivation Sites

Impact Area	Existing Environmental Conditions
Air Quality	• Portable diesel and gasoline generators used on a stationary basis operating for extended periods of time with local air quality impacts and associated high emissions (PM10, PM2.5 and other criteria pollutants). • Contributions to PM10 from construction, grading, and travel on unpaved roads. • Objectionable and detectable odors from fuels, fertilizers, and cannabis plants. • Existing operations may be located near "sensitive receptors. • Burning of cannabis waste products.
Biological Resources	• Varying degrees of habitat modifications through tree removal and clearing of vegetation. • Inappropriate storage, use, and disposal of pesticides, fertilizers, and related materials with potential adverse effect on sensitive species. • Illegal or unpermitted water diversions sufficient to affect riparian habitat values and impact sensitive natural communities and species. • Cultivation impacts on oak woodland and rangelands, endangered and threatened species, riparian and critical habitat, wetlands, and native resident or migratory wildlife corridors. • Use of security fencing, wildlife traps and various poisons. • Non-compliance with setback requirements to sensitive areas. • Lack of protection of riparian buffers, wetlands, and Environmentally Sensitive Habitat Areas (ESHAs). • Adverse impact from artificial lighting. • Habitat fragmentation. • Removal of riparian buffers, wetlands and environmentally sensitive habitats areas. • Endangerment of wildlife and listed rare species.
Cultural Resources	• Trespass on and desecration of sacred lands. • Diversion of tribal water with associated impacts on fish.
Geology and Soils	• Illegal or non-permitted grading of roads, cultivation sites, ponds which may facilitate erosion and slope failure. • Development without consideration of subsurface conditions which may facilitate slope failure or the failure of the road surface or impoundment. • Over-grading as a result of non-consideration of site topography, soils, geology, and hydrology. • Lack of erosion control to protect water quality. • Lack of compliance with slope restrictions. • Impoundments/damming of streams. • Impediments to fish passage • Improperly graded roads/ delivery of sediment to streams.
Greenhouse Gas Emissions	• Greenhouse gas emissions associated with power generation to run lights and exhaust fans. • Greenhouse gas emissions associated with vehicles required to conduct cultivation operations in remote settings.

Table 2. Impacts to the Environmental Baseline from Existing Illegal/Trespass Cultivation Sites and Unpermitted Cultivation Sites

Impact Area	Existing Environmental Conditions
Hazards and Hazardous Materials	• Use of petroleum products, fertilizers, and various pesticides. • Use of volatile compounds (pressurized gases such as propane or solvents) for cannabis manufacturing processes with associated risk of explosion or chemical release. • Improper storage of hazardous materials and/or storage above minimal amounts with no hazard response plan. • Fire risk associated with the operation of gasoline powered equipment in close proximity to dry vegetation. • Close interface with wildland areas and non-compliance with Fire codes and State Responsibility Area regulations. No sprinkler systems or defensible space. • Improper use and storage of petroleum products, fertilizers, herbicides, pesticides, automotive and machine-related fluids (acids, solvents, degreasers, corrosives, antifreeze, and hydraulic fluid), and construction materials (asphalt and oils, cementitious materials). • Improperly sited or hazardous water tanks. • Improper disposal of petroleum products, fertilizers, herbicides, pesticides, automotive and machine-related fluids and construction materials
Hydrology and Water Quality	• Depletion of water resources and potential impacts to or loss of beneficial uses. • Cultivation without implementation of control measures required by state and local permit regulations related to water quality, grading, erosion control, stream protection, stormwater management and discharge. • Lack of legal water supply. • Permitted and unpermitted surface water withdrawals from streams and rivers Illegal water storage, impoundment, illegally constructed dams/diversions. • Improper storing of fertilizers and pesticides creating the risk of or actual contamination of surface or groundwater. • Illegally constructed or unpermitted wells with associated impacts on neighboring well, surface water supplies, in-stream flows, groundwater supply. • Alteration of natural drainage and runoff patterns. • Temperature impacts from improper hydromodification, potential for adverse geomorphological changes, and creation of habitat/migration barriers. • Alteration of drainage patterns and watercourse channels. • Blocking or impeding natural stream flows or floodwater flows. • Improper stream crossings that create a sediment source and create or exacerbate unstable features. • Illegal dumping. • Improperly sited outhouses and disposal of human waste. • Trucking of water to cultivation sites.
Land Use and Planning	• Lands improved and structures built without required permits or according to existing regulations. • Non-compliance with General Plan policies and zoning regulations (cultivation in areas where use/similar uses are not allowed).
Noise	• Noise from generators and trimming machines. • Noise from water pumps.

Table 2. Impacts to the Environmental Baseline from Existing Illegal/Trespass Cultivation Sites and Unpermitted Cultivation Sites

Impact Area	Existing Environmental Conditions
Population and Housing	• Cultivation in "habitable" portions of residences. • Increased population in rural areas.
Public Services	• Longer emergency response times in remote areas not generally serviced. • High number of enforcement actions requiring Sheriff involvement.
Transportation/Traffic	• Long travel times associated with sites in remote areas and associated emissions. • Illegal or improperly graded access roads. • Lack of prior evaluation of driveway encroachments, new roads or road improvements, site distance, adequate access/turn-around space for emergency vehicles. • No traffic impact fees or agreements regarding maintenance of access roads.
Utilities and Service Systems	• Unaccounted for increase in energy consumption and disposal of waste (solid waste, dumping large amounts of soil, high levels of fertilizers and amendments added to soil and irrigation water). • Undocumented source of water demand potentially in conflict with other water rights and potentially subject to water availability restrictions. • Illicit connections and utility theft (jerry rigged wiring, bypass of electrical meter and circuit breaker, water theft).

Regulatory Setting

Cultivation and use of medical cannabis has been legal on a statewide basis since passage of the *California Compassionate Use Act* (Prop 215) on November 6, 1996 (California Health and Safety Code Section 11362.5). Additional guidance and regulatory control were established by SB 420 which took effect January 1, 2004 (California Health and Safety Code Section 11362.7 et seq.) and the issuance of *Guidelines for the Security and Non-Diversion of Marijuana Grown for Medical Use*, issued by the California Attorney General in 2008. The California Department of Fish and Wildlife, the Regional Water Quality Control Board, and others have documented thousands of new cultivation sites established since 1996. This use has been largely unregulated in the absence of a comprehensive state and local program. The California Department of Forestry and Fire Protection have documented unpermitted timberland tree clearances and harvests to establish cultivation sites.

Mendocino County has undertaken prior efforts to register and regulate medical cannabis growers within the framework of the State of California's changing approach to regulation. The County's cultivation ordinance was adopted in 2008 as Chapter 9.31 of the Mendocino County Code, and allowed no more than twenty-five (25) marijuana plants on any one (1) parcel which was intended to result in a significant reduction in the complaints of odor and the risks of fire, crime, and pollution.

In 2010, the County amended Chapter 9.31 to add an exemption to the 25 plant per parcel limitation. Cultivators could grow up to 99 plants, provided that those seeking the exemption apply for, obtain, and comply with the conditions of a permit issued by the Sheriff. The revised ordinance contained numerous conditions related to the 99 plant permit program, from application to inspection to enforcement and appeal. The revised ordinance also contained additional limitations on how and where cannabis may be cultivated.

In 2012, in response to a directive from the United States Department of Justice, the County amended Chapter 9.31 to eliminate the 99-plant permit program. The 25 plant per parcel limitation remained, but was changed from a legal parcel to an assessor's parcel. The elimination of the 99-plant permit program included aspects consumer safety and environmental protection that were critical components to preserving the character and natural resources of Mendocino County from this unregulated industry.

In order to regulate environmental effects from the unregulated commercial medical cannabis industry, the North Coast Regional Water Quality Control Board (NCRWQCB) adopted the *Waiver of Waste Discharge Requirements and General Water Quality Certification for Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effects In the North Coast Region* (herein after called the "Order") in August 2015. The Order establishes water resource protection requirements and provides a mechanism for cannabis cultivators to meet the requirements of the federal Clean Water Act, California Water Code, State Nonpoint Source Policy, and the Basin Plan for the North Coast region. Under the Order, operations with 2,000 square feet or more of cannabis canopy area or any amount of cultivation that poses a threat to water quality that were located on private lands in the North Coast region were required to enroll in the program by February 15, 2016.

The Mendocino County Board of Supervisors appointed an ad hoc committee in November, 2015, to review and make recommendations for revisions to Chapter 9.31 with the goal of aligning the County with MCRSA. In December, 2015, the ad hoc committee presented a timeline for adoption of a revised ordinance, projected to occur in the spring of 2016, but reported in April, 2016 that ordinance adoption would be delayed based on the need for environmental review.

On May 17, 2016, the Mendocino County Board of Supervisors adopted an urgency ordinance amending Chapter 9.31, which—again—created a permit program operated by the Sheriff's Office. Two tiers of cultivation were created: 26-50 plants and 51-99 plants per legal parcel. This program required compliance with conditions designed to protect the public peace, health and safety, including numerous conditions intended to provide enhanced environmental protection, similar to the 99-plant program in 2012. The urgency ordinance had a sixty (60) day registration window for cultivators to apply for a permit from the Sheriff's Office or voluntarily register with the Department of Agriculture if cultivating 1-25 plants.

On June 8, 2016, litigation was filed challenging the adoption of the urgency ordinance, alleging that it required review under CEQA and was not eligible for any CEQA exemptions. The plaintiffs and the County entered into a settlement agreement to resolve the lawsuit on June 21, 2016. The settlement agreement allowed the County to accept applications for permits under the urgency ordinance until June 22, 2016, and required the County to enforce the urgency ordinance for applications received as of that date.

Since the original approval of the *California Compassionate Use Act* (Prop 215) (California Health and Safety Code Section 11362.5) in 1996, and because of ambiguity in State law and conflict with federal law, cultivators have sometimes been unable, and in many cases unwilling, to secure permits for such regulated activities as:

1) Surface water withdrawal for irrigation of parcels both immediately adjacent and removed from the water source;
2) Impoundment of surface water in tanks and ponds;
3) Installation of in-stream dams and water diversion equipment;
4) Grading of roads, ponds and cultivation sites;
5) Removal of trees and vegetation and timber harvest for land clearance;
6) Application of pesticides;
7) Installation of culverts and road crossings;
8) Establishment and maintenance of sanitary facilities; and
9) Discharge (intentional and inadvertent) of sediment, pesticides, fuels, lubricants and other materials into surface waters, groundwater and associated wetlands and other protected habitats.

The ordinance seeks to establish local-level regulation, consistent with the State and regional regulation including the Order and MCRSA. State legislation will create the Bureau of Medical Cannabis Regulation (hereinafter referred to as the "BMCR") and amendments to the provisions of Business and Professions Code Sections 19315, 19316, 19320, 19322, 19332, and 19360 and Health and Safety Code Section 11362.777.

RELATIONSHIP TO PRIOR CEQA DOCUMENTS

This Initial Study is prepared as an independent analysis of the anticipated effects of the proposed project and is not directly tiered from another document. However, two prior Environmental Impact Reports and one Initial Study/Mitigated Negative Declaration are incorporated by reference as valuable sources of information regarding the anticipated effects of general development and agricultural cultivation in Mendocino County and the background and likely effects of cannabis cultivation pursuant to ongoing regulatory efforts by the State of California.

General Plan Update Final EIR (SCH #2008062074)

The Mendocino County Board of Supervisors certified the Final Environmental Impact Report for the General Plan in 2009. The update process began in 2001 and was intended to "reflect changing conditions, issues, requirements, and desired direction for the future growth and development of the unincorporated county for the next 20 years."

In 2007, a Working Draft General Plan Update was released, consolidating most policies into two elements on the issues of development and resource management. In July 2008, a Public Review Draft General Plan was published and released for public review and comment. The General Plan Update EIR analyzes the potential environmental effects of adoption of the Public Review Draft General Plan.

The goals, policies, and programs in the General Plan represent the County's statement of how Mendocino County should grow or change in the coming decades and how today's challenges will be met. Many of the adopted policies have the effect of reducing or avoiding negative environmental effects from the land uses and development authorized by the General Plan. With the adopted policies in place, and a limited number of additional policies identified as desirable through the environmental review process, the General Plan EIR concludes that all potential environmental effects of have been reduced to less than significant with the exception of the following:

1) Short term, long term and cumulative air quality impacts, and toxic air emissions;
2) Impacts to wetlands, riparian or other sensitive biotic communities;
3) Demand for fire protection, emergency medical services and law enforcement;
4) Increased traffic congestion;
5) Requirements for additional water supplies, storage, treatment and conveyance;
6) Cumulative greenhouse gas emissions;
7) Cumulative decrease in water supply, increase in air pollutants, and increase in health hazards, due to global climate change;
8) Cumulative impacts to special status plant and wildlife species, sensitive natural communities, and movement corridors;
9) Cumulative reduction in groundwater and reduced recharge in the North Coastal Basin;
10) Cumulative increase in traffic noise impacts;
11) Cumulative increase in demand for fire protection, emergency medical services, and law enforcement;
12) Cumulative increase in traffic congestion; and
13) Cumulative increase in demand for water supplies and associated facilities.

The General Plan policies which were adopted to reduce or avoid environmental impacts remain in effect and are expected to reduce the impacts of cannabis cultivation approved pursuant to the MCCR. The Lead Agency generally accepts the General Plan Update EIR analysis of effects of development, agricultural land uses, and related activities with regard to the proposed project except where cannabis cultivation presents unusual environmental challenges or concerns.

Ukiah Valley Area Plan EIR (SCH 2003072038)

The Ukiah Valley Area Plan (UVAP) sets policy guidelines and establishes land use classifications that provide a framework for the County's future land use decisions throughout the unincorporated portions of the Ukiah Valley. It is designed to guide development up to the year 2030; A Draft Program Environmental Impact Report (EIR) was prepared to analyze the effects of development pursuant to the UVAP. The Plan anticipates eventual development of a maximum of 5,430 dwelling units, 4.6 million square feet of

commercial development, and 2.4 million square feet of industrial development. The Final EIR was certified in July, 2011.

The UVAP includes a wide variety of goals and policies to promote growth in the Ukiah Valley pursuant to the vision established by the community throughout the UVAP development process. The policies also reduce or avoid substantial adverse environmental impacts.

The following impacts were assessed to be significant after all proposed policies were considered:

1) Conversion of farmland and prime agricultural soils;
2) Inducing population growth;
3) Social and economic effects that may result in a physical adverse change in the environment;
4) Risk of injury and death and the amount of property damage resulting from seismic events in the plan area;
5) Increased need for new or enlarged storm drain facilities;
6) Increase the transport of sediments, oils, greases, and other residues and chemicals to receiving waterways and the groundwater;
7) Injury or death of special status species of wildlife and/or destruction of habitat required by those species;
8) Potential to adversely affect areas of archaeological or historical resources;
9) Potential to adversely affect areas of paleontological resources;
10) Increase traffic volumes and generate harmful emissions of air pollutants that could result in exposure of people to substantial pollution, violate air quality standards, and/or conflict or obstruct MCAQMD's air quality plan;
11) Adversely affect scenic views along Highway 101, along other major public thoroughfares, and at gateways to the plan area;
12) Development may be inconsistent with the scale and character of existing development in the surrounding area;
13) New development will create new glare and include new lights that will adversely affect nighttime views;
14) Require the construction of new schools;
15) Increase the demand for a new criminal justice center;
16) Exposure of people and structures to wildland fires;
17) Conflict with emergency response and evacuation plans;
18) Increase the demands on emergency medical agencies serving the plan area;
19) Increase the demand for potable water and require the development of additional sources of water;
20) Require construction of new water source, treatment, storage, or supply facilities;
21) Require new or expanded sewer treatment facilities;
22) Increase the demand for parks and recreational facilities;
23) Cause greenhouse gas emissions that exceed State emission targets and adversely affect climate; and
24) Cumulatively result in a decrease in water supply and increase in health hazards.

The Lead Agency generally accepts the UVAP EIR analysis of effects of development, agricultural land uses, and related activities with regard to the proposed project except where cannabis cultivation presents unusual environmental challenges or concerns.

Water Board Order Initial Study/Mitigated Negative Declaration

On August 13, 2015, the NCRWQCB adopted Order R1-2015-0023, *General Waiver of Waste Discharge Requirements and General Water Quality Certification for Dischargers of Waste from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effects in the North Coast Region (herein after referred to as "Order"*), adopted a Mitigated Negative Declaration based on an Initial Study prepared pursuant to CEQA (SCH # 2015042074).

The Initial Study provides valuable background information regarding current practices, anticipated efforts to bring cultivation operations into compliance with a variety of local and state regulations and the likely effects of implementation of the order. Much of the information in the Initial Study remains relevant as applied to the anticipated cultivation of cannabis pursuant to the MCCR. The Lead Agency generally accepts the NCRWQCB Initial Study analysis of effects of regulated cannabis development and related activities with regard to the proposed project except where the MCCR addresses cultivation outside of the scope of the Order.

PROJECT DESCRIPTION

In summary, the proposed project consists of the adoption of two ordinances as follows[2]:

Medical Cannabis Cultivation Ordinance (County Code Chapter 10A.17)

1) With limited exceptions for personal use and primary caregivers, all cultivation of cannabis for medical use will require a Mendocino County Cultivation Permit;
2) Cultivation is required to be set back from schools, public parks, churches, youth oriented facilities, and residential treatment facilities;
3) Restricts the impact of odor, light, noise, and impacts to the quantity and quality of surface water;
4) Track and Trace requirements for permitted medical cannabis (from plant to consumer) and zip tie confirmation for plants grown under the personal use and primary caregiver exemptions;
5) Restates the sunset provisions regarding Medical Marijuana Collectives organized pursuant to Proposition 215 and Senate Bill 420 as described in the Health and Safety Code;
6) Establishes the following permit types:
    a. Type C for outdoor cultivation using no artificial lighting with a maximum of 2,500 square feet of total plant canopy size on one legal parcel,
    b. Type C-A for indoor cultivation using exclusively artificial lighting not to exceed 2,500 square feet of cultivation area within a structure on one legal parcel,
    c. Type C-B for cultivation using a combination of natural and supplemental artificial lighting (mixed-light) not to exceed 2,500 square feet of cultivation area within a structure on one legal parcel,
    d. Type 1 for outdoor cultivation using no artificial lighting of 2,501 to 5,000 square feet of total plant canopy size on one legal parcel,
    e. Type 1A for indoor cultivation using exclusively artificial lighting of 2,501 to 5,000 square feet of cultivation area within a structure on one legal parcel,
    f. Type 1B for cultivation using a combination of natural and supplemental artificial lighting (mixed-light) of 2,501 to 5,000 square feet of cultivation area on one legal parcel,
    g. Type 2 for outdoor cultivation using no artificial lighting of 5,001 to 10,000 square feet of total plant canopy size on one legal parcel,

[2] The summaries provided reflect the Mendocino County Medical Cannabis Cultivation Regulation in DRAFT form as of November 2, 2016.

h. Type 2A for indoor cultivation using exclusively artificial lighting of 5,001 to 10,000 square feet cumulative cultivation area on one legal parcel,
i. Type 2B for cultivation using a combination of natural and supplemental artificial lighting (mixed-light) of 5,001 to 10,000 square feet cultivation area on one legal parcel, and
j. Type 4 for the cultivation of medical cannabis solely as a nursery product to be sold to a permittee, a qualified patient or a primary caregiver. The nursery product may take the form of either vegetative and non-flowering starts or may be in the form of seeds, if the applicant is applying as a seed producer under this type of permit. The cumulative cultivation area shall not exceed 22,000 square feet on one legal parcel;

7) Establishes a methodology for the review of cultivation permit applications and specifies required application materials;
8) Establishes performance standards including:
   a. Requirement to follow the approved site plan,
   b. When available, secure a current valid state license,
   c. Conform to track and trace requirements,
   d. Comply with all statutes, regulations and requirements of the California State Water Resources Control Board, Division of Water Rights, including filing the *Initial Statement of Water Diversion and Use* required by Water Code Section 5101,
   e. Requirement that generators only be used as a secondary or backup source of power and requires leak and spill prevention measures,
   f. Maintain Tier 1, 2, or 3 certification with the Order, or equivalent, as required. Operations which are not required to secure certification from NCRWQCB are required by the proposed MCCR to comply with the standard conditions of approval for certification,
   g. Comply with Mendocino County and CAL FIRE "defensible space" standards,
   h. Comply with the terms of a CDFW Lake or Streambed Alteration Agreement, if applicable,
   i. Facilitate mandatory inspections,
   j. Support limitations on the type and application of pesticides,
   k. Store and handle fuel in compliance with state and local laws and regulations;
   l. Pay applicable fees, and
   m. Comply with conditions required pursuant to zoning review;
9) Identifies methods for demonstrating prior cultivation, limits permits prior to 2020 to cultivation which was underway prior to 2016;
10) Allows C, C-A, or C-B permits (less than 2,500 square feet of cultivation area), in any inland Zone District where a residence would be principally permitted, where prior cultivation has been demonstrated and all other cultivation standards can be met. Identifies Zoning Districts in which expansion of previous cultivation sites will be prohibited;
11) Establishes certification types and standards;
12) Establishes a program of third party inspections allowing the Mendocino County Agricultural Commissioner to approve non-governmental inspectors to perform field checks, identify potential or actual points of concern, and work with the cultivators to correct any identified problems; and
13) Establishes an enforcement program based on required consultation visits by third party inspectors, required compliance visits by county staff and implementation of enforcement actions, if needed.

Cannabis Cultivation Site Regulation (Zoning Code Section 20.242)

This section establishes appropriate zoning districts for existing ("Phase 1"; Table 3) and new cannabis cultivation sites ("Phases 2 and 3"; Table 4) as well as the type of zoning clearance necessary for each type of cultivation permit required by the Mendocino County Cannabis Cultivation Ordinance. The key components of the zoning code amendments include the following:

Phase 1

1) Establishes requirements for existing cultivation sites in all zoning districts in operation prior to January 1, 2016. Smaller cultivation sites (less than 2,500 square feet) may continue in all zones with a C, C-A, or C-B permit;
2) Establishes requirements for permits in the TPZ and FL Districts to prohibit the permitting of new cultivation sites not in operation prior to January 1, 2016. All applications for permits for cultivation sites in the TPZ and FL Districts must be received by January 1, 2018;
3) Allows for the continued use and an expansion up to a total of 10,000 square feet of permitted cultivation areas by existing cultivators within TPZ and FL Districts; where the continued use is subject to an approved Administrative Permit and, if applicable, a Less-Than-3-Acre Conversion Exemption or Timberland Conversion Permit, approved by the California Department of Forestry and Fire Protection (CAL FIRE). Or, alternatively, evidence that environmental impacts have been mitigated, to the extent feasible, as required by the resource protection agencies including CAL FIRE, the NCRWQCB, and CDFW can be demonstrated;
4) Allows existing cultivation sites to be closed and relocated to properties which can more fully meet minimum parcel sizes, slope limitations, and other restrictions; and
5) Sets the process for planning review of applications, including circumstances permitting site specific conditions of approval, requirements for hearings.

Phase 2

1) Starting January 1, 2018, new indoor, artificial light cultivation operations may be permitted only in industrial zoning districts.

Phase 3

1) Starting January 1, 2020, new cultivation sites may be permitted only in the AG District or in the RR, UR, and RL Districts provided that the cultivation site is located in a watershed with a completed watershed assessment that demonstrates there is adequate water supply available to serve the new cultivation site and existing uses, including in-stream requirements. Zoning districts which require a watershed assessment are marked with an * in Table 4.

Table 3. Zoning Permit Requirements for Existing Medical Cannabis Cultivation by Zoning District and Medical Cannabis Cultivation Ordinance Permit Type

Permit Type		C Sm Outdoor	C-A Sm Indoor, Artificial Light		C-B Sm, Mixed Light	1 Med Outdoor	1-A Med Indoor, Artificial Light	1-B Med Mixed Light	2 Lg Outdoor	2-A Lg Indoor, Artificial Light	2-B Lg Mixed Light	4 Nursery
Min Parcel Area (ac)		NA	NA		NA	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 2	ZC	AP	UP	ZC	ZC	--	--	--	--	--	--
	RR 5	ZC	AP	UP	ZC	ZC	--	ZC	--	--	--	--
	RR 10	ZC	AP	UP	ZC	ZC	--	ZC	ZC	--	ZC	ZC
	AG	ZC	AP	UP	ZC	ZC	--	ZC	ZC	--	ZC	ZC
	UR	ZC	AP	UP	ZC	ZC	--	ZC	ZC	--	ZC	ZC
	RL	ZC	AP	UP	ZC	ZC	--	ZC	ZC	--	ZC	ZC
	FL*	AP	AP	AP	AP	AP	--	AP	AP	--	AP	AP
	TPZ*	AP	AP	AP	AP	AP	--	AP	AP	--	AP	AP
	I1	ZC	ZC	ZC	ZC	ZC	ZC	ZC	--	ZC	ZC	ZC
	I2	ZC	ZC	ZC	ZC	ZC	ZC	ZC	--	ZC	ZC	ZC
	PI	ZC	ZC	ZC	ZC	--	ZC	ZC	--	ZC	ZC	ZC

-- = Not Allowed, ZC = Zoning Clearance, AP = Administrative Permit, UP = Minor Use Permit

* No new cultivation sites are permitted the FL and TPZ Districts and no cultivation sites may be transferred to a legal parcel in the FL and TPZ Districts (Section 20.242.050.D). Existing cultivation sites are permitted in these districts subject to limitations (Section 20.242.050.E).

Table 4. Zoning Permit Requirements for New Medical Cannabis Cultivation by Zoning District and Medical Cannabis Cultivation Ordinance Permit Type

Permit Type		C Sm Outdoor	C-A Sm Indoor, Artificial Light		C-B Sm, Mixed Light	1 Med Outdoor	1-A Med Indoor, Artificial Light	1-B Med Mixed Light	2 Lg Outdoor	2-A Lg Indoor, Artificial Light	2-B Lg Mixed Light	4 Nursery
Min Parcel Area (ac)		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 2*	ZC	AP	UP	ZC	ZC	--	--	--	--	--	--
	RR 5*	ZC	AP	UP	ZC	ZC	--	ZC	--	--	--	--
	RR10*	ZC	AP	UP	ZC	ZC	--	ZC	ZC	--	ZC	ZC
	AG	ZC	AP	UP	ZC	ZC	--	ZC	ZC	--	ZC	ZC
	UR *	ZC	AP	UP	ZC	ZC	--	ZC	ZC	--	ZC	ZC
	RL *	ZC	AP	UP	ZC	ZC	--	ZC	ZC	--	ZC	ZC
	I1	ZC	ZC	ZC	ZC	ZC	ZC	ZC	--	ZC	ZC	ZC
	I2	ZC	ZC	ZC	ZC	ZC	ZC	ZC	--	ZC	ZC	ZC
	PI	ZC	ZC	ZC	ZC	--	ZC	ZC	--	ZC	ZC	ZC

-- = Not Allowed, ZC = Zoning Clearance, AP = Administrative Permit, UP = Minor Use Permit,

* = Watershed Assessment Required

Anticipated Project Impacts

Phase I

Permitting of cultivation sites existing as of January 1, 2016.

The Lead Agency estimates there are several thousand existing cannabis cultivation sites within the inland portions of Mendocino County. Until the ordinance is adopted and applications for permits are accepted, the number of operators of existing sites who will seek and secure permits pursuant to the proposed ordinance is somewhat speculative. However, based on participation in prior registration, regulatory systems and demonstrated interest in the preparation of the ordinance, it is reasonable to anticipate a minimum of several hundred applications, affecting a gross acreage of several thousand acres, with significantly fewer acres directly impacted by cultivation and related infrastructure development. During the abruptly shortened application period of the 2016 permit program, the Mendocino County Agricultural Commissioner's Office received approximately 152 voluntary registrations and statements of interest and the Mendocino County Sheriff's Department received approximately 340 permit applications.

Each permit may require physical changes to the existing operations to come into compliance with federal, state and local regulations. Such changes may include, but are not limited to the following:

1) Re-grading or reconstructing public and private access roads and cultivation sites to improve drainage and reduce the risk of erosion, sedimentation and slope failure;
2) Modifying or installing surface water intakes, pumps and irrigation lines to comply with water rights and related regulations and CDFW regulations;
3) Modifying or installing new surface water impoundments (small dams) and/or installation of water storage tanks to reduce withdrawals during low stream flow conditions;
4) Installation of fencing, construction of storage sheds and similar efforts to secure the cannabis crop as well as to safely store pesticides, fuels, fertilizers and other chemicals which may be hazardous to human health or to the health of sensitive plant or animal species or habitats; and
5) Relocation of greenhouses and/or outdoor cultivation sites to conform to mandatory minimum setbacks.

Each of these actions will take place within a context of an environmental setting already acknowledged to have been substantially degraded by unpermitted and/or unregulated cultivation practices as described above. Current cultivation sites vary widely in their circumstances, characteristics, maintenance, and prior efforts to conform to regulatory and other standards.

Phase 2

Permitting of new medium and large indoor artificial light cultivation sites in industrial zoning districts, beginning on January 1, 2018.

The type and the intensity of impacts associated with the development of new indoor cultivation sites in industrial zoning districts during Phase 2 are largely the same as other manufacturing uses allowed in the industrial zoning districts. For this reason, while the ordinance does not establish a maximum number of medium and large indoor cannabis cultivation sites within Mendocino County, the impacts associated with cannabis cultivation in this phase will be limited. Impacts will be further minimized by the limited number of parcels that are situated within the County's industrial zoning districts.

Phase 3

Permitting of new cultivation sites in agricultural zoning districts or in selected zoning districts, with completed watershed assessments, after January 1, 2020.

New cultivation sites, other than medium and large indoor artificial light operations located in industrial zoning districts (Phase 2), are only allowed in the AG,RR, UR or RL Districts where a watershed assessment has been completed. Permits for Phase 3 will only be available after January 1, 2020. Because of the watershed assessment required in the RR, UR and RL Districts, it is anticipated that the majority of Phase 3 permits will be issued on lands zoned for agriculture and would be substantially the same as existing agricultural cultivation with added protections limiting the cultivation area and requirements to avoid sensitive habitat areas as described in the ordinance. During this phase, the number or density of cultivation sites will be substantially limited by the availability of legal lots located in AG District and by the number of legal lots with RR, UR, or RL Districts that are located within a watershed with a completed watershed assessment. Activities that may occur in Phase 3 include, but are not limited to the following:

1) Site clearing and grading;
2) Vegetation removal and soil preparation;
3) Road development and stream crossings;
4) Installation of water storage and irrigation equipment;
5) Construction of greenhouses, hoop houses, fences, and accessory structures;
6) Installation of temporary or permanent sanitary facilities (such as portable toilets or septic systems);
7) Application of pesticides and fertilizers; and
8) Extension of infrastructure, infill and redevelopment of industrial zoned lots and development of power and water sources on AG, RR, UR, and RL lots.

In nearly all cases, the anticipated uses which may affect the environment will take place within an existing comprehensive regulatory system. For example, the process of perfecting surface water rights—for irrigation, securing permits to construct in-stream water intakes, irrigation lines, and water storage facilities—requires several permits and opportunities for agencies to impose appropriate conditions to limit or avoid impacts to habitat, water quality, and other stream values. Similar regulatory systems apply to limit erosion and sedimentation from grading.

The analysis of the potential effects of cultivation activities will take place in the context of state and federal regulations which apply to various aspects of cannabis cultivation. In some cases, regulatory compliance may be sufficient to reduce potential effects below the threshold of significance. (See *Citizens Opposing A Dangerous Environment v. County of Kern*, 228 Cal.App.4th 360 (5th Dist. July 25, 2014), Oakland Heritage Alliance v. City of Oakland (2011) 195 Cal.App.4th 884, and Tracy First v. City of Tracy: (2009) 177 Cal.App.4th 912).

Limitations on Project Description

The following cannabis cultivation is **NOT** subject to the proposed MCCR and is **NOT** included in the project description, either with regard to sites currently existing or which are established in the future:

1) Cultivation that is not legal under state law;
2) Cultivation on sites in any zone other than those specifically listed in the proposed ordinance, including cultivation within the Coastal Zone;
3) Cultivation on sites which fail to meet the minimum parcel size established by the proposed ordinance;
4) Cultivation not authorized by the property owner ("trespass grows") including all cultivation which may occur on public lands;
5) New cultivation sites in TPZ and FL Zoning Classifications established after January 1, 2016;
6) Cultivation sites which cannot establish a legal right to their source of water for irrigation; and
7) Cultivation sites which cannot demonstrate, if applicable, that a less-than-3-acre conversion exemption or timberland conversion permit, approved by CAL FIRE has been issued. Or, alternately, for existing operations occupying sites created through prior unauthorized conversion of timberland that cannot demonstrate that environmental impacts have been mitigated, to the extent feasible, as required by the resource protection agencies including CAL FIRE, NCRWQCB and CDFW.

III. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

An environmental checklist follows this section and addresses all potential adverse effects resulting from the proposed project. All significant adverse effects from any of the proposed activities can be mitigated to a less than significant level.

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a **"Potentially Significant Impact"** or "**Potentially Significant Unless Mitigation Incorporated**" as indicated by the checklists on the following pages.

X	Aesthetics	X	Agriculture Resources	X	Air Quality
X	Biological Resources		Cultural Resources	X	Geology and Soils
X	Green House Gases	X	Hazards and Hazardous Materials	X	Hydrology and Water Quality
X	Land Use and Planning		Mineral Resources	X	Noise
X	Population and Housing		Public Services		Recreation
	Transportation	X	Utilities and Service Systems		Mandatory Findings of Significance

An explanation for all checklist responses is included, and all answers take into account the whole action involved and the following types of impacts: off-site and on-site; cumulative and project-level; indirect and direct; and construction and operational. The explanation of each issue identifies (a) the threshold of significance—if any—used to evaluate each question; and (b) the mitigation measure identified, if any, to reduce the impact to less than significant.

In the checklist the following definitions are used:

"**Potentially Significant Impact**" means there is substantial evidence that an effect may be significant.

"**Potentially Significant Unless Mitigation Incorporated**" means the incorporation of one or more mitigation measures can reduce the effect from potentially significant to a less than significant level.

"**Less Than Significant Impact"** means that the effect is less than significant and no mitigation is necessary to reduce the impact to a lesser level.

"**No Impact"** means that the effect does not apply to the proposed project, or clearly will not impact nor be impacted by the proposed project.

DETERMINATION: (To be completed by the Lead Agency on the basis of this initial evaluation)

☐	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
☒	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
☐	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
☐	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
☐	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature _____ Date _____

Title _____

I. AESTHETICS. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☒	☐	☐

Thresholds of Significance: The project would have a significant effect on aesthetic resources if it will have a substantial adverse effect on a scenic vista; substantially 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 the site and its surroundings; create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area.

REGULATORY SETTING

CEQA establishes that it is the policy of the State to take all action necessary to provide the people of the State "with…enjoyment of aesthetic, natural, scenic and historic environmental qualities" (Public Resources Code [PRC] §21001[b]). In addition, the California Department of Transportation (Caltrans) designates state scenic highways where roadways pass through particularly scenic landscapes.

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.

Specific policies pertaining to viewsheds and lighting are provided below: <u>Chapter 3: Development Element</u>

Community Character Policies

1) 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.
2) Policy DE-89: Reduce excessive artificial light and offsite light impacts while maintaining nighttime safety, security, and productivity.

<u>Chapter 4: Resource Management Element</u>

1) *Policy* RM-*87: 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:*
   a. *Are compatible with the natural terrain and hydrology,*
   b. *Conserve continuous critical habitats, oak woodlands and natural vegetation, and*
   c. *Minimize visual impacts.*
2) Policy RM-132: Maintain and enhance scenic values through development design principles and guidelines, including the following:
   a. Development scale and design should be subordinate to and compatible with the setting,

b. Reduce the visual impacts of improvements and infrastructure, and
c. Minimize disturbance to natural features and vegetation, but allow selective clearing to maintain or reveal significant views.

3) Policy RM-134: 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

Chapter 4: Community Development

1) CD2.2b: Interim Design Guidelines.
Until the design guidelines and landscape guidelines are adopted, the County will conduct design review of proposed discretionary projects. Outdoor lighting for new projects will not be allowed to cause light trespass and will limit light pollution to the degree feasible. The County will use as interim guidelines the Simple Guidelines for Outdoor Lighting Regulations developed by the International Dark-Sky Association.

Proposed Ordinance

The Mendocino County Medical Cannabis Cultivation Regulation will consist of Chapter 10A.17 of the Mendocino County Code and Chapter 20.242 of the Mendocino County Zoning Ordinance (Inland). In particular, Section 10A.17.040 (General Limitations on Cultivation of Medical Cannabis) establishes specific regulations relating to the use of lighting:

> *"(A) The cultivation of medical cannabis in Mendocino County, in any amount or quantity by any entity, shall not be allowed in the following areas:*
> *(4)….In any location where the cannabis plants are visible from the public right of way or publicly traveled private roads.*
> *(D) All lights used for the "mixed-light" cultivation of medical cannabis 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."*

For allowable indoor permit types (C-A Small Indoor, 1A Medium Indoor, and 2A Large Indoor), an additional policy pertaining to lighting is provided in Section 10A.17.080 (Cultivation Permits–Specific Requirements):

> *"All structures used shall be constructed in a manner so as to fully contain any light or light glare involved in the cultivation process."*

DISCUSSION

Mendocino County is predominantly rural with a very scenic and visually diverse aesthetic character. Scenic resources within the project implementation area include redwood and other forests located throughout the County, natural open space and rangeland, and agricultural areas—such as vineyards and irrigated pastures. Most of the land is forested or in agricultural production and these lands are considered open spaces and scenic resources. Rivers, creeks, and streams are also a prominent landscape feature (County of Mendocino 2009). Based upon information provided by the Mendocino County Agricultural

Commissioner, an estimated 2.9 percent of County land is cultivated as cropland (not including cannabis cultivation).

Scenic Highways and Areas

Caltrans designates State Scenic Highways where roadways pass through particularly scenic landscapes. Although scenic resources throughout Mendocino County are visible from roads and highways, no highways in Mendocino County have been officially designated as State Scenic Highways by either the County or Caltrans (California Department of Transportation 2014c). The unincorporated portion of Mendocino County includes numerous public lands including National forests, State parks, and County parks that offer views of the valleys from ridgelines, as well as a mix of different type of vegetation and wildlife. A portion of Mendocino National Forest is located in northern Mendocino County and is a significant visual resource. The Mendocino National Forest spans portions of Mendocino, Colusa, Lake, Glen, Tehama, and Trinity Counties.

Scenic Farmland

Agricultural lands in production are dominated by vineyards, followed by pear and apple orchards, row crops, and pasture. Agricultural lands are generally considered scenic, as they contain little urban development and feature diverse vegetation types. Structures supporting agricultural operations, such as barns and farmhouses, are often considered aesthetically pleasing in their architectural design and setting.

Scenic River

As noted in Chapter 4 (Resource Management Element) of the Mendocino County General Plan, the Eel River has been designated as both a Federal and California Wild and Scenic River under the National Wild and Scenic Rivers Act (1968) (16 U.S.C. 1271-1287) and the California Wild and Scenic Rivers Act (1972) (Public Resources Code Section 5093.50-5093.70). As a Federal and California Wild and Scenic River, the Eel River is one of several rivers in the State "*which possess extraordinary scenic, recreational, fishery, or wildlife values*" and are to be "*preserved in their free-flowing state, together with their immediate environments, for the benefit and enjoyment of the people of the State*." A management plan has not been prepared by the California Natural Resources Agency.

Light and Glare

A nighttime sky in which stars are readily visible is considered a valuable scenic/visual resource. "Light pollution," as defined by the International Dark Sky Association, is any adverse effect of artificial light, including sky glow, glare, spillover lighting, light clutter, decreased visibility at night, and energy waste. There are two types of light pollution—sky glow and light trespass. Sky glow is a result of light fixtures that emit a portion of their light directly upward into the sky where light scatters, creating an orange-yellow glow above a city or town. This light can interfere with views of the nighttime sky and can diminish the number of stars that are visible. Light trespass occurs when poorly shielded or poorly aimed fixtures cast light into unwanted areas, such as neighboring properties. Light pollution is a problem most typically associated with urban areas. However, nighttime light pollution is being experienced in rural areas where cannabis cultivators using mixed-light have illuminated the nighttime skies (Keegan, 2016).

Nighttime Sky—Title 24 Outdoor Lighting Standards

On October 1, 2005, new California Energy Commission (CEC) standards became effective which include changes to the requirements for outdoor lighting for residential and nonresidential development. The standards regulate lighting characteristics such as maximum power and brightness, shielding, and sensor controls to turn lighting on and off. Different lighting standards are set by classifying areas by lighting zone. The classification is based on population figures of the 2000 Census. Areas can be designated as LZ-1 (dark), LZ-2 (rural), or LZ-3 (urban). Lighting requirements for dark and rural areas are stricter in order to protect the areas from new sources of light pollution and light trespass. The majority of Mendocino County is designated at LZ-2. The standards improve the quality of outdoor lighting and help to reduce the impacts of light pollution, light trespass, and glare.

Cannabis cultivation operations have historically been located throughout Mendocino County due to its remote, isolated, and sited on rugged terrain. Because of the clandestine nature of cannabis cultivation prior to the passage of California Compassionate Use Act, and, continuing into the present day, these qualities have been valued by cannabis cultivators seeking to remain inconspicuous. Activities associated with the development of cannabis cultivation sites with the potential to affect aesthetic or scenic resources generally include the following:

1. Tree removal and/or clearing of vegetation;
2. Grading of terrain to level areas for construction and cultivation, create or reclaim roads, and develop ponds;
3. Installation of new structures including: greenhouses, hoop houses, water storage tanks, residential dwellings, storage sheds, fencing, and lighting; and
4. Use of artificial lighting to manipulate the growth process and to provide security lighting.

Aesthetics a) and c)

A scenic vista is a location that offers a high quality, harmonious, and visually interesting view. Per Section 10A.17.040(A)(4) of the proposed MCCR, cultivation sites will not be visible from public roads or publically traveled private road; scenic vistas will not be affected from the most typical vantage points.

Although there is a requirement that cultivation sites may not be visible from a public road or publically traveled private road, changes in the landscape may be visible as a result of the relocation or expansion of existing cultivation sites under Phase 1 implementation, or the installation of new cultivation sites under Phase 3 implementation. Potentially visible features may include fencing, limited vegetation removal, and grading for roadway or site development. Per Policy DE-85 of Chapter 3: Development Element of the Mendocino County General Plan related to *Community Character Policies,* "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."

Some industrial zoning districts that will be eligible for permitting under Phase 2 implementation of the proposed MCCR are visible from scenic roads and vistas. However, any cannabis cultivation facilities sited in existing or newly constructed structures in the industrial zones would be consistent with the industrial zone's character and subject to County policies related to new development in the industrial zone as well as Mendocino County's permit requirements. Uses permitted pursuant to the proposed MCCR are similar in nature to uses already allowed—or allowed with permits—in the respective zones would, therefore, not impact the visual character of the site or surroundings.

For parcels developed in residential and agricultural zoning districts, site improvement activities, such as road development and minor clearing of vegetation, are considered typical of rural residential and agriculturally zoned parcels and will be subject to viewshed preservation requirements. Uses permitted

pursuant to the proposed MCCR are similar in nature to uses already allowed—or allowed with permits—in the respective zones would, therefore, not impact the visual character of the site or surroundings. Therefore, the impact of cannabis cultivation operations on scenic vistas or the existing visual qualities of a site and its surroundings will be less than significant.

Aesthetics b)

The project would not impact scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway. No such highways exist in Mendocino County. Therefore, the project would result in no impact on scenic resources along a scenic highway.

Aesthetics d)

Indoor and mixed-light cannabis cultivation involves the use of artificial lighting to aid in the cultivation process. In addition, security measures are required to protect cannabis operations. Security measures will likely include outdoor lighting at various entry points to the area containing cannabis operations. Exterior security lighting will be subject to the following policies of the Mendocino County General Plan:

<u>Chapter 3: Development Element—</u>Community Character Policies

1) Policy DE-89: Reduce excessive artificial light and offsite light impacts while maintaining nighttime safety, security, and productivity.

<u>Chapter 4: Resource Management Element—</u>Dark Sky Policies

1) Policy RM-134: 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.

Impacts associated with the use of lighting to manipulate the cannabis growth process will be subject to the provisions of Subsection D of Section 10A.17.040 of the proposed MCCR, which requires lighting to be directed such that it is confined to the legal parcel and illuminates only the necessary area.

> *"(D) All lights used for the "mixed-light" cultivation of medical cannabis 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."*

For allowable indoor permit types (C-A Small Indoor, 1A Medium Indoor, and 2A Large Indoor), an additional policy pertaining to lighting is provided in Section 10A.17.080 (Cultivation Permits–Specific Requirements):

> *"All structures used shall be constructed in a manner so as to fully contain any light or light glare involved in the cultivation process."*

As previously described, implementation of the proposed MCCR will occur in three phases. Under Phase 1, operations that can prove their existence as of January 1, 2016 will be permitted in the AG, FL, I1, I2, P1, RL, RR-2, RR-5, RR-10, TPZ, and UR Districts and in all other zoning districts provided the maximum cultivation size is less than 2,500 square feet (Permit Types C, C-A and C-B). During Phase 2, new cannabis cultivation will

be permitted in the industrial (I1, I2, PI) zoning districts only. Under Phase 3, varying types of new cannabis cultivation will be allowed in the AG, I1, I2, P1, RL[3], RR-2, RR-5, RR-1, and UR Districts.

During Phase 1, existing sites will be brought into compliance with the County's policies related to security lighting and lighting used to manipulate the cannabis growth process, representing an improvement over existing conditions. During Phase 2, new cultivation will be allowed in the industrial zoning districts only and will only be allowed within structures; therefore, there will be no impacts associated with sky glow or light trespass, and any impacts associated with security lighting will be controlled by the County policies regarding lighting and will be consistent with the character of the industrial zone, reducing potential impacts to a less than significant level. During Phase 3, cultivation sites with artificial lighting have the potential to increase impacts associated with new sources of light above existing conditions.

The expansion of cannabis cultivation may introduce lighting in areas, which otherwise experience limited light pollution due to their remote or rural location. Compliance with provisions of the County Land Use Code and proposed MCCR related to lighting development standards are sufficient to reduce the impact from security and other non-cultivation related lighting to a less than significant level. However, mixed use lighting is not otherwise required to be fully shielded and may illuminate relatively large areas. To minimize potential effects of light and glare, Mitigation Measure AES-1 requires that all new structures used for mixed-light cultivation shall be constructed in a manner so as to fully contain any light or light glare involved in the cultivation process. With mitigation incorporated there will be a less than significant impact to light and glare.

MITIGATION MEASURES

AES-1: Mendocino County shall modify the MCCO prior to its adoption by the Board of Supervisors to require that all new structures used for new mixed-light cultivation shall be constructed in a manner so as to fully contain any light or light glare involved in the cultivation process.

FINDINGS

The Proposed Project would have a **Less Than Significant Impact with Mitigation Incorporated** on Aesthetic Resources.

[3] Mitigation Measure AG-2 removes RL Zoning District from Phase 3.

II. AGRICULTURE AND FORESTRY RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) 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?	☐	☒	☐	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☒	☐	☐
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by PRC section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☒	☐
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☒	☐	☐
e) 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 forestland to non-forest use?	☐	☒	☐	☐

Thresholds of Significance: Agriculture and Forestry Resources would be significantly affected by the proposed project if the project were to convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (hereafter "farmland"), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural uses. Significant impacts to Agricultural and Forestry Resources would also occur if the project conflicted with existing zoning for agricultural use or a Williamson Act contract; conflicts with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by PRC 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 forestland to non-forest use.

REGULATORY SETTING

Farmland Protection Policy Act

The U.S. Farmland Protection Policy Act (FPPA) (7 U.S.C. 4201 *et seq*, implementing regulations 7 CFR Part 658 of the Agriculture and Food Act of 1981 (as amended) is intended to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. It assures that, to the maximum extent possible, federal programs are administered to be compatible with state and local units of government. Federal agencies are required to develop and review their policies and procedures to implement the FPPA every 2 years.

For the purpose of the FPPA, farmland includes Prime Farmland, Unique Farmland, and Land of Statewide or Local Importance. Farmland subject to FPPA requirements does not have to be currently used for cropland. It can be forest land, pastureland, cropland, or other land but not water or urban built-up land.

Farmland Mapping and Monitoring Program Classifications

The California Department of Conservation Farmland Mapping and Monitoring Program (FMMP) prepares Important Farmland maps periodically for most of the state's agricultural areas based on information from Natural Resource Conservation Service (NRCS) soil survey maps, Land Inventory and Monitoring Criteria developed by NRCS, and land use information mapped by the California Department of Water Resources (DWR). These criteria are generally expressed as definitions that characterize the land's suitability for agricultural production, physical and chemical characteristics of the soil, and actual land use. Important Farmland maps generally are updated every two years. The FMMP thereby provides information about the quality of farmland in Mendocino County.

The Important Farmland mapping system incorporates eight mapping categories: five categories relating to farmlands and three categories associated with lands used for nonagricultural purposes. Farmland mapping included in the CEQA checklist are summarized below.

> **Prime Farmland**—Lands with the combination of physical and chemical features best able to sustain long-term production of agricultural crops. The land must be supported by a developed irrigation water supply that is dependable and of adequate quality during the growing season. It also must have been used for the production of irrigated crops at some time during the four years before the mapping data was collected.
>
> **Farmland of Statewide Importance**—Lands with agricultural land use characteristics, irrigation water supplies, and physical characteristics similar to those of Prime Farmland but with minor shortcomings, such as steeper slopes or less ability to retain moisture.

NRCS Farmland Mapping

NRCS has identified soils suitable as Prime Farmland in its two soil surveys of Mendocino County. The NRCS definition of Prime Farmland is the same as that in the FMMP. The majority of the Prime Farmland is located within the Ukiah and Anderson Valleys with pockets of Prime Farmland in the southern coastal region (Department of Conservation 2014). The County strives to preserve agricultural soils in the use of more compact development patterns, including the use of multi-story buildings to accommodate needed housing and commercial uses on less land (County of Mendocino, 2009).

California Right to Farm Act

The California Right to Farm Act (California Civil Code Section 3482.5)—enacted in 1981—provides that a farming activity cannot be a public nuisance if all of the following factors are met:

1) The activity is in support of the production of an agricultural commodity;
2) The agricultural activity is commercial in nature;
3) The activity is conducted "in a manner consistent with proper and accepted customs and standards as established and followed by similar agricultural operations in the same locality;"
4) The farming activity must have been in operation for at least three years; and
5) The farming activity was not a nuisance at the time it began.

It is noteworthy that the California Right to Farm Act does not require "best management practices" but instead simply allows adherence to "accepted" customs and practices. In addition, the statute specifically states that it prevails over any contrary provision of a city or county ordinance or regulation, but does allow

cities and counties to require disclosures to be given to prospective home buyers that a dwelling is in close proximity to an agricultural operation. Mendocino County enacted a Right to Farm Ordinance in 1983.

California Health and Safety Code 11362.777(a) specifies: "For purposes of this section and Chapter 3.5 (commencing with Section 19300) of Division 8 of the Business and Professions Code, medical cannabis is an agricultural product." However, the identification of medical cannabis as an agricultural product does not extend to other areas of the law. For example, cannabis is not an agricultural commodity with respect to local "right to farm" Ordinances.

California Timberland Productivity Act of 1982

The California Timberland Productivity Act of 1982 (California Government Code Section 51100-51104) is intended to maintain the limited supply of timberland to ensure its current and continued availability for the growing and harvesting of timber and compatible uses, and to discourage premature or unnecessary conversion of timberlands to urban and other uses. Section 51104(g) of the Act states that a Timberland Protection Zone (TPZ) is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, defined as "any use which does not significantly detract from the use of property for, or inhibit, growing and harvesting timber, and include (but is not limited to):

1) Management for watershed;
2) Management for fish and wildlife habitat or hunting and fishing;
3) A use integrally related to the growing, harvesting, or processing of forest products, including but not limited to roads, log landings, and log storage areas;
4) The erection, construction, alteration, or maintenance of gas, electric, water, or communication transmission facilities;
5) Grazing; and
6) A residence or other structure necessary for the management of land zoned as timberland production."

The County's Timber Production Zone regulation (Mendocino County Code Chapter 22.07) implements these objectives through TPZ zoning district.

Similarly, the Forest Land Zoning District (Mendocino County Code Chapter 20.064) is intended "to create and preserve areas suited for the growing, harvesting, and production of timber and timber-related products. Processing of products produced on the premises would be permitted as would certain commercial activities associated with timber production and the raising of livestock. Typically, the FL District would be applied to lands not zoned Timberland Production but which have the present or future potential for timber production, intermixed smaller parcels and other contiguous lands, the inclusion of which is necessary for the protection of efficient management of timber resource lands."

DISCUSSION

The proposed project is applicable to multiple parcels in a variety of zones throughout unincorporated Mendocino County, excluding the Coastal Zone. The proposal involves the development of local regulations that will permit the commercial cultivation of medical cannabis in certain locations subject to specific regulatory oversight and findings. Pertinent to agricultural and forestry resources, Phase 1 (which is limited to existing cultivation sites) may be issued in the AG, RL, FL and TPZ Districts. During Phase 3 implementation, new cultivation sites may be permitted in the AG and RL districts but not the FL or TPZ Districts.

Various parcels where cannabis cultivation would be allowed in Phase 1 and Phase 3 implementation of the proposed MCCR are located on or immediately adjacent to various farmland, agricultural, and forest resources.

Potential impacts on agriculture and forestry resources associated with the cultivation of cannabis include the following:

1) Areas cleared of timber for the installation of roadways, water storage, and cultivation sites;
2) Conversion of forest lands to other uses;
3) Cultivation sites out of compliance with acreage limitations under the Forest Practices Act and zoning regulations; and
4) Inefficient use of soils by siting cultivation operations based on factors such as privacy and remoteness as primary considerations instead of characteristics beneficial to agriculture such as terrain, soil fertility, sun exposure, and water availability.

Agriculture and Forestry Resources a)

Under the proposed MCCR, cultivation of cannabis for medical use would be allowed in the AG District during the implementation of Phase 1 and Phase 3 of the project. Medical Cannabis is an agricultural product and its cultivation is consistent with and similar to other agricultural activities that occur on agricultural lands.

Although, there would be no direct conversion, the proposed MCCR does include measures which may inadvertently incentivize the development of dwelling units and subdivision of agricultural and rangeland.

Most cultivation permits outside of industrial zones may only be issued on parcels that are developed with a legal dwelling unit. This requirement applies to existing cultivation permits issued during Phase 1, as well as to all new cultivation permits issued during Phase 3. Phase 2 permits will be in industrial zones that do not include the requirement for a dwelling unit. The requirement for a dwelling unit on each parcel may lead to conversion of agricultural land, including prime farmland, to establish home sites to qualify for a permit. In most cases, such dwelling units could be constructed as a permitted use with no independent CEQA review of their individual or cumulative effect. In the absence of mitigation, there is the potential that the project will have a significant effect on the conversion of agricultural land. Mitigation Measure AG-1, which removes the dwelling unit requirement from AG, RL, FL and TPZ Districts, is proposed to reduce this potentially significant effect on agricultural resources.

The project may incentivize subdivision of agricultural land and rangeland to establish separate legal lots of record for the purpose of securing additional cultivation permits. This may have a negative effect on grazing and other land intensive agricultural practices which typically require large areas under common ownership or control to provide an economically viable return. Subdivision applications are subject to review pursuant to CEQA and any effect to the ongoing viability of the agricultural resources would be evaluated on a site specific level when subdivision application is made. However, in the case of rangeland particularly, there may be existing underlying legal parcels for which, pursuant to the subdivision map act, certificates of compliance can be applied for and granted without CEQA review. This can have a negative effect on the continuity of rangeland uses by fragmenting existing ownership and grazing operations of the larger ranches in the County. Mitigation Measure AG-2, which prohibits the issuance of permits for new cultivation sites in RL Districts are proposed to de-incentivize subdivision efforts that would impeded continued rangeland uses. By eliminating new cultivation sites in RL districts there will be a

substantial reduced in the acreage and parcels available for cultivation in Phase 3. With mitigation incorporated there will be a less than significant impact to agricultural conversion.

Agriculture and Forestry Resources b)

Cannabis is recognized under the Medical Cannabis Regulation and Safety Act (MCRSA) as an agricultural product; therefore, there would be no conflict with producing cannabis in the agricultural zone, provided all required findings contained in the existing zoning code and the proposed MCCR can be met.

The Williamson Act (officially the California Land Conservation Act of 1965) is a California law that provides relief of property tax to owners of farmland and open-space land in exchange for a ten year agreement that the land will not be developed or otherwise converted to another use. The intent of the Williamson Act is to preserve a maximum amount of a limited supply of prime agricultural land to discourage premature and unnecessary conversion of prime agricultural land to urban uses.

In response to multiple inquiries from cities and counties, the State Board of Conservation distributed direction to counties statewide regarding cannabis production on Williamson Act lands. The guidance reads, "Medical marijuana is an agricultural product, under both the 2015 medical marijuana statutes and the Williamson Act. Therefore, nothing in the Williamson Act prohibits the growth of medical marijuana on land enrolled in the Williamson Act. A city or county's participation in the Williamson Act does not alter a local government's authority to place conditions on crop types and agricultural practices allowed in areas under their jurisdiction." (Department of Conservation, 2016)

Mendocino County policies set minimum parcel size requirements of ten (10) acres for prime agricultural land and forty (40) acres for non-prime agricultural land. Fifty percent (50%) of the land to be contracted is to be continuously used or maintained for agricultural uses, unless the Board of Supervisors makes specific findings. These two requirements, combined with the maximum cultivation sizes in the proposed MCCR, would have the effect that cannabis cultivation alone could not qualify as an agricultural preserve, therefore, another form of agriculture would also need to occur on the property to qualify for the program.

On October 6, 2015, the Mendocino County Board of Supervisors adopted amended policies and procedures for implementing the Williamson Act Program in the County through Ordinance No. 4345 and Resolution No. 15-156. The current policies make no provision for medical cannabis cultivation. Until such policies are amended there is the potential that cannabis cultivation on land subject to Williamson Act land could be interpreted to conflict with existing land conservation contracts.

Mendocino County Staff are currently preparing proposed amendments to the implementing policies and procedures to address the cultivation of medical cannabis on property subject to Williamson Act contracts. Staff anticipates a recommendation to the Board of Supervisors to declare that cannabis production is a "compatible" use which may be undertaken on land subject to Williamson Act Land Conservation Contracts, but the value of a medical cannabis product may not be included in the agricultural income calculations used to determine whether property qualifies to participate in the Williamson Act Program. Other agricultural uses would be required on site to qualify or to maintain eligibility to remain in the program.

Mitigation Measure AG-3 is proposed to prohibit cannabis cultivation permits on lands currently enrolled in the Williamson Act until the Policies and Procedures for Agricultural Preserves and Williamson Act Contracts have been amended to reflect the Board's direction regarding cannabis cultivation. Incorporating

Mitigation Measure AG-2 will ensure there is no conflict between the cultivation use and Williamson Act Land Conservation Contracts.

With implementation of these mitigation measures, the proposed MCCR does not conflict with existing zoning for agricultural use as cannabis is technically considered an agricultural product. Therefore the impact would be less than significant with mitigation incorporated.

Agriculture and Forestry Resources c)

The Timberland Production Zone (TPZ) was established in 1976 in the California Government Code as a designation for lands for which the Assessor's records as of 1976 demonstrated that the "highest and best use" would be timber production and accessory uses. Public improvements and urban services are prohibited on TPZ lands except where necessary and compatible with ongoing timber production. The original purpose of TPZ zoning, was to preserve and protect timberland from conversion to other more profitable uses and ensure that timber producing areas not be subject to use conflicts with neighboring lands.

As defined in PRC Section 4526, "Timberland means 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 a commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species are determined by the Board of Forestry and Fire Protection on a district basis." PRC Section 12220(g) defines forested land as land that can support ten percent native tree cover of any species. By this definition, various sites throughout the project area that would be permitted under the proposed MCCR have the potential to include lands that are considered forest land.

No Phases of the MCCR subject any lands to re-zoning. But the MCCR would permit existing cultivation sites in the FL and TPZ Districts that can demonstrate compliance with all provisions specified. While a historical impact may exist from already established cultivation sites in the FL and TPZ Districts, these impacts are considered an existing condition and part of the project baseline.

Permitting existing cultivation sites located within the TPZ and FL Districts under Phase 1 implementation of the proposed zoning code amendments (Section 20.242.050 Table 1) requires an administrative permit through the County Department of Planning and Building Services. MCCR Section 20.242.050E, allows for the expansion of existing sites up to 10,000 square feet in the TPZ and FL Districts. Per section 20.242.080.C.3 of the proposed MCCR, administrative permits require the following findings: "there is no other environmentally superior cultivation site located on the same parcel; the location and operation of the medical cannabis cultivation site will, to the maximum extent feasible, avoid or minimize its impact on environmentally sensitive areas including hillsides exceeding 15 percent, prime soils, oak woodland, and timber resources." Additionally, each administrative permit is subject to a CEQA finding. Each existing cultivation site within the FL or TPZ Districts will need to be evaluated to determine the appropriate level of CEQA review and mitigation can be incorporated into the permit, if necessary.

Timberlands as defined by PRC4526 are not limited to the FL or TPZ Districts. Lands meeting this definition may include property located in the various RR Districts and potentially some areas zoned AG, RL and UR. Pursuant to Subsection (X) of Section 10A.17.090 (Cultivation Permit Application and Zoning Review) of the proposed MCCO, the following will be required as part of permit applications in Phases 1 and 3:

> *"If the application would include the conversion of timberland as defined under Public Resources Code section 4526, a copy of a Less-Than-Three-Acre Conversion Exemption or Timberland*

> *Conversion Permit, approved by the California Department of Forestry and Fire Protection ("CAL FIRE"). Alternately, for existing operations occupying sites created through prior unauthorized conversion of timberland, the applicant must provide evidence that environmental impacts have been mitigated, to the extent feasible, as required by the resource protection agencies including CAL FIRE, the NCRWQCB and the CDFW."*

Through permit processing CAL FIRE will be consulted to ensure compliance with the above referenced section. The County will rely on CAL FIRE's determination of whether the project conflicts with TPZ, forestland, or timberland resource provisions under their jurisdiction. In Phase 1 there will be no significant additional impacts to TPZ or FL lands above the baseline condition. In Phases 2 and 3, new cannabis cultivation will not be allowed in the FL or TPZ Districts. There will be no impact to FL or TPZ Districts during implementation of Phase 2 and 3. Impacts will be less than significant to TPZ and FL lands.

Agriculture and Forestry Resources d) and e)

In the existing baseline condition, substantial cannabis cultivation occurs in remote, isolated settings, typically, in areas which are naturally forested. These practices have resulted in substantial changes to forest lands including tree removal, water diversion, grading and other activities which together constitute conversions of forest lands to non-forest use. Baseline and future conversion of agricultural lands is not a significant concern as medical cannabis is an agricultural product.

The mechanisms for continued forest land conversion with the implementation of Phase 3 of the proposed MCCR are limited. These will largely come from requests for Less-Than-Three-acre Conversions on RR zoned timberlands. CAL FIRE has reported a surge in the number of CEQA-exempt Less-Than-Three-acre Conversions as a large number of cannabis cultivators have moved into forested landscapes.

Less-Than-Three-Acre Conversions or Timber Conversions will be required for any application under Phase 3 that involves land meeting the definition of timberland. Currently CAL FIRE reviews requests for Less-Than-Three-Acre and other Timber Conversions without County participation. Conversion requests to CAL FIRE require the applicant to state the proposed alternate use (bona fide intent) for the site once the timber is removed. If a Conversion request states that the bona fide intent for conversion is medical cannabis cultivation it is necessary for CAL FIRE to have accurate information as to whether the property would qualify for a Cultivation Permit based on zoning, setbacks, and other provisions outlined in the MCCR. Without this information CAL FIRE could inadvertently authorize conversion of timberlands in area that ultimately may not fall within the permitting criteria.

To avoid this circumstance, Mitigation Measure AG-4 is proposed requiring the County to participate in the Timber Conversion process with CAL FIRE to ensure that conversions are compliant with the proposed MCCR and other zoning requirements. With mitigation incorporated there will be a less than significant impact.

MITIGATION MEASURES

AG-1: Mendocino County shall modify the MCCO prior to its adoption by the Board of Supervisors to remove the requirement for a legal dwelling unit on all parcels which receive a cultivation permit in the AG, RL, FL and TPZ Districts.

AG-2: Mendocino County shall modify Zoning Chapter 20.242 prior to its adoption by the Board of Supervisors to prohibit new medical cannabis cultivation permits in the RL Zoning District.

AG-3: Mendocino County shall prohibit the issuance of cultivation permits on lands currently enrolled in the Williamson Act until the Policies and Procedures for Agricultural Preserves and Williamson Act Contracts have been amended to address cannabis cultivation.

AG-4: Mendocino County Planning and Building Services will participate in reviewing timber conversions and in doing so provide information to CAL FIRE as to whether a Cultivation Permit has been issued corresponding with the bona fide intent for conversion as stated in the conversions request.

FINDINGS

The Proposed Project would have a **Less Than Significant Impact with Mitigation Incorporated** on Agriculture and Forest Resources.

III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
c) 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 (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	☐	☒	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☒	☐	☐

Thresholds of Significance: The project would have a significant effect on Air Quality if it conflicts with or obstructs implementation of applicable air quality plans; violates any air quality standard or contribute substantially to an existing or projected air quality violation; results 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 (including releasing emissions, which exceed quantitative thresholds for ozone precursors); exposes sensitive receptors to substantial pollutant concentrations; or creates objectionable odors affecting a substantial number of people.

REGULATORY SETTING

Air pollution control in the State of California is based on federal, state, and local laws and regulations. The federal Environmental Protection Agency, Cal EPA, and regional clean air agencies, all regulate air quality. Federal and State agencies establish maximum concentrations for a wide variety of pollutants such as particulate matter (PM10 and PM2.5), ozone, and other smog precursors (NOX and ROG).

Mendocino County is part of the North Coast Air Basin, consisting of Del Norte, Humboldt, Trinity, Mendocino, and northern Sonoma Counties, and is within the jurisdiction of the Mendocino County Air Quality Management District (MCAQMD). Air basins bordering the North Coast Air Basin include the Northwest Plateau, Sacramento Valley, Lake, and San Francisco Area air basins. The topography of the North Coast Air Basin is similar to that of Mendocino County in that it varies with mountain peaks, valleys, and coastline (County of Mendocino General Plan, 2009).

The climate of Mendocino County transitions between that of the coast and that of the interior of California. The eastern portion of the County is characterized by warm, dry summers and cool, wet winters. Coastal Mendocino County has a mild Mediterranean climate with abundant rainfall (County of Mendocino General Plan, 2009).

MCAQMD operates air monitoring stations in Fort Bragg, Ukiah, and Willits. Based on the results of monitoring, the entire County has been determined to be in attainment for all Federal criteria air pollutants

and in attainment for all State standards except Particulate Matter less than 10 microns in size (PM10). Throughout the inland portions of the County, MCAQMS identifies the following as sources of PM10:

1) Woodstoves;
2) Fireplaces;
3) Outdoor burning, including agricultural waste;
4) Fugitive dust;
5) Automobile traffic; and
6) Industry.

In January of 2005, MCAQMD adopted a Particulate Matter Attainment Plan establishing a policy framework for the reduction of PM10 emissions, and has adopted Rule 1-430 which requires specific dust control measures during all construction operations, the grading of roads, or the clearing of land as follows:

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; and
7) The operator shall keep a daily log of activities to control fugitive dust.

In December, 2006, MCAQMD adopted Regulation 4, Particulate Emissions Reduction Measures, which establishes emissions standards and use of wood burning appliances to reduce particulate emissions. These regulations applied to wood heating appliances, installed both indoors and outdoors for residential and commercial structures, including public facilities. Where applicable, MCAQMD also recommends mitigation measures to encourage alternatives to woodstoves/fireplaces, to control dust on construction sites and unpaved access roads (generally excepting roads used for agricultural purposes), and to promote trip reduction measures where feasible.

In 2007, the Air Resources Board (ARB) adopted a regulation to reduce diesel particulate matter (PM) and oxides of nitrogen (NOx) emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. Such vehicles are used in construction, mining, and industrial operations. The regulation imposes limits on idling, requires a written idling policy, and requires disclosure when selling vehicles. Off-road diesel powered equipment used for grading or road development must be registered in the Air Resources Board DOORS program and be labeled accordingly. The regulation restricts the adding of older vehicles into fleets and requires fleets to reduce their emissions by retiring, replacing, or repowering older engines or installing Verified Diesel Emission Control Strategies.

In 1998, the California Air Resources Board established diesel exhaust as an Air Toxic, leading to regulations for categories of diesel engines. Diesel engines emit a complex mixture of air pollutants, including both gaseous and solid material which contributes to PM2.5. All stationary and portable diesel engines over 50 horse power need a permit through the MCAQMD.

Like many counties in Northern California, Mendocino County has areas that contain Naturally Occurring Asbestos (NOA). State regulations, enforced by MCAQMD, may affect grading and surfacing projects. The District uses a map prepared by County Information Services to identify areas likely to have asbestos

containing geologic features. The map was derived from maps produced by the CA Bureau of Mines and Geology and the USDA Natural Resource Conservation Service. For projects in areas identified as potentially containing NOA, the District requires an evaluation and report by a State registered geologist to determine that any observed NOA is below levels of regulatory concern in the areas being disturbed (Title 17, CCR, Section93105(c)(1)). The Air Pollution Control Officer may, upon being provided a report detailing the geologic evaluation, grant an exemption from other requirements of the regulation. If the State registered geologist determines that NOA is present at levels above regulatory concern, or the applicant chooses not to have the testing and evaluation conducted, the District requires dust control measures in accordance with Title 17, CCR, Section 93105(d) and (e). Such measures generally include, maintaining vehicle speeds at less than 15 mph, washing down vehicles prior to moving off the property and cleaning visible track-out as needed at least once a day. All fill removed from areas containing NOA must be disposed of in accordance with applicable laws and regulations, approved dust suppressants must be used on unpaved surfaces and all on-site workers must be informed of possible presence of NOA.

DISCUSSION

The impacts of the cultivation of medical cannabis on air quality include the following:

1) Portable diesel and gasoline generators operating for extended periods of time (PM10, PM2.5 and other criteria pollutants);
2) Contributions to PM10 from site construction and grading, and travel on unpaved roads;
3) Contributions to PM10 and other criteria pollutants from vehicle emissions and fugitive dust from water delivery, fuel delivery, and transportation of materials and harvest;
4) Objectionable and detectable odors from fuels, fertilizers, and cannabis plants; and
5) Contributions to PM10 from burning of slash from site clearance and burning of agricultural waste;

The proposed MCCRA includes the following provisions, which are expected to reduce the aforementioned air quality impacts:

1) Prohibition against new cultivation operations in that TPZ and FL Districts, which are typically located far away from urban centers and have few available paved roads;
2) Requirement that setbacks from a variety of potentially sensitive receptors, including schools, parks and all single family residences on parcels under separate ownership;
3) Establishment of minimum parcel sizes which discourage concentration of cultivation operations. Minimum parcel sizes increase with the size and intensity of proposed operations;
4) Establishment of maximum cultivation areas which limit the scale of potential emissions from individual operations;
5) Prohibition against the use of a generator as a primary source of power; and
6) Requirement that all cultivation operations identify a water right sufficient to irrigate the cultivated area, reducing the potential to rely on water delivery, reducing PM10 and vehicle emissions from truck traffic to remote cultivation sites.

Air Quality a, b, c)

The cultivation of medical cannabis has the potential to generate substantial emissions of particulate matter, increasing a non-attainment criterion pollutant throughout Mendocino County. This is likely to be generated by traffic on dirt and gravel roads, earth moving activities, and potential burning of materials. NOA may also be present and cause exposure during grading and roadwork activities at proposed cultivation sites. Existing regulations—such as the MCAQMD fugitive dust regulations and the provisions of the proposed MCCR—will reduce such emissions and exposure. To ensure that the MCAQMD has the

opportunity to be involved in the permitting of cultivation sites and that applicable existing air quality standards are met, Mitigation Measure AIR-1 is proposed. This mitigation measure requires sending a referral to MCAQMD and incorporating their recommendations into the permit approval. With mitigation incorporated, these impacts are reduced to less than significant level.

Air Quality d, e)

The proposed MCCR provides several mechanisms to prevent air quality impacts, particularly odors, from impacting sensitive receptors and large numbers of people who may object to the strong odor associated with cannabis cultivation during the flowering phase. Furthermore, cannabis cultivation is identified as an agricultural use. Odors from agricultural operations on appropriately zoned parcels are a typical and anticipated circumstance and are not typically defined as a nuisance.

According to the MCAQMD, there is currently insufficient evidence that the burning of vegetated matter from the growing of cannabis would not result in significant odors that could affect nearby receptors. Therefore Mitigation Measure AIR-2 will be applied to prohibit burring of excess cannabis plant material.

If concentrated by ventilation systems, the odors from larger indoor, and greenhouse cultivation operations have a substantially greater potential to generate offensive odors on adjacent properties, even where mandatory setbacks from property lines and adjacent residences have been met. Mitigation Measure AIR-3 addresses this impact by requiring filtered ventilation systems be installed in mixed light and artificial light cultivation structures.

With mitigation incorporated, these impacts are reduced to less than significant level.

MITIGATION MEASURES

AIR-1: Mendocino County shall amend the proposed MCCR to require consultation with the Mendocino County Air Quality Management District (MCAQMD) prior to the issuance of any permit for the cultivation of medical cannabis. The District will have the opportunity to require emissions control devices, asbestos removal, and Best Management Practices pursuant to adopted regulations to ensure that the proposed cultivation operation will comply with the PM Attainment Plan or District regulations regarding fugitive dust and other sources of PM-10 and otherwise complies with adopted air quality plans including Naturally Occurring Asbestos policies.

AIR-2: Mendocino County shall amend the proposed MCCR to prohibit the burning of excess cannabis plant materials associated with the cultivation and preparation of medical cannabis.

AIR-3: Mendocino County shall amend the proposed MCCR to require that all buildings—including greenhouses—used for the cultivation of medical 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 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.

FINDINGS

The Proposed Project would have a **Less Than Significant Impact with Mitigation Incorporated** on Air Quality.

IV. BIOLOGICAL RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) 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 the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d) 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?	☐	☒	☐	☐
e) Conflict with any local policies or Ordinances protecting biological resources, such as a tree preservation policy or Ordinance?	☐	☒	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☒	☐	☐

Thresholds of Significance: The project would have a significant impact to Biological Resources if it were to 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 the California Department of Fish and Game or U.S. Fish and Wildlife Service; have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service; have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (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.

REGULATORY SETTING

Federal Regulations and Standards

Endangered Species Act

The purpose of the Endangered Species Act (ESA) of 1973 (16 U.S.C. Section 1531 et seq.) is to protect and recover imperiled species and the ecosystems upon which they depend. It is administered by the U.S. Fish and Wildlife Service (USFWS) and the Commerce Department's National Marine Fisheries Service (NMFS). The USFWS has primary responsibility for terrestrial and freshwater organisms, while the responsibilities of NMFS are mainly marine wildlife such as whales and anadromous fish such as salmon.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. Sections 703–712) makes it illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued pursuant to Federal regulations. The USFWS has statutory authority and responsibility for enforcing the MBTA.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 U.S.C. Section 668-668c), enacted in 1940, prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald eagles, including their parts, nests, or eggs. The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb."

Federal Water Pollution Control Act

The Federal Water Pollution Control Act of 1948 (P.L. 80-845, 62 Stat. 1155), commonly known as the Clean Water Act (CWA), authorized the Surgeon General of the Public Health Service, in cooperation with other Federal, state and local entities, to prepare comprehensive programs for eliminating or reducing the pollution of interstate waters and tributaries and improving the sanitary condition of surface and underground waters. During the development of such plans, due regard was to be given to improvements necessary to conserve waters for public water supplies, propagation of fish and aquatic life, recreational purposes, and agricultural and industrial uses. The original statute also authorized the Federal Works Administrator to assist states, municipalities, and interstate agencies in constructing treatment plants to prevent discharges of inadequately treated sewage and other wastes into interstate waters or tributaries.

State Regulations and Standards

California Endangered Species Act

The California Endangered Species Act (CESA) (Fish and Game Code Sections 2050-2116), enacted in 1970, states that all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected or preserved. The California Department of Fish and Wildlife (CDFW) will work with all interested persons, agencies and organizations to protect and preserve such sensitive resources and their habitats.

California Native Plant Protection Act (NPPA)

The California Native Plant Protection Act (NPPA) (Fish and Game Code Section 1900-1913) was enacted in 1977 and allows the Fish and Game Commission to designate plants as rare or endangered. There are 64

species, subspecies, and varieties of plants that are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants, but includes some exceptions for agricultural and nursery operations; emergencies; and after properly notifying CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations.

California Oak Woodlands Conservation Act (AB 242-2001) and the Oak Woodlands Conservation Act (SB1334-2004)

The California Oak Woodlands Conservation Act requires that as part of the determination made pursuant to CEQA, a county shall determine whether a project may result in a conversion of oak woodlands that will have a significant effect on the environment.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) of 1969 is the principal law governing water quality regulation in California. Enforced by the Regional Water Boards, the Porter-Cologne Act establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (California Water Code section 13000 et seq.), the policy of the State is as follows:

1) That the quality of all the waters of the State shall be protected;
2) That all activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason; and
3) That the State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation.

On August 13, 2015, the NCRWQCB adopted the Order and adopted a Mitigated Negative Declaration based on an Initial Study prepared pursuant to CEQA (SCH # 2015042074). The Order includes a review of biological impacts from medical cannabis cultivation, especially in regard to beneficial uses of water quality, and requires conformance with the "Standard Conditions" and "Best Management Practices for Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effects" as presented the Order (see Attachments B and C, respectively).

The Initial Study prepared for the Water Board Order includes the following:

> *"The North Coast Region is home to numerous threatened and endangered species that are among the beneficial uses most sensitive to excessive sediment and temperature and reduction in suitable habitat. The migration, spawning, reproduction, and early development of cold water fish such as coho salmon (Oncorhynchus kisutch), chinook salmon (O. tshawytscha), and steelhead trout (O. mykiss) are impacted in the North Coast Region due to water quality impairments and are central to numerous recovery efforts. The National Marine Fisheries Service (NMFS) has listed Southern Oregon/Northern California Coast (SONCC) coho salmon (1997), California Coastal Chinook salmon (1999), and Northern California steelhead (2000) as threatened under the federal Endangered Species Act. The California Fish and Game Commission also listed coho salmon as threatened in 2005.*
>
> *Additionally, waterbodies covering approximately two-thirds of the area of the North Coast Region are included on the Clean Water Act Section 303(d) List of impaired waters due to excessive sediment; technical assessments and programs of implementation for these impaired waters focus on sediment and temperature control for recovery of cold freshwater habitat (COLD) defined as uses that "support cold water ecosystems including, but not limited to, preservation or*

enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates." (NCRWQCB, 2011)

Local Standards

Mendocino General Plan policies related to biological resources are found in the Resource Management (RM) and the Open Space and Conservation (OC) chapters of the General Plan and include the following:

RM-1	Require adequate buffers for all projects potentially impacting stream corridors and/or their associated riparian habitat.
RM-27	Identify and maintain wildlife movement corridors to support biodiversity and healthy natural processes.
RM-29	The County shall require all public and private discretionary projects to 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.
RM-79	Provide information to landowners, developers, and the public on the importance and value of maintaining wildlife corridors.
RM-98	Support State and Federal measures to protect and enhance the freshwater and marine ecology into the development process, such as: • Stream corridor protection and restoration. • Riparian vegetation protection and restoration. • Erosion and sediment control measures. • Surface mining controls.
OC 1.1	River Corridor Uses - Develop and adopt regulations establishing standards applicable to River Corridors. Until the regulations and the final Stream Setbacks are adopted, require that land use and development comply with the following principles. Allow or consider allowing the following uses within any River Corridor area: • Streamside maintenance, fire fuel management, and restoration. • Livestock grazing. • Agricultural cultivation, but not within 100 feet of top of bank for the Russian River and 25 feet for Other Riparian Corridors. • Public projects, including water-dependent public recreational facilities. • Timber operations conducted in accordance with an approved timber harvest plan. • Mining operations conducted in accordance with the County Surface Mining regulations. • Road, street, and utility crossings • Streamside maintenance, fire fuel management, and restoration. • Permitted summer dams. •Equipment turnaround and access roads associated with agricultural cultivation, provided that the affected area is the minimum necessary for these turnaround and access roads and that a minimum 25' vegetative filter strip is provided and maintained between the affected area and the top of the bank.

OC 1.1 [cont.]	• Vegetation removal as part of an integrated pest management program administered by the Agricultural Commissioner. Prohibit, except as otherwise listed above, grading, vegetation removal, agricultural cultivation, structures, roads, utility lines and parking lots within any streamside conservation area. Consider an exception to this prohibition if: • It makes a lot unbuildable and if vegetation removal is minimized, or •The use involves only the maintenance, restoration, or minor expansion of an existing structure or other existing use, or • It can be clearly demonstrated through photographs or other information that the affected area has no substantial value for riparian functions, or •The use involves only the maintenance, restoration, or minor expansion of an existing structure or other existing use, or • A conservation plan is approved that provides for the appropriate protection of the biotic resources, water quality, flood management, bank stability, groundwater recharge, and other applicable riparian functions.

DISCUSSION

Special Status Species

Special-status species are those animal and plant species that, in the judgment of the resource agencies, trustee agencies, and certain non-governmental organizations, warrant special consideration in the California Environmental Quality Act (CEQA) process. This includes the following:

1) Officially designated "threatened," "endangered," or "candidate" species federally listed by the USFWS and protected under the Federal Endangered Species Act (FESA);
2) Officially designated "rare," "threatened," "endangered," or "candidate" species state listed by the CDFG and protected under the California Endangered Species Act. CDFG also maintains a list of "Fully Protected" species as well as "California Species of Special Concern" that are also generally included as special-status species under CEQA;
3) Species considered rare, threatened, or endangered under the conditions of Section 15380 of the CEQA Guidelines, such as plant species identified on lists 1A, 1B, and 2 in the CNPS Inventory of Rare and Endangered Vascular Plants of California; and
4) Other species considered sensitive, such as birds protected under the Migratory Bird Treaty Act (MBTA), which includes most native birds. A species may also be designated as special concern at the local level.

Special status species and critical habitats within the County of Mendocino have been identified based on a query of the California Natural Diversity Database (CNNDB) (Attachment D), California Native Plant Society (CNPS) rare plant lists (Attachment E), responses from the United States Fish and Wildlife Service (September 15, 2016, Arcata and Sacramento Offices) (Attachment F), and a search of National Marine Fisheries Service (available upon request). Table 4-A (Special-Status Species In or Potentially Occurring in Mendocino County) from Chapter 4 (Resource Management Element) of the Mendocino County General Plan identifies special-status species found in or potentially occurring within the County; however, the contents of this list is included on the other lists previously mentioned.

Habitat and Wildlife

Per pages 4-9 – 4-10 of Chapter 4 (Resource Management Element) of the County of Mendocino General Plan:

> *"Mendocino County has a wide range of climates, topography, soils, and watershed conditions, all of which produce very diverse plant and animal communities. Vegetation predominant in the region, includes valley grassland and oak woodland in lowlands and valleys, coastal scrub and prairies along the Pacific Ocean, and mixed chaparral, hardwood forest, and coniferous forest in the mountains. Mendocino County has a very wide range of biological communities, some of which are highly productive or contain rare plant communities. These include redwood, Douglas-fir, montane hardwood, chaparral, grasslands, closed cone pine-cypress, oak woodland, agricultural, white fir, ponderosa pine, Klamath mixed fir, coastal scrub, urban, red fir, barren, and aquatic habitats. Figure 4.2 contains a map of the biological communities in Mendocino County."*

Additionally, as discussed in Chapter 4 of the Mendocino County General Plan, there are several sensitive habitats located in Mendocino County. Sensitive habitats include those that are of special concern to resource agencies, Section 1600 of the California Fish and Game Code, CAL FIRE directives, and Section 404 of the Federal Clean Water Act. Sensitive habitats in Mendocino County include:

1) Serpentine Soils and Rock Outcrops;
2) Pygmy Forest;
3) Wetlands/Waters of the United States; and
4) Old-Growth Forest.

Waterways

Mendocino County can be broadly divided into three major watersheds areas: the Coastal, Eel, and Russian River basins. The Coastal system consists of numerous relatively short streams flowing west to the Pacific Ocean. Major stream systems located in the Coastal watershed include 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, while 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, while the Russian River watershed includes significant portions of Sonoma County (County of Mendocino, 2009).

Surface runoff in each basin is derived almost entirely from rainfall, although snow does fall in the mountains located in the eastern portion of the Eel River watershed. Stream flow responds directly to the rainfall pattern; high stream flows will drop quickly without sustaining rainfall. During the dry summer months, stream flow must be supplied from groundwater seepage, channel storage, reservoir storage, diversions, natural springs, and artesian wells (County of Mendocino, 2009).

There are individuals and organizations throughout Mendocino County involved in managing watershed resources, and collaborating in data collection, planning management, sharing of technical expertise, pooling funding resources, and implementation of watershed projects. A major focus of these watershed efforts is the improvement of water quality in the streams and restoration of native fish habitat and native aquatic species (County of Mendocino, 2009).

Eleven (11) watersheds within Mendocino County are listed as impaired for sediment and elevated instream temperatures, including: Ten Mile River; Noyo/Pudding Creek; Big River and Berry Gulch; Albion River; Garcia River; Gualala River; Navarro River; Upper Russian River; Middle Fork Eel River; South Fork Eel River; and Middle Mainstem Eel River. Within these watersheds, Total Maximum Daily Load (TMDL) requirements (that are in various stages of development) will require reductions in contributing sediment sources to achieve the load reductions necessary to protect fishery resources. County permitting of cannabis cultivation in forested watersheds (existing operations under Phase 1 and future operations under Phase 3) has the potential to increase instream temperatures in TMDL-listed waterbodies through the diversion of additional water from the water body or contribution of additional sediment into the water body, or both.

The project is designed to prevent, monitor for, and address potential environmental impacts through a wide array of regulatory requirements. In Phase 3, the permitting of new cannabis cultivation sites in any zoning district other than the AG District will require a watershed assessment to assure adequate water resources. The watershed assessment is more fully described in the Hydrology and Water Quality section of this Initial Study.

Biological Resources a), b), c), d), e) and f)

As mentioned in the discussion of this section there are numerous species identified by CDFW and USFWS as candidate, sensitive or special status species (collectively will be referred to as sensitive species). While the MCCR and the Order offer specific protections to riparian areas and wetlands, which provide protection to many sensitive species, those species occurring outside of these areas may experience impacts with the implementation of Phase 3 when new cultivation sites may be permitted. Because new outdoor cultivation sites will only require a zoning clearance in the zoning districts in which they are allowed, there is not currently a mechanism within the MCCR to confirm if new cultivation locations may impact sensitive species that are not located in wetland or riparian areas.

Subsection (l) of the agricultural code amendments, Section 10A.17.090 (Cultivation Permit Application and Zoning Review), requires the submittal of a cultivation and operations plan which includes describing watershed and habitat protection measures; water storage; conservation and use; drainage, runoff, and erosion control; and proper storage of fertilizers, pesticides, and other regulated products to be used on the legal parcel; in addition to a description of cultivation activities.

To be protective of potential upland sensitive species that may not otherwise be protected through other agency involvement, mitigation is required. Mitigation Measure BIO-1 requires involvement with CDFW to determine if any sensitive species will be affected by a proposed new cultivation site. The MCCR will be revised to require a sign off from CDFW for each proposed cultivation site to evaluate if there is a possibility for presence of sensitive species. Prior to submittal of the MCCO cultivation permit, cultivators will need to coordinate with CDFW who 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. If it is determined that a sensitive species could occur, the required cultivation and operations plan shall be revised to incorporate measures to protect sensitive species to the satisfaction of CDFW. A cultivator that cannot demonstrate to the satisfaction of CDFW that there will be a less than significant impact to sensitive biological resources will not be issued a cultivation permit. The County may eliminate this requirement at such time CDFW authorizes the County to perform this function based on available mapping and training of Agricultural Commissioner's staff and the qualifications of third party inspectors to identify sensitive species habitat. CDFW will remain involved when a sensitive resource is identified.

The MCCR relies heavily on the performance standards identified in Agriculture Code Section 10.A.17.110 and on the Standard Conditions of the Order to control adverse biological impacts to riparian areas, wetlands, and migratory fish and wildlife species. All applicants for permitting under the MCCR must establish and maintain enrollment under the Order, or for those sites not required to enroll under the Order, compliance with the Standard Conditions contained in the Order must be demonstrated (MCCR Sections 10A.17.110(F) and (G)).

The Biological Resources section of the Initial Study from the Order (SCH No. 2015042074) states:

> "Widespread unregulated cannabis cultivation in the North Coast Region is currently posing a new wave of threats to cold freshwater habitat and the dependent species (Bauer, 2015). Land disturbing activities and discharges of waste from cultivation activities can lead to increased sediment loading to streams, reduced shading and water temperature increases, increased nutrient loading, reduction in large wood inputs, and direct alterations to stream morphology due to in-channel disturbances. Excessive surface water diversion can lead to dewatering of streams. Among the biological resources at risk are species that require a full year in freshwater. Dewatering can threaten the survival of entire year classes. *The Order is designed to address these impacts from cannabis cultivation and lead to an improvement in water quality and conditions associated with cold freshwater habitat*. [Emphasis added]
>
> The baseline conditions include legacy impacts and more recent improper site development or maintenance, including improper stream crossing design, which can result in erosion and transportable sediment, create or exacerbate unstable features, and result in temperature impacts from improper hydromodification, potential for adverse geomorphological changes, creation of habitat/migration barriers, and removal of riparian vegetation.
>
> Inadequate riparian protection measures can result in adverse temperature increases, and can result in or increase the likelihood of pollutant discharges to surface waters, or of fill/threatened fill in streams or wetlands. If conducted improperly, soil storage and disposal can result in placement of fill in or where it can enter surface waters, controllable sediment sources, and creation or exacerbation of unstable features. Water diversion, storage, and use can result in depletion of water resources and potential impacts to or loss of beneficial uses; improper construction or maintenance of storage features or facilities can result in pollutant discharge and damage to watercourse structure and instream habitat, and can create fish and wildlife migration barriers. Irrigation runoff from marijuana cultivation and other similar growing operations can result in sediment and other pollutant transport to receiving waters, and possible exacerbation of unstable features. The Order is designed to eliminate and reduce such impacts, particularly as they relate to candidate, sensitive or special status species, riparian habitat, and/or other sensitive natural communities, and federally-protected wetlands.
>
> The pattern and range of instream flows can be affected by the timing, duration, and rate of water withdrawals. The Order contains conditions related to water storage and use that may encourage Dischargers to pursue alternate water supply to avoid direct diversions from surface streams in the summer. Increased use of management measures and practices such as water conservation measures, and increased use of off-stream storage and voluntary curtailments of water diversion, could increase dry weather instream flows, and associated habitat. This would help return dry weather flows in the watersheds to a more natural, pre-development condition. However, collection of water for storage during the rainy season may result in reductions in winter

and spring flows, which could have a minor impact on salmonid species by limiting access to spawning habitat, and dewatering rearing areas. In implementing the Order, staff intends to facilitate watershed-wide coordination of diversion schedules and streamflow monitoring to inform diversion management. Generally, flow-related stresses to candidate, sensitive, or special status species are likely to be reduced by the requirements of the Order.

The Order requires development and implementation of site-specific water resource protection plans that include measures to avoid and minimize impacts on candidate, sensitive, or special status species; riparian habitat and other sensitive natural communities; and federally-protected wetlands, as well as impacts on the movement of resident or migratory fish or wildlife and migratory corridors. Such measures may include those necessary on a specific site to prevent and minimize sediment discharges from roads and developed areas, and to prevent and minimize pollutant discharges associated with cultivation and associated activities, including nutrients and pesticides.

Potential impacts to sensitive species, habitats, and wetlands due to implementation of management measures or conducting remediation/cleanup/restoration activities will be temporary and short-term. Such impacts could include increased stream temperatures as a result of decreased shade resulting from tree felling associated with equipment access to clean up sites and increases in sediment delivery from site activities. Remediation/cleanup/restoration activities necessary to bring sites into compliance with the Order could involve work to be performed within watercourses to remove fill placed during past site development or activity. The process of remediating existing impacts on wetlands and watercourses could cause hydrological impacts including interruption through the use of instream containment and diversion structures, such as cofferdams, for the protection of aquatic life and water quality. Some of the disturbances will occur in an area impacted by previous, unassociated, activities. Where correction of onsite conditions or maintenance of onsite features is necessary to attain or maintain compliance with the Order, construction Best Management Practices (BMPs), as described in Appendix B must be implemented as applicable.

Again, the intended purpose of the Order is to improve the conditions of these sensitive areas in the long term. The process of remediation/cleanup/restoration of any site will be temporary, and scheduled by Regional Water Board staff, as necessary, to minimize cumulative impacts within a watershed.

Collectively, the measures described above mitigate the impacts to federally-protected wetlands, riparian habitat or other sensitive natural community, and any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (DFW) or United States Fish and Wildlife Service (USFWS) to a level that is less than significant, and any potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory corridors, or impede the use of native wildlife nursery sites is mitigated to a level that is less than significant."

The Order Standard Conditions provide general guidance topics such as stream crossing and maintenance, spoils management, riparian and wetland protection, irrigation runoff, use of pesticides, herbicides, and petroleum and other chemicals. To bring potential impacts of improvements to existing cultivation sites and potential new cultivation sites to a level that is less than significant, the MCCR shall be amended to also include the "Best Management Practices for Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effects" as

presented in the Order (see Mitigation Measure BIO-2 below). Within the Best Management Practices section there is additional information about construction scheduling (work season May 1 to October 15 and winterization/weatherization measures for rain events), limitations on earth moving, and vegetation and removal of exotic plants. The Best Management Practices section also has a section related to the protection of sensitive species (BMPs 65-69):

1) "Consult with federal, state and local agencies regarding location of rare, threatened or endangered species;
2) Prior to commencing work, designate and mark a no-disturbance buffer to protect sensitive species and communities;
3) All work performed within waters of the state shall be completed in a manner that minimizes impacts to beneficial uses and habitat. Measures shall be employed to minimize land disturbances that shall adversely impact the water quality of waters of the state. Disturbance or removal of vegetation shall not exceed the minimum necessary to complete Project implementation;
4) All equipment, including but not limited to excavators, graders, barges, etc., that may have come in contact with extremely invasive animals (e.g. zebra mussels or new Zealand mud snails) or plant (e.g., Arundo donax, scotch broom, pampas grass) or the seeds of these plants, shall be carefully cleaned before arriving on site and shall also be carefully cleaned before removal from the site, to prevent spread of these plants; and
5) Vegetation shall be established on disturbed areas with an appropriate mix of California native plants and/or seed mix. All initial plantings and seed shall be installed prior to completion of the project work."

Further discussion of protections for migratory fish species are found in the hydrology and water quality section. Impacts to migratory fish species are reduced to a level that is less than significant by incorporating Mitigation Measure HYD-1, which requires an In-Stream Flow Policy to be developed and adhered to prior to issuing permits for new cultivation sites in RR and UR zones.

Section 21083.4 of the California Public Resources Code, effective January 1, 2005, requires counties to evaluate and determine under the California Environmental Quality Act (CEQA) whether a project within their jurisdiction may result in a conversion of oak woodlands that will have a significant effect on the environment. Additionally, as previously discussed, sensitive habitats within the County also include pygmy and old-growth forests. Per Chapter 4 of the Mendocino County General Plan, pygmy forests are known to occur only in the western part of Mendocino County and—according to the U.S. Forest Service—most old-growth forests in California are on federal property. With the implementation of BIO-1 and BIO-2 evaluations can be made to avoid impacts to sensitive habitats by helping to ensure the establishment and operation of cultivation sites incorporates appropriate environmental protections required by CDFW and other resource trustee agencies.

Mendocino County General Plan Policies to avoid wetlands, protect stream banks, and riparian corridors. The MCCR will help to implement these setbacks by requiring cultivators to maintain enrollment in the Order or otherwise adhere to the Standard Conditions and BMPs (Mitigation Measure BIO-2). Through these measures 50-200 foot streamside setbacks are required and wetlands must be avoided reducing impacts to these resources to a less than significant level.

Compliance with the proposed MCCR and the Order may require the relocation of cultivation sites in Phase 1 to more environmentally appropriate locations. The proposed zoning code amendment Section 20.242.050(G) of the MCCR also allows for cultivation sites to be transferred from an origin parcel to a new parcel so long as the destination parcel complies with zoning permit and development standards that apply to a new cultivation site as specified in Section 20.242.070 of the proposed MCCR and that the

cultivator releases rights to resume cultivation on the origin parcel. Overall these provisions will have a net benefit to the environment as less environmentally suitable sites will be eliminated and new locations will be developed in compliance with applicable protections. However, the sites to be abandoned on the origin parcels must be restored in order reduce the potential that they will continue to have negative environmental impacts. With incorporation of Mitigation Measure BIO-3, these origin parcel site will be restored based on a restoration plan that is consistent with the standard conditions and BMPs listed in the Order..

With mitigation incorporated there will be a less than significant effect to biological resources.

MITIGATION MEASURES

BIO-1: Mendocino County shall amend the MCCR to require a sign off from CDFW for each proposed cultivation site to evaluate if there is a possibility for presence of sensitive species. Prior to submittal of the MCCO cultivation permit, cultivators will need to coordinate with CDFW who 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. If it is determined that a sensitive species could occur, the required cultivation and operations plan shall be revised to incorporate measures to protect sensitive species to the satisfaction of CDFW. A cultivator that cannot demonstrate to the satisfaction of CDFW that there will be a less than significant impact to sensitive biological resources will not be issued a cultivation permit. The County may eliminate this requirement at such time CDFW authorizes the County to perform this function based on available mapping and training of Agricultural Commissioner's staff and the qualifications of third party inspectors to identify sensitive species habitat. CDFW will remain involved when a sensitive resource is identified.

BIO-2: Mendocino County shall amend the MCCR to require cultivators—not otherwise required to maintain enrollment in the Order—to adhere to 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.

BIO-3: Mendocino County shall amend the MCCR to require that any existing cultivation operation be restored to the maximum extent feasible in conjunction with an approved on-site or off-site relocation during Phase 1. The applicant shall include a restoration plan, consistent with the standard conditions and BMPs listed in the Order, with the application for any permit for which relocation of an existing operation is proposed. The restoration plan shall include the following, except where such activities can be demonstrated to be technically infeasible or likely to lead to additional environmental impacts:

1) Remove or repurpose buildings, greenhouses, fences, irrigation equipment, water intakes, pumps, storage tanks and other materials brought to the site for the purpose of cannabis cultivation;
2) Remove dams, ponds or other in-stream water storage to restore natural stream flows unless such features will continue in use;
3) Remove or compost agricultural wastes;
4) Remove trash and other debris;
5) Re-vegetate cleared areas with native plants typical of nearby natural areas, including groundcover, shrubs and trees; and
6) Take additional site specific steps as recommended by NCRWQCB, CDFW, County Staff or third party inspectors, to restore natural function and habitat values to the site.

Mitigation is also incorporated through **HYD-1**

FINDINGS

The Proposed Project will have a **Less than Significant Impact with Mitigation Incorporated** on Biological Resources.

V. CULTURAL RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?	☐	☐	☒	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐
e) Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074?	☐	☐	☒	☐

Thresholds of Significance: The project would have a significant effect on Cultural Resources if it would cause a substantial adverse change in the significance of a historical resource as defined in '15064.5; cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5; directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or disturb any human remains, including those interred outside of formal cemeteries or cause a substantial adverse change in the significance of a tribal cultural resource.

REGULATORY SETTING

Assembly Bill 52

Assembly Bill (AB) 52 amended the California Environmental Quality Act (CEQA) to address California Native American tribal concerns regarding how cultural resources of importance to tribes are treated under CEQA. The Public Resources Code (PRC) now 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." (State of California, 2015). It is now required by the PRC that the Lead Agency consult with any California Native American tribes that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. By consulting with California Native American tribes prior to making a decision regarding the environmental impact of a proposed project, delays to permit processing can be avoided and mitigation measures can be incorporated into project proposals that preserve cultural resources.

In order to comply with AB-52, the County contacted by letter the following Tribes on September 6, 2016 requesting consultation on the proposed MCCR:

Tribe
Coyote Valley Band of Pomo Indians
Guidiville Band of Pomo Indians
Hopland Band of Pomo Indians
Sherwood Valley Rancheria
Redwood Valley Rancheria
Potter Valley Band of Pomo Indians
Coyote Valley Band of Pomo Indians
Guidiville Band of Pomo Indians
Hopland Band of Pomo Indians
Laytonville Rancheria/Cahto Tribe
Manchester Band of Pomo Indians
Noyo River Indian Community
Pinoleville Band of Pomo Indians
Potter Valley Band of Pomo Indians
Redwood Valley Rancheria
Round Valley Reservation/Covelo Indian Community
Sherwood Valley Rancheria
Cloverdale Rancheria
Yokayo Band of Pomo Indians
Eel River Nation of Sovereign Wailaki
Inter Tribal Sinkyone Wilderness Council
Hopland Band of Pomo Indians

With the exception of the Sherwood Valley Rancheria, no comments have been received. The Sherwood Valley Rancheria did call and reserved their comments.

California Historic Resource Information System (CHRIS)

The California Historical Resources Information System (CHRIS) consists of the California Office of Historic Preservation (OHP), nine Information Centers (ICs), and the State Historical Resources Commission (SHRC). The OHP administers and coordinates the CHRIS and presents proposed CHRIS policies to the SHRC, which approves these polices in public meetings. The CHRIS Inventory includes the State Historic Resources Inventory maintained by the OHP as defined in California Public Resources Code §5020.1(p), and the larger number of resource records and research reports managed under contract by the nine ICs. The CHRIS maintains a wide range of documents and materials relating to historical resources. Pursuant to federal and state law, information within the CHRIS pertaining to historical resources of an archaeological nature is confidential, with access to and release of said information determined under criteria set forth in the CHRIS Operations Manual (State of California, 2016).

Discovery of Human Remains (PRC Code Section 7050.5)

Public Resources Code Section 7050.5 establishes a mandatory process to follow whenever human remains are found outside a cemetery. All excavation or similar work in the vicinity is required to halt. The County Coroner will be contacted to determine if the cause of death must be investigated. If the coroner determines that the remains are of Native American origin, it is necessary to comply with State laws regarding the disposition of Native American burials, which fall within the jurisdiction of the California Native American Heritage Commission (NAHC) (Public Resources Code, Section 5097). In such cases, the coroner will contact NAHC. The descendants or most likely descendants of the deceased will be contacted, and work will not resume until they have made a recommendation to the landowner or person responsible for excavation work with direction regarding appropriate means of treatment and disposition, with appropriate dignity, of the human remains and any associated grave goods, as provided in Public Resources Code, Section 5097.9

Mendocino County Archaeological Ordinance

The Mendocino County Archaeological Ordinance adopted in 1976 (Mendocino County Code, Chapter 22.12.010) was created in order to protection cultural resources for the economic and cultural life of the County. The County Archaeological Commission was established under MCC Section 22.12.040 as a part of the Mendocino County General Plan in 2009. The Commission conducts project reviews under CEQA and provides recommendations for mitigation regarding archaeological resources.

The Mendocino County Archaeological Ordinance also provides direction for the public regarding their obligations in the event that archaeological resources are found inadvertently during excavation. In summary, the Mendocino County Archaeological Ordinance requires that all work be discontinued within 100 feet of the discovery and that the Director of Planning and Building Services shall be notified. The Director and the Archaeological Commission then determine whether the site is one of archaeological significance and may order a 30-to-45-day halt to construction to allow time for additional site characterization, excavation of sensitive materials and other reasonable related activities.

All activities carried out by permittees pursuant to the proposed MCCR will be subject to this requirement. The Lead Agency determines if the Mendocino County Archaeological Ordinance fulfills the requirement pursuant to Public Resources Code Section 15064.5(f) to make provisions for historical or unique archaeological resources accidentally discovered during construction.

DISCUSSION

Cultural resources include historic buildings and structures, historic districts, historic sites, prehistoric and historic archeological sites and other prehistoric and historic objects and artifacts, as well as known Native American gathering sites for culturally significant materials. Paleontological resources include vertebrate, invertebrate, or plant fossils (County of Mendocino, 2009).

Mendocino County has a long history of occupation and use by Native American groups. The Russian and Eel Rivers and other watercourses, valleys and coastal areas provided a rich and varied habitat for Native Americans who have occupied the area for over 6,000 years. At the time of Euroamerican contact (ca. 1769), Central Pomo, Northern Pomo, Coast Yuki, Yuki, Huchnom, Cohto, Sinkyone and Wilaki occupied the area encompassed by current Mendocino County (County of Mendocino, 2009).

Known Cultural Resources in Mendocino County

Current archaeological and historical investigations identified 4,520 cultural resources (i.e. prehistoric sites, historic sites and historic buildings/structures) in Mendocino County (County of Mendocino, 2009). Approximately twenty-five percent (25%) of the cultural resources are properties that are listed in the Office of Historic Preservation Directory of Properties for Mendocino County dated September 7, 2007. According to the Mendocino General Plan, thirty-six (36) properties are listed in the National Register of Historic Places (NRHP) and the California Register of Historic Places (CRHP), all of which are within cities or the Coastal zone, therefore, will not be affected by the MCCR.

Known Paleontological Resources in Mendocino County

A search of the University of California Museum of Paleontology (UCMP) collections database identified 193 paleontological resources in Mendocino County (approximately 11 have been added since the General Plan EIR was prepared in 2008). The majority of the resources were found in Coastal areas, which are not affected by the proposed MCCR.

Cultural Resources a), b), c), d), and e)

Consultation pursuant to AB 52 has been initiated with regard to the proposed MCCR. No response has been received to indicate that the project may have an effect on tribal or other cultural resources. No site specific activity is authorized by the proposed MCCR.

The requirements of State law and local ordinances as described above will apply to any activities carried out pursuant to the proposed project and provide adequate protection of resources and guidance to property owners and others in the event of the unexpected or inadvertent discovery of resources during grading or similar activities.

Therefore, no significant effect will occur.

MITIGATION MEASURES

No mitigation required.

FINDINGS

The Proposed Project will have a **Less than Significant Impact** on Cultural Resources.

VI. GEOLOGY AND SOILS. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☒	☐
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
c) 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?	☐	☒	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) 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?	☐	☐	☒	☐

Thresholds of Significance: The project would have a significant effect on geology and soils if it would expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides; result in substantial soil erosion or the loss of topsoil; 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; be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property; or 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.

REGULATORY SETTING

Alquist-Priolo Earthquake Fault Zoning Act

California's Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) (PRC Section 2621 et seq.), originally enacted in 1972 as the Alquist-Priolo Special Studies Zones Act and renamed in 1994, is intended to reduce risks to life and property from surface fault rupture during earthquakes. The Alquist-Priolo Act prohibits the location of most types of structures intended for human occupancy across the traces of active faults and strictly regulates construction in the corridors along active faults (earthquake fault zones).

It also defines criteria for identifying active faults—giving legal weight to terms such as "active"—and establishes a process for reviewing building proposals in and adjacent to earthquake fault zones.

Under the Alquist-Priolo Act, faults are zoned and construction along or across them 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 referring to approximately the last 11,000 years). A fault is considered well-defined if its trace can be identified clearly by a trained geologist at the ground surface, or in the shallow subsurface using standard professional techniques, criteria, and judgment (Bryant and Hart, 2007).

Seismic Hazards Mapping Act

Like the Alquist-Priolo Act, the Seismic Hazards Mapping Act of 1990 (PRC Sections 2690–2699.6) is intended to reduce damage resulting from earthquakes. While the Alquist-Priolo Act addresses surface fault rupture, the Seismic Hazards Mapping Act addresses other earthquake-related hazards, including strong ground shaking, liquefaction, and seismically induced landslides. Its 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 within mapped seismic hazard zones.

Under the Seismic Hazards Mapping Act, permit review is the primary mechanism for local regulation of development. Specifically, cities and counties are prohibited from issuing development permits for sites within seismic hazard zones until appropriate site-specific geologic and/or geotechnical investigations have been carried out and measures to reduce potential damage have been incorporated into the development plans. Geotechnical investigations conducted within Seismic Hazard Zones must incorporate standards specified by California Geological Survey Special Publication 117a, Guidelines for Evaluating and Mitigating Seismic Hazards.

Clean Water Act Section 402 General Permit for Construction and other Land Disturbance Activities (General Order 2010-0014-DWQ)

The CWA is discussed in detail in the Biological Resources Section of this Initial Study. However, because CWA Section 402 is directly relevant to grading activities, additional information is provided herein.

Section 402 of the CWA mandates that certain types of construction activities comply with the requirements of EPA's National Pollutant Discharge Elimination System (NPDES) permitting program. EPA has delegated to the State Water Resources Control Board (SWRCB) the authority for the NPDES program in California, where it is implemented by the state's nine Regional Water Quality Control Boards (RWQCBs).

Dischargers whose projects disturb one or more acres of soil—or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres—are required to obtain coverage under the General Order 2010-0014-DWQ. 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. General Construction Permit applicants are required to prepare a Notice of Intent and a Stormwater Pollution Prevention Plan (SWPPP) and implement and maintain BMPs to avoid adverse effects on receiving water quality as a result of construction activities, including earthwork.

Coverage under the General Permit (General Order 2010-0014-DWQ) is obtained by submitting permit registration documents to the SWRCB that include a risk level assessment and a site-specific SWPPP identifying an effective combination of erosion control, sediment control, and non-stormwater BMPs. The General Permit requires that the SWPPP define a program of regular inspections of the BMPs and, in some cases, sampling of water quality parameters.

Mendocino County 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. Per the Mendocino County Code, grading in excess of five thousand (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 five thousand (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.

DISCUSSION

Mendocino County lies entirely within the Coast Range Geomorphic Province of California and is characterized by northwest trending mountain ranges with elevations ranging from 2,000 to 4,000 feet and intervening valleys ranging from 1,000-1,500 feet in the central part of the County and dropping to 500 feet where the Russian and Eel Rivers leave Mendocino County. The valleys reflect the geologic structures of the region, including the San Andreas Fault and the Maacama Fault. The major geologic units in the County from east to west are the Gualala formation, the Franciscan, the Franciscan Complex, and the South Form Mountain Schist. Mendocino County is located just south of the southern end of the Cascadia Subduction Zone (CSZ). The Gorda Plate, located west of the CSZ, is being subducted beneath the westward over-thrusting continental North American Plate. The Pacific Plate, moves laterally relative to the other two plates. The onshore margin between the Pacific Ocean and the Pacific and North American Plates is the San Andreas Fault, and is located offshore in the northern part of the County and on-shore in the Manchester and Gualala areas of Southern Mendocino County. Five faults or fault zones traverse Mendocino County which are considered potentially active or active: San Andreas Fault; Whale Gulch Fault; Maacama Fault; Round Valley Fault; Etsel Ridge Fault (PMC 2008).

Mendocino County's climate (wet winters and dry summers), mountainous terrain, weak bedrock conditions, and think colluvial mantle all contribute to landslides and erosion in Mendocino County which include earthflows (coherent masses of earth on moderate slopes with gradients of 20-50%), debris flows (masses of soil, rock, and water, and vegetation on steep slopes with gradients of 50 percent or more and soils with limited clay content), and rock falls. The triggering mechanisms for each landslide type includes seismic shaking or water from rainfall, surface, flow, seepage, or artificial means. Landslide mapping by USGS and CGS has been conducted in areas where timber harvesting occurs, but large parts of eastern Mendocino County have not been mapped (PMC, 2008).

In general, instability hazards are based on slope gradient, underlying geologic rock formations, and known landslides. In Mendocino County, the Franciscan Formation and Maacama fault zone have poor slope stability characteristics. In addition, there are several alluvial basins within the County in Willits, Ukiah, and Covelo and along river systems that are susceptible to liquefaction. Expansive soils are also common

throughout the County (particularly near clay-rick Franciscan rocks and in wet basins) and can contribute to soil creep and landslide development (PMC. 2008).

A variety of mineral resources are known to occur throughout Mendocino County, including aggregate (sand and gravel) and hard rock quarry mines (PMC. 2008). The permitted mining operations are subject to the State Mining and Reclamation Act of 1975 (SMARA), which requires sites to be mined according to an approved mining plan and inspection annually to ensure the operation is adhering the approved plan. Upon completion of the operations, permitted mining sites must be reclamation based on the approved reclamation plan that typically includes removal of all equipment and stockpiles, grading to natural contours and revegetation.

There are two general types of soil erosion: geologic and accelerated. While geologic erosion is natural, accelerated erosion is generally influenced by ground disturbing activities such as logging, bulldozing, road construction/use of unpaved roads, overgrazing, or expansion of accelerated lands. Agricultural activities can contribute to increased erosion. The grading and site preparation associated with such activities remove topsoil and expose underlying spoils to erosion from a variety of sources including wind and water.

Sediment from erosion is the number one pollutant impairing North Coast streams. Excess sediment is defined as soil, rock, sand, silt, or clay that is delivered to waters in an amount that could negatively affect aquatic life and water quality. Soil particles have nutrients attached that can add to the nutrient load and contribute to algae blooms. In addition, roads, land development, and site maintenance are all potential contributors to erosion.

Sediment pollutes in numerous ways. It reduces the amount of oxygen available to plants and animals and carries fertilizers and other chemicals into waterways. Once in the stream system, sediment locks gravel together like concrete, preventing salmon and steelhead from making their nests and suffocating eggs from lack of oxygen. It can cause or contribute to flooding, impede stream flow, increase water temperatures, and promote the growth of toxic algae in the summer and fall. Sediment-rich water has more erosive power, increasing bank and streambed damage downstream. As a general rule, steep slopes are more vulnerable to erosion compared to gentle slopes, and bare ground is more likely to erode than vegetated areas. Vegetated areas, particularly those next to a water source, can act as a buffer, slowing runoff and capturing sediment, and preventing it from settling in the stream.

Potential impacts associated with cannabis cultivation on geology and soil resources include the following:

1) Illegal or non-permitted grading of roads, cultivation sites, and/or ponds which may facilitate erosion/delivery of sediment to streams and contribute to slope failure;
2) Development without consideration of subsurface conditions which may facilitate slope failure or the failure of the inadequately constructed road surface or earthen impoundment;
3) Over-grading as a result of non-consideration of site topography, soils, geology, and hydrology;
4) Lack of implementation of erosion and sediment control best management practices to protect water quality;
5) Lack of compliance with slope restrictions; and
6) Unauthorized disposal of large amounts of spent soil near tributaries.

The IS for the Order, closely considered the need for effective measures to address geological and soil science considerations applicable to outdoor cannabis cultivation and related uses. The MCCR applies provisions of the Order—which primarily govern cultivation in excess of 2,000 square feet of canopy and is limited to existing cultivation sites—to cultivation facilities that would be primarily implemented in Phase 2 and Phase 3 of the MCCR(including operations less than 2,000 square feet in size).

Proposed Agriculture Code amendment subsection G of Section 10A.17.110 (Performance Standards of the MCCR), "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, which is set forth in Appendix A to this Chapter". Therefore, cultivation facilities proposed to be implemented under Phase 2 and Phase 3 of the proposed MCCR will be subject to the same standard conditions as Phase 1 (existing) sites.

Consequently, adoption of the proposed MCCR will enable greater application of relevant mitigation for potential impacts concerning geologic issues than would otherwise occur. Implementation of relevant Standard Conditions and BMPs from the Order (see Mitigation Measure BIO-2) will occur under local oversight during permitting and inspections by County staff, in coordination with other state and local agencies including CDFW, NCRWQCB, Mendocino County Environmental Health Division, Mendocino County Planning and Building Department, and others.

Geology and Soils a) i)-iv)

Implementation of the proposed MCCR will occur in three phases. Under Phase 1, operations that can prove their existence as of January 1, 2016 will be permitted in the AG, FL, I1, I2, P1, RL, RR-2, RR-5, RR-10, TPZ, and UR Districts. Under Phase 2, indoor cannabis cultivation operations will be permitted in the industrial (I1, I2, P1) zones only. Under Phase 3, varying types of cannabis cultivation will be allowed in the AG, I1, I2, P1, RL, RR-2, RR-5, RR-10, and UR Districts. Cultivation in AG Districts will be required to meet the standards in the proposed MCCR as well as typical planning and regulatory requirements. Cultivation in most other zoning districts will have the additional requirement to demonstrate through a watershed assessment that adequate water is available for all users, including water necessary to support riparian and related habitat values. The requirements of the watershed assessment are expected to disqualify a substantial proportion of the steeper slopes and hillside terrain outside the AG District.

As previously described, it is not feasible to establish specific existing conditions at every potentially-affected site for a project as extensive as the proposed MCCR. Whether or not one of the project sites to be permitted is located within an Earthquake Fault Zone as defined by the Alquist-Priolo Earthquake Fault Zoning Act will depend on the specific location of the proposed facility and whether any known active or potentially active faults exist on the site. Similarly, the risk of strong seismic ground shaking, seismic-related ground failure (including liquefaction) and landslide is dependent on site-specific conditions. Mendocino County is located within a seismically active region in which very large earthquakes (9.0+) are possible; however, strong seismic shaking is a regional hazard and is not particular to any one project site. The risk of lateral spreading, subsidence, and liquefaction at many sites throughout Mendocino County is also high, but depends on site specific conditions.

The potential for seismic ground shaking, ground failure, and naturally occurring landslides to occur is unavoidable if these conditions are present on a property. However, the risk of people or structures experiencing substantial adverse effects as a result is minor because the primary land use contemplated in the proposed MCCR is agricultural and any structures proposed are ancillary to the primary use and will either be existing/legal residences or otherwise permitted in accordance with the California Building Code. Any new development will be required to comply with the seismic zone standards of the California Building Code. These standards are in place to ensure that structures are designed and built to withstand strong seismic ground shaking.

Therefore, this impact would be less than significant.

Geology and Soils b) and c)

Improper site development or maintenance can result in erosion and transportable sediment and can create or exacerbate unstable features. Improperly conducted soil storage and disposal and improperly sited, constructed, or maintained water storage ponds or surface water impoundments or crossings can exacerbate unstable features or fail catastrophically, causing significant erosion and/or sediment delivery to receiving waters. In addition, irrigation runoff from cannabis cultivation operations can result in sediment and other pollutant transport to receiving waters, and possible exacerbation of unstable features.

Landslides may occur on slopes of 15 percent or less. However, the probability of landslides is greater on steeper slopes that exhibit old landslide features such as scarps, slanted vegetation, and transverse ridges. Activities that may trigger a landslide or exacerbate an existing landslide include the removal of support materials at the toe of a slope, the addition of weight to the top of a slope, or the addition of water into the slope's subsurface. Excavation or grading at toe slopes, the addition of weight such as spoil piles or irrigation ponds at the top of slopes, and the diversion of water into the subsurface of slopes may occur on existing sites. The Order includes requirements to remedy unstable conditions on existing sites and to mitigate the exposure of people or structures to potential substantial adverse effects related to landslides.

Work associated with cleanup of an existing site may involve re-grading of fill prisms, removal of fill from watercourses, construction of retaining walls for soil stabilization, upgrading of stream crossings, or reshaping cutbacks. The Order requires that cleanup plans be prepared by a qualified professional and consider the presence and location of identifiable existing landslides and slopes which may become unstable. In addition, the Order requires the removal of structures or drainage features that are located on, or that drain into, unstable features. Further, Order requires that irrigation runoff be controlled so that it does not exacerbate unstable features or conditions. Proper siting, design, and monitoring of relevant improvements by a qualified professional will minimize the potential impacts of remediation/cleanup activities to less than significant levels. New sites permitted in Phase 3 of implementation of the proposed MCCR will be subject to the same requirements of the Order.

The Order requires the following in the siting, design, and monitoring of project features to minimize the impact to public safety:

1) If a site is located in an Alquist-Priolo Earthquake Fault Zone, or an area with substantial evidence of a known fault, the siting, design, and monitoring of site features will consider fault rupture hazard to minimize the potential impact to public safety;
2) The siting, design, and monitoring of site features will consider hazards associated with strong seismic ground shaking and seismic-related ground failure, including liquefaction; and
3) Water storage facilities shall be properly located and designed to minimize failure potential and catastrophic discharge to surface waters.

There may be situations resulting from implementation of the proposed MCCR where portions of a given site, whether temporarily or permanently, contain exposed bare soil or disturbed soil and that are therefore prone to erosion or loss of topsoil, including:

1) Cleanup/remediation activities conducted as part of Phase 1 implementation required to bring existing sites into compliance which may involve moving the cultivation site to comply with permit requirements, regrading or expanding of the site, and addressing illegal water impoundments;
2) Construction activities associated with Phase 3 implementation and development of sites in the approved zoning districts which may include removing vegetation, moving and filling ground material, and moving heavy equipment on-site and off-site; and
3) Ongoing operations of cultivation facilities in all three implementation phases.

The Order includes requirements for implementation of appropriate BMPs to prevent and minimize wind and water erosion of soils. These measures have been incorporated as Mitigation Measure BIO-2. Relevant BMPs to this discussion include:

1) Installation of adequate road ditch relief drains or rolling dips only where necessary since frequent routine grading can cause the ditch to erode;
2) Use of sediment control devices such as check dams or sand bag barriers when necessary to disperse ditch water, which would otherwise cause further erosion; and
3) Compaction and contouring of stored soil spoil piles to mimic natural slope contours, which reduces the potential for fill saturation and failure.

In addition, the Order recognizes that there may be situations when remediation/cleanup/restoration activities are located on a geologic unit or soil that is unstable, or that could become unstable as a result of the cleanup activities (such as removing fill from a creek and having it collapse and wash downstream). To mitigate these potential impacts, the Order includes the following:

1) Resource protection and cleanup plans will be developed by a qualified professional;
2) Resource protection and cleanup plans shall consider geologic units or soils that are unstable or that could become unstable and avoid them if possible; and
3) Appropriate mitigation measures will be implemented if avoidance of unstable geologic features is not possible.

Proper implementation, inspection, and maintenance of the BMPs included in the Order should prevent excessive erosion or the substantial loss of topsoil. The management measures required by the Order to site cultivation facilities on a single geologic unit and not on soils that are unstable or could become unstable as a result of the project, significantly reduce the potential for on-site or off-site landslide, subsidence, liquefaction, or collapse.

Although the Order is applicable only to cultivation sites required to establish and maintain enrollment in Tier 1, 2, and 3 per the proposed Agriculture Code amendments in subsection G of Section 10A.17.110 (Performance Standards of the Mendocino County Medical Cannabis Cultivation) of the MCCR, "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, which is set forth in Appendix A to this Chapter" (or Standard Conditions Applicable to All Dischargers). Cultivation facilities proposed to be implemented under Phase 2 and Phase 3 of the proposed MCCR will be subject to the same standard conditions as Phase 1 (existing) sites.

Therefore, the impact is less than significant with mitigation incorporated (refer to Mitigation Measure BIO-2).

Geology and Soils d)

Building permit review typically includes evaluation of soils associated with foundation design. Expansive soils that could create substantial risks to life or property will be addressed through the Building Permit process. However, there may be situations in which activities conducted as part of remediation/cleanup/restoration activities on existing sites involve expansive soils. These types of activities may involve repairs to features such as road prisms, water storage pads or ponds, and/or swales or stream crossings with varying levels of damage caused by expansive soils. Existing cultivation sites requiring this level of cleanup will be enrolled pursuant to the Order under which the following management measures

(intended to reduce the associated risk of expansive soils on life and property) will be required as appropriate:

1) Site-specific water resource protection plans and cleanup plans will be prepared by a qualified professional;
2) The water resources protection plan shall consider expansive soils and include measures to minimize significant damage resulting from expansive soils if applicable;
3) Management measures including the removal of expansive soil, replacement with non-expansive fill, and lime treatment of expansive soil; and
4) Water storage facilities shall be properly located and designed to minimize failure potential and catastrophic discharge to surface waters.

These existing measures will minimize the impacts of expansive soils to less than significant levels. Therefore this impact would be less than significant.

Geology and Soils e)

Septic systems need to be appropriately sited and sized and have the correct number of leach lines to be effective and protective of human health and natural resources. Failure to do so has the potential to destabilize soils and result in contamination representing a serious threat to human health and the environment.

Remediation, cleanup, and restoration activities at existing sites under Phase 1 of the proposed MCCR and the development of new sites under Phase 2 and Phase 3 implementation may require the installation of septic tanks or alternate wastewater disposal systems on individual sites. Phase 2 cultivation facilities will only be located in industrial zoning districts, the majority of which will be served by public water and sewer, and are, therefore, less of a concern. For cultivation sites developed under Phase 3 implementation, each septic system will be required to be sited, designed, and constructed in accordance with County rules and regulations regarding soils, siting, and slope. In addition, existing and new cultivation facilities will be required to comply with the SWRCB's Onsite Wastewater Treatment System (OWTS) policy. Because the siting and design of wastewater disposal systems is governed by other existing requirements or policies, and will be determined on a case-by-case basis, the effect of inadequate soils on wastewater disposal is determined to be less than significant.

MITIGATION MEASURES

Mitigation is incorporated through the implementation of Mitigation Measure BIO-2.

FINDINGS

The Proposed Project will have a **Less than Significant Impact with Mitigation Incorporated** on Geology and Soils.

VII. GREENHOUSE GAS EMMISSIONS. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions (GHG), either directly or indirectly, that may have a significant impact on the environment?	☐	☒	☐	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☒	☐	☐

Thresholds of Significance: The project would have a significant impact on Greenhouse Gas Emissions if it would generate greenhouse gas emissions (GHG), either directly or indirectly, that may have a significant impact on the environment; or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

REGULATORY SETTING

California's Legislature established the Air Resources Board (ARB) in 1967 to:

1) Attain and maintain healthy air quality.
2) Conduct research into the causes of and solutions to air pollution.
3) Systematically attack the serious problems caused by motor vehicles, which are a major cause of air pollution in the State (Air Resources Board, 2015).

The Federal Clean Air Act (FCAA) is the federal law passed in 1970, and last amended in 1990, which forms the basis for the national air pollution control effort. Basic elements of the act include stationary source emissions standards and permits. The ARB does not have authority to issue permits directly to stationary sources of air pollution. Primary responsibility for permitting all sources, except vehicular sources, rests with the local and regional air pollution control authorities known as Air Pollution Control Districts (APCD) or Air Quality Management Districts (AQMD).

Mendocino County is located with the Mendocino County Air Quality Management District (MCAQMD). The mission of the MCAQMD is to protect and manage air quality, an essential public resource upon which the health of the community depends as required by the FCAA. The MCAQMD has adopted a Particulate Matter (PM) Attainment Plan. The plan includes a description of local air quality, the sources of local PM emissions, and recommended control measures to reduce future PM levels. Projects are reviewed for compliance with the PM Attainment Plan; however, the PM Attainment Plan does not specifically address the cumulative effect of GHG emissions.

The framework for regulating GHG emissions in California is described under Assembly Bill (AB) 32. In 2006, the California Global Warming Solutions Act (AB 32) definitively established the State's climate change policy and set GHG reduction targets (health and Safety Code §38500 et sec.), including setting a target of reducing GHG emissions to 1990 levels by 2020. AB 32 requires local governments to take an active role in addressing climate change and reducing greenhouse gas (GHG) emissions. The MCAQMD does not have rules, regulations, or thresholds of significance for non-stationary or construction-related GHG emissions.

As noted in the project description, there is no reliable data to indicate how many existing cultivation operations will seek permits in Phase 1, or how many applications will be received for new operations in Phase 2 and Phase 3. As such, calculating a numeric estimate of the generation of greenhouse gasses is overly speculative. However, there is sufficient information to consider the sources of GHG emissions for

typical indoor and outdoor operations and to identify available measures to reduce overall emissions on a project by project basis.

DISCUSSION

Medical cannabis cultivation may cause direct and indirect emissions of GHG from any of the following sources:

1) Portable diesel and gasoline generators used on a stationary basis operating for extended periods of time with local air quality impacts and associated high emissions;
2) Vehicle emissions from water delivery, fuel delivery, and transportation of people and materials to the site and transport of the harvest for sale and processing;
3) Burning of slash from site clearance and burning of agricultural waste;
4) Loss of a "carbon sink" and increase in emissions from the clearing and burning of trees and brush to accommodate new or relocated cultivation sites; and
5) Off-site emissions for electricity generation for heating, cooling and lighting of indoor artificial light and mixed-light operations.

The proposed MCCRs include the following provisions which are expected to reduce GHG impacts:

1) Prohibits new cultivation operations in TPZ and FL Districts, which are typically found farthest from urban centers and with few available paved roads increasing vehicle miles traveled;
2) Establishes maximum cultivation areas which limit the scale of potential emissions from individual operations;
3) Prohibits the use of a generator as a primary source of power;
4) Establishes a maximum lighting capacity for indoor artificial and mixed-light cultivation operations; and
5) Requires all cultivation operations to identify a water right sufficient to irrigate the cultivated area, reducing the potential to rely on water delivery.

Greenhouse Gas Emissions a)

The baseline condition includes substantial GHG emissions from existing cannabis cultivation throughout Mendocino County. In Phase 1, GHG impacts are expected to be modest as existing, unregulated, and unpermitted sites are inspected and practices to improve the sites are implemented pursuant to the provisions of the proposed MCCR and other federal, state and local regulations. The restoration of existing cultivation sites proposed to be relocated on-site or off-site in Phase 1, as described in Mitigation Measure BIO-3, the provisions of the restoration plan, consistent with the Order, will help to restore the natural function of forestland as a carbon sink.

In all phases, the cultivation of medical cannabis has the potential to generate substantial emissions of GHG. Existing regulations, such as Corporate Average Fuel Economy (CAFE) standards and other state and federal requirements to improve transportation and building energy efficiency and to reduce GHG emissions from energy production, will reduce such emissions. Additionally the incorporation of Mitigation Measures AIR-1 (require consultation with the MCAQMD) and AIR-2 (Prohibits burning of excess cannabis plant materials), will further assist in limiting GHG emission from cultivation related development.

Greenhouse Gas Emissions b)

The Lead Agency has not adopted any County-specific Climate Action Plans, policies or regulations which would be violated by the proposed MCCR. If all feasible measures to reduce GHG emissions from

permitted cultivation operations are implemented, the project will not interfere with adopted goals to reduce overall GHG emissions on a statewide basis.

GHG regulations are in continuous development at all levels of government and are likely to become more restrictive over the period in which the proposed MCCR is effective. There is a substantial potential that future regulations may affect agricultural practices, including the cultivation of medical cannabis. Ongoing consultation with regulatory agencies such as MCAQMD, the Mendocino Council of Governments (MCOG) will be necessary to avoid future conflicts.

MITIGATION MEASURES

Mitigation is incorporated through Mitigation Measures AIR-1, AIR-2, and BIO-3.

FINDINGS

The Proposed Project will have a **Less Than Significant Impact with Mitigation Incorporated** on Greenhouse Gas Emissions.

VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☒	☐	☐
e) 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, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized area or where residences are intermixed with wildlands?	☐	☒	☐	☐

Thresholds of Significance: The project would have a significant impact on hazards and hazardous materials if it were to create a significant hazard to the public or the environment through reasonably foreseeable upset and 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 one-quarter mile of an existing or proposed school; or be located on a site which is included on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment. In addition, for projects 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, would the project result in a safety hazard for people residing or working in the project area; if the project is within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area. Finally, the project would have a significant impact to hazards and hazardous materials if it would impair the implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan; or expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized area or where residences are intermixed with wildlands.

REGULATORY SETTING

Clean Water Act

As discussed in previous sections, Section 402 of the CWA (33 U.S.C. Sections 1251 – 1376) established the National Pollutant Discharge Elimination System (NPDES) permitting program for the discharge of any pollutant (except for dredged or fill material which is otherwise regulated) into waters of the United States. In Mendocino County, this permit program is administered by the NCRWQCB. For proposed projects with a footprint greater than 1 acre, it is necessary to obtain an NPDES General Construction Permit prior to any construction activities. One requirement for an NPDES permit is the development and implementation of a SWPPP that defines the site-specific BMPs that will be implemented to prevent the discharge of pollutants and sediments into receiving waters.

State agencies accept delegation of federal responsibility for the administration of hazardous materials and hazardous waste management. The Porter-Cologne Act allows the SWRCB and the State's nine RWQCBs to accept implementation responsibility for the CWA. The Hazardous Waste Control Act of 1977, and recent amendments to its implementing regulations, have given the California Department of Health Services the lead role in administering the Resource Conservation and Recovery Act (RCRA) program.

Hazardous Waste Control Act

The Hazardous Waste Control Act created the State Hazardous Waste Management Program. Hazardous wastes are defined as waste products with properties that make them dangerous or potentially harmful to human health or the environment. They can be the byproducts of manufacturing processes or simply discarded commercial products, like cleaning fluids or pesticides. The act is implemented by regulations set forth in 26 CCR, which describes the following required parameters for the proper management of hazardous waste: identification and classification; generation and transport; design and permitting of recycling, treatment, storage, and disposal facilities; treatment standards; operation of facilities and staff training; and closure of facilities and liability requirements.

These regulations list more than 800 materials that may be hazardous, and the regulations establish criteria for identifying, packaging, and disposing of the materials. Under this act and 26 CCR, a generator of hazardous waste must complete a manifest that accompanies the waste from the generator to the transporter to the ultimate disposal location. Copies of the manifest must be filed with Department of Toxic Substances Control (DTSC).

State and Federal Occupational Safety and Health Administration Regulations

Pursuant to the Occupational Safety and Health Act of 1970, the federal Occupational Safety and Health Administration (OSHA) has adopted numerous regulations pertaining to worker safety, contained in CFR Title 29. These regulations set the standards for safe work practices and work places, including standards relating to the handling of hazardous materials. The California Occupational Safety and Health Administration (Cal-OSHA) assumes primary responsibility for developing and enforcing standards for safe workplaces and work practices within the state. At sites known to be contaminated, a site safety plan must be prepared to protect workers. The site safety plan establishes policies and procedures to protect workers and the public from exposure to potential hazards at the contaminated site.

Cal-OSHA regulations are generally more stringent than federal OSHA regulations and are detailed in CCR Title 8.

Mendocino County Stormwater Management Program

The unincorporated areas in the vicinity of the City of Ukiah and the City of Fort Bragg are within the Mendocino County Municipal Separate Storm Sewer System (MS4). In those areas the County's stormwater management program require stormwater management BMPs (such as fiber rolls, jute matting, coverage of loose materials, silt fencing and other mechanisms to prevent erosion and sedimentation from construction site from exiting the construction site.

Existing Conditions

As previously discussed, existing cultivation is considered part of the project baseline conditions. Existing conditions in Mendocino County likely include thousands of cultivation sites, many that use and manage hazardous materials without any direct environmental regulatory oversight. To address this gap, the Order includes conditions requiring proper storage, handling, use, and disposal of chemicals, which are intended to reduce the potential for release of hazardous materials into the environment. Off the grid cultivation of cannabis typically relies on large generators to power lights and exhaust fans. Improperly contained fuels and other petroleum products; leaks and spills associated with their use and/or storage, can lead to contaminated soil and potential toxicity to public health and the environment. The Order coupled with the MCCR and State regulations that are currently being developed provide a pathway to compliance for operators who conform to the Standard Conditions, Applicable to all Dischargers.

Certain common activities conducted at cultivation sites have the potential to result in the release of hazardous substances as a result of routine transport, use, or disposal of hazardous materials. Activities conducted as part of remediation/cleanup/restoration activities also provide a potential threat. Various materials will likely be transported to project sites including gasoline and diesel to fuel equipment, hydraulic fluid associated with equipment operators and machinery, asphalt and oils for road surfacing, surface stabilizers, acids, solvents, degreasers, corrosives, antifreeze, hydraulic fluids and oils; and cementious materials. These materials could leak during transport or discharge to land or surface waters if left unprotected from wind or rain or if inappropriately managed.

Relocation or demolition of inappropriately sited structures could result in the release of hazardous materials including, but not limited to, treated wood waste, lead-based paints, and asbestos. Any hazardous waste generated from the demolition of structures or impoundments would need to be disposed of in designated hazardous waste landfills. Finally, cultivation sites often use and manage fertilizers, herbicides, and pesticides. Compliance activities may require the relocation of hazardous products to areas that are more protective of water quality and other measures to reduce the potential for accidents or spills during site relocation or remediation/cleanup/restoration as well as during ongoing operations.

Recognized environmental concerns associated with hazards and hazardous materials as related to cannabis production include the following:

1) Use of petroleum products, fertilizers, and various pesticides;
2) Use of volatile compounds (pressurized gases such as propane or solvents) for cannabis manufacturing processes with associated risk of explosion or chemical release;
3) Improper storage of hazardous materials and/or storage above minimal amounts with no hazard response plan;
4) Fire risk associated with the operation of gasoline powered equipment in close proximity to dry vegetation;

5) Close interface with wildland areas and non-compliance with Fire codes and State Responsibility Area regulations. No sprinkler systems or defensible space;
6) Improper use and storage of petroleum products, fertilizers, herbicides, pesticides, automotive and machine-related fluids (acids, solvents, degreasers, corrosives, antifreeze, and hydraulic fluid), and construction materials (asphalt and oils, cementitious materials);
7) Improperly sited or hazardous water tanks; and
8) Improper disposal of petroleum products, fertilizers, herbicides, pesticides, automotive and machine-related fluids and construction materials.

Cannabis cultivation facilities generate wastes that can be classified as solid waste, compostable organic waste, or dangerous waste. It is the responsibility of the business owner/operator to evaluate their waste to determine its classification and proper management. If a waste product is determined to be a dangerous waste, specific requirements for storage and disposal will apply.

Understanding the environmental risk posed by pesticides, fungicides, and rodenticides requires an understanding of the exposure paths of the various organisms that could be exposed, with consideration as to the location where the various products would be applied. Users are required to follow the label approved by the California Department of Pesticide Regulation (DPR) regarding the type of products appropriate for particular uses, application methods and timing, worker safety, and environmental protections. Like any tool, these products must be used properly. At a minimum, users should be familiar with:

1) The types of wildlife and vegetation present, including endangered species;
2) The relative risk posed by the herbicide to different wildlife and plant taxa that may be present and the anticipated exposure scenarios;
3) The relative persistence of the herbicide in the environment, primarily in soil; and
4) The mobility of the herbicide in runoff water. Offsite movement in surface water and leaching to groundwater are both primarily influenced by the herbicide's water solubility and its tendency to adsorb to soils.

It should be noted that the types of chemicals commonly used in agricultural settings may not be appropriate for use in wildlands, and BMPs regarding appropriate application should vary based on site conditions (slope, species present, etc.) and proximity to wildland interface and waterways. Typically, EPA evaluates the product's risk to aquatic and terrestrial wildlife before the product may be registered for use in wildlands. Use of chemical products in wildlands can be mitigated by following the BMPs included Mitigation Measure BIO-2.

Pesticides and Fungicides

There are many plant diseases that affect the cannabis industry. Cannabis pests vary according to variety or "cultivar," whether the plants are grown indoors or outdoors, and where the plants are grown geographically. Primary pest problems associated with indoor cannabis cultivation include:

1) Abiotic disorders;
2) Pathogens (powdery mildew, Pythium root rots):
    a. Conditions that contribute to mildew include high humidity, moderate temperature, and still air. Cannabis growers combat this condition through appropriate spacing of plants and the use of fungicides and fans; and
3) Arthropods (Two spotted spider mite, Hemp russet mite, rice root aphid, fungus gnats).

The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) is a federal law that set the basic system of pesticide regulation in the United States. US EPA regulates the use of pesticides under provisions of law defined by FIFRA but has yet to establish a crop category for cannabis under pesticide laws because cannabis remains classified as a schedule 1 controlled substance under federal law.

Per MCCO section 10A.17.110.(L), under California law the only pesticide products not illegal to use on cannabis are those that contain an active ingredient labeled for a broad enough use to include use on cannabis, or those that are exempt from FIFRA section 25(b) and California Code of Regulations, Title 3, Section 6147.

Rodenticides

There are rodenticides that are not DPR-restricted materials or federally restricted use pesticides *and* are registered for a broad enough use to include use in or around cannabis cultivation sites. If using a rodenticide the operator should always read and follow the label and check to make sure that the target rodent is listed. Second-generation anticoagulant products are DPR-restricted materials not labeled for field use should never be used in or around cannabis cultivation sites. (DPR, 2015)

Solid Waste

Solid waste management is regulated at the local level by county health departments. Some active and abandoned cannabis cultivation sites are characterized by the illegal dumping or abandoning of solid waste or garbage. The types of waste typically left behind include (but are not limited to)*: Irrigation tubing (often miles of it), water hoses, tarps, fertilizers, pesticides, rodenticides, firearms, toxic chemicals, butane canisters,* caution tape (to warn off trail hikers), seedling cannabis plants, and plastic starter trays.

Cannabis Plant Waste

Common practice is for cannabis cultivators to burn or otherwise dispose of cannabis plant waste. The BMPs presented in the Order No. 2015-0023 recommend that plants be composted on-site.

Fluorescent Bulbs (or other bulbs containing mercury)

Some lamps commonly used at cannabis cultivation facilities contain mercury and other metals. Such lamps include fluorescent, compact fluorescent, high-pressure sodium, mercury vapor and metal halide lamps. According to the EPA, testing of these lamps established that a high percentage of the lamps exhibit the toxicity characteristic for metals, particularly mercury. If the material in the lamps exceeds the toxicity level for mercury or any other heavy metals, used or waste lamps are regulated as a hazardous waste. Used or waste bulbs that are hazardous waste must be appropriately recycled, sent off for disposal as a hazardous waste, or sampled and tested to prove that the light bulbs do not exceed the quantity of mercury and other metals that would make them hazardous waste. Municipal solid waste landfills in California are not permitted to accept any quantity of non-residential hazardous waste for disposal. Waste lamps that are classified as hazardous waste must be brought to a permitted hazardous waste treatment, storage, or disposal facility. Hazardous waste lamps that are disposed of in the trash can result in an enforcement action with associated administrative penalties.

Lighting materials used in indoor cannabis cultivation have environmental risks if not properly managed for disposal. High-intensity discharge (HID) bulbs are not recyclable and each bulb contains approximately 30

mg of mercury and other toxins. Mercury is a neurotoxin, and is recognized as extremely toxic, particularly in gaseous form. A cannabis association in Washington (Okanogan Cannabis Association) estimated the potential for 30 mg of mercury pollution per kg of cannabis product if proper disposal is not practiced. (Moberg and Mazzetti, 2013).

Petroleum Leaks and Spills

Gas, diesel and oil are all highly toxic to aquatic life and careless handling of these products around cannabis cultivation sites is potentially problematic. Very small amount of these substances can kill aquatic invertebrates, coat the stream bottom, contaminate large expanses of soil, and pollute the drinking water supply. For example, just *one* litre of *oil* can *contaminate one* million litres of water (Oil Care, 2015). It is highly undesirable to have these substances leaching in to the soil and consequently introduced into ground water.

Hazards and Hazardous Materials a) and b)

The potential impacts associated with hazardous materials apply to Phase 1, 2, and 3 of the proposed project and to indoor as well as outdoor and mixed-light cultivation sites.

Implementation of the proposed project does have the potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. During construction, fuel and small amounts of solvents, paints, oils, grease and caulking would be transported, used, and disposed in compliance with applicable regulations such as the Resource Conservation and Recovery Act (RCRA), Department of Transportation Hazardous Materials Regulations, and Mendocino County Office of Emergency Services Certified Unified Program Agency (CUPA) regulations. Compliance with regulations (which is assumed by CEQA) and implementation of these BMPs would minimize hazards to the public and environment and would reduce this impact to a less than significant level.

As discussed, it is common practice for cannabis cultivation facilities to consistently use hazardous materials including petroleum products, fertilizers, herbicides, and pesticides—as well as automotive and machine-related fluids and products including: acids; solvents; degreasers; corrosives; antifreeze; hydraulic fluid; materials associated with road construction and site improvements including asphalt and oils for road surfacing; and cementitious materials. If improperly stored or utilized, all of these materials can result in potentially significant environmental effects.

Pursuant to the Order, the NCRWQCB has applied applicable "standard conditions to address impacts from the storage and use of hazardous materials at cultivation sites through the implementation of measures and protocols to ensure that potential impacts (resulting from careless or unauthorized use or storage) are avoided. These include the following requirements:

1) Any pesticide or herbicide product application be consistent with product labeling and be managed to ensure that they will not enter or be released into surface or ground waters (Order section I.A.8);
2) Petroleum products and other liquid chemicals be stored in containers and under conditions appropriate for the chemical with impervious secondary containment;
3) Implementation of spill prevention, control, and countermeasures (SPCC) and have appropriate cleanup materials available onsite (Order section I.A.9);
4) Standard construction BMPs be used during cleanup and restoration activities; and
5) Plans must be developed for any on-site water quality management or remediation/cleanup/restoration activities.

In the IS prepared for the Order, the NCRWQCB concludes:

> "By increasing containment measures, requiring spill prevention measures, requiring appropriate application of chemicals (e.g. application of pesticides consistent with product labeling requirements), implementation of standard construction BMPs, and development of water resource protection plans and cleanup plans, the Regional Water Board anticipates that efforts to comply with the Order would generally reduce routine transport and use of chemicals. The potential risks of exposure to hazardous materials would be small, especially with proper handling and storage procedures. Therefore, the potential for the Order to 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 accident conditions involving the release of hazardous materials into the environment is mitigated to a less than significant level."

Phase 1 of the MCCR involves the permitting of operations in existence as of January 1, 2016; conditions in Mendocino County include an unknown number of cannabis cultivation facilities. As described in the Project Description, these activities are considered a part of the project baseline. Phase 1 implementation of the proposed project would bring these sites into compliance. The proposed MCCR applies the Standard Conditions of the Order to cannabis cultivation sites implemented under Phase 2 and Phase 3 and Mitigation Measure BIO-2 requires that BMPs specified in the Order be applied to all cultivation sites permitted under the MCCR.

By widening the scope and applicability of standard conditions and BMPs associated with the Order (through Mitigation Measure BIO-2) to operations smaller than 2,000 square feet of cultivation area and to Phase 2 and Phase 3 facilities, the impacts from Hazards and Hazardous Materials are further reduced. Compliance with federal, state, and local regulations, in combination with BMPs, would ensure that all hazardous materials are used, stored, and disposed properly, which would minimize potential impacts related to a hazardous materials release during the construction, remediation/cleanup/restoration, or operational phases of a specific project. Based on these regulatory requirements, with mitigation incorporated, there will be a less than significant impact.

Hazards and Hazardous Materials c)

The proposed MCCR includes a Special Use Setback that is based on the State's Alcoholic Beverage Control setbacks from youth oriented and community facilities (e.g., 1,000 feet from schools). The County's proposed setback mirrors the State's requirements and will apply to all types of cannabis cultivation sites including outdoor, indoor with artificial light, and mixed-light. Although the 1,000 foot buffer falls just short of one-quarter-mile from a school, the cultivation activities would not routinely involve emitting hazardous—or acutely hazardous—materials, substances, or waste.

While the permitting and potential expansion of cannabis cultivation facilities does have the potential to emit some ozone precursors including diesel particulate and sulfur dioxide associated with diesel-fueled backup generators (see Air Quality section for more information), the amount of ozone or sulfur dioxide that would potentially be emitted are essentially ozone precursors that would not be a potential threat to human health, particularly given the 1,000 foot setback requirements. Therefore, there would be a less than significant impact.

Hazards and Hazardous Materials d)

It is not expected that existing or proposed cultivation operations will include locations from the list of hazardous materials sites compiled pursuant to Government code section 65962.5. If an existing site is found to be contaminated during site inspections, an investigation will be opened to determine the extent of the contamination. These types of investigations are routinely handled by the Mendocino County Department of Environmental Health.

Under the proposed MCCR, medium and large outdoor cultivation sites will not be permitted in the industrial zoning district, however indoor and mixed-light will be. Industrial sites are frequently developed on abandoned mill sites from the timber industry or other high impact manufacturing facilities that may have some degree of soils contamination. Cannabis cultivation on industrial zones will likely use exclusively imported soils so there is little chance of existing subsurface contamination to impact the cultivation operation or those working at the site.

To help ensure that the cultivation site will not be located on hazardous materials site identified pursuant to Government Code Section 65962.5 and, as a result, could create a significant hazard to the public or the environment, Mitigation Measure HAZ-1 is proposed. This requires the MCCR to be amended to include "Cortese List" database search results as part of the application materials for a cultivation site. If the site is listed on the "Cortese List" it must be demonstrated that the cultivation is in compliance and compatible with any cleanup and or abatement order that is established for the site.

With mitigation incorporated, a less than significant impact would occur.

Hazards and Hazardous Materials e) and f)

While there is the potential for cannabis cultivation facilities to be permitted within an airport land use plan, or within two miles of a public airport or public use airport, the heights of structures associated with the operations will be too low to affect airport hazards. Therefore there would be no impact.

Hazards and Hazardous Materials g) and h)

A high number of the areas where cultivation would be allowed under the proposed MCCR interface with wildlands. Under current baseline conditions, fires related to cultivation pose an increased hazard to first responders including but not limited to: unknown hazardous chemicals including pesticides, fuel (often stored in improper containers), large quantities of butane, improperly constructed (non-complying) buildings, hostile occupants, and weapons and ammunition. In addition, there are often poorly constructed roads and watercourse crossings not suited for fire-fighting equipment which may hamper ingress and egress during emergencies. Possible failure of roads and crossings expose first responders and equipment to injury. Lack of road and address signage results in increased emergency response time (CAL FIRE Early Consultation letter dated September 15, 2016). These current conditions conflict with Fire Safe standards specified in Public Resources Code 4290.

For any existing or new cultivation site to be permitted, the applicant must demonstrate compliance with Public Resources Code 4290. These requirements include but are not limited to:

1) Road standards for fire equipment access;
2) Standards for signs identifying streets, roads, and buildings;
3) Minimum private water supply reserves for emergency fire use; and
4) Fuel breaks and greenbelts.

By implementing these standards with existing and new cultivation sites, there will be an improvement over the baseline emergency access and response condition.

There is increasing evidence connecting fires with illicit electrical connections and faulty generator wiring associated with cannabis cultivators seeking to live off-grid, enhance grow sites, power fans, and connect power to wells, hot water heaters, etc. Four fires in Calaveras County between mid-June and mid-July 2015 were the result of "negligent use of equipment and improperly installed electrical systems on cannabis cultivation sites" according to Calveras Enterprise report on CAL FIRE information. For example, the 2015 Rocky Fire which destroyed 43 homes and 53 outbuildings in Lake County was identified as "Outdoor Gas Water Heater Failure" as a result of a hot water heater secured to a tree.

Existing and new structures associated with cannabis cultivation approved by the MCCR will need to be compliant with California Building Code. Additionally, the BMPs incorporated by Mitigation Measure BIO-2 include measures for proper fuel storage and containment and specifics on road and stream crossing construction and maintenance. Air Quality Mitigation Measure AIR-2 prohibits the burning of plant waste. These reduce risk of wildland fire to a level that is less than significant.

Cultivation sites located in indoor structures will be required to comply with applicable building codes. All new development and commercial cannabis activities will be required to meet Fire Code standards through Use Permit and/or Building Permit review and requirements. Where necessary, sprinkler systems, defensible space, emergency access, and other fire related measures will be applied. With appropriate review of applications submitted pursuant to the proposed MCCR indoor cultivation associated with the project is anticipated to have a less than significant impact on the potential for injury or death from wildfires.

With mitigation incorporated there would be a less than significant impact.

MITIGATION MEASURES

HAZ-1: Mendocino County shall modify the MCCO prior to its adoption by the Board of Supervisors to include a "Cortese List" database search results as part of the application materials for a cultivation site. If the site is listed on the "Cortese List" it must be demonstrated that the cultivation is in compliance and compatible with any cleanup and or abatement order that is established for the site. Currently Cortese List database searches can be run by accessing http://www.calepa.ca.gov/SiteCleanup/CorteseList/

Mitigation is incorporated through the implementation of AIR-2 and BIO-2.

FINDINGS

The Proposed Project will have a **Less than Significant Impact with Mitigation Incorporated** on Hazards or Hazardous Materials.

IX. HYDROLOGY AND WATER QUALITY. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☒	☐	☐
c) 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, which would result in substantial erosion or siltation on- or off-site?	☐	☒	☐	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?	☐	☒	☐	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☒	☐	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk or loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☒	☐	☐
j) Result in inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐

Thresholds of Significance: The project would have a significant effect on hydrology and water quality if it would violate any water quality standards or waste discharge requirements; substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted); 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, which would result in substantial erosion or siltation on- or off-site; substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality. Significant impacts would also occur if the project would place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map; place housing within a 100-year flood hazard area as mapped on a federal Flood

Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map; place within a 100-year flood hazard area structures, which would impede or redirect flood flows; expose people or structures to a significant risk or loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or result in inundation by seiche, tsunami, or mudflow.

REGULATORY SETTING

Clean Water Act

In 1972, Congress amended the Federal Water Pollution Control Act to control pollution from point sources (such as wastewater treatment plants) into waters of the United States through the issuance of National Pollutant Discharge Elimination System or NPDES permits. NPDES permits are based on "waste discharge requirements" that are either narrative or numeric standards designed to protect water quality. The Federal Water Pollution Control Act is known today as the Clean Water Act (CWA), and Congress has amended the Act several times. In 1987, Congress made it unlawful to discharge pollutants (including sediment) to waters of the United States from non-point sources (such as municipal storm water and industrial or construction sites) and directed non-point source dischargers to comply with the NPDES permit scheme. CWA sections applicable to the proposed MCCR are described below.

Section 402: National Pollutant Discharge Elimination System Permit

Pursuant to CWA Section 402(p) of the Clean Water Act and as related to the goals of the Porter-Cologne Water Quality Control Act, the SWRCB adopted a statewide NPDES General Permit for Storm Water Discharges Associated with Construction Activity (Order No. 2009-0009-DWQ, NPDES No. CAR000002) on September 2, 2009. Commonly referred to as the "Construction General Permit," the regulation requires that any construction project that disturbs one or more acres of land surface (or is part of a common plan of development or sale that disturbs one or more acres of land surface) is required to obtain coverage under the Construction General Permit.

Section 303: Impaired Water Bodies (303(d) list) and Total Maximum Daily Loads

Under Section 303(d) of the CWA, the SWRCB is required to develop a list of impaired water bodies that do not meet water quality standards (promulgated under the National Toxics Rule [NTR] or the California Toxics Rule [CTR]) after the minimum technology-based effluent limitations have been implemented for all point and non-point sources. Impaired water bodies are priority ranked for Total Maximum Daily Load (TMDL) development and implementation based on the level of impairment and the beneficial uses that need to be protected. A TMDL is a calculation of the total maximum amount of a pollutant that a water body can receive on a daily basis and still meet water quality standards. The US Environmental Protection Agency (EPA) and California Regional Water Quality Control Boards (RWQCBs) are responsible for establishing TMDL waste-load allocations and incorporating improved load allocations into water quality control plans, NPDES permits, and waste discharge requirements (WDRs).

Waste Discharge Requirements Associated with Total Maximum Daily Load Implementation/Load Allocations

There are eleven (11) watersheds in Mendocino County which are currently listed as impaired by sediment and high instream temperatures. They include: Ten Mile River; Noyo/Pudding Creek; Big River and Berry Gulch; Albion River; Garcia River; Gualala River; Navarro River; Upper Russian River; Middle Fork Eel River; South Fork Eel River; and Middle Mainstem Eel River (North Coast RWQCB). Within these watersheds, Total Maximum Daily Load (TMDL) requirements (that are in various stages of development) will require

reductions in contributing sediment sources to achieve the load reductions necessary to protect beneficial uses (North Coast RWQCB).

In watersheds where a TMDL has been developed and approved—or is in process of being developed—watershed plans are required to achieve the load reductions called for in the TMDL. These plans are defined by US EPA in the National NPS Program Guidance and are intended to provide detailed information to ensure that priority activities are being undertaken to achieve water quality objectives and beneficial uses within a specific period of time. Watershed plans must address the following nine key elements:

1) Causes and Sources—Causes and sources of impairment (physical, chemical, and biological);
2) Expected Load Reductions—Estimate of load reductions expected to result from implementation of each of the management measures or BMPs;
3) Management Measures—Identification of critical areas and management measures/practices and associated costs necessary to achieve the estimated load reductions;
4) Technical and Financial Assistance—Estimate of technical and financial assistance needed, associated costs, and authorities that will be relied upon to implement the watershed plan;
5) Information/Education Schedule—How public understanding of the project and participation in selecting, designing, and implementing management measures will be achieved;
6) Schedule—Schedule for implementing management measures;
7) Measurable Milestones—Schedule of interim, measurable milestones for determining whether the management measures, BMPs, or other control actions are being implemented;
8) Evaluation of Progress—Criteria that can be used to determine whether load reductions are being achieved and if progress towards attaining water quality standards is being achieved. If not, criteria for determining whether the plan or TMDL (if established) needs to be revised; and
9) Monitoring—Evaluation of the effectiveness of the implementation efforts, measured against the criteria established in the Evaluation of Progress element.

Porter-Cologne Water Quality Control Act

The State of California's Porter-Cologne Water Quality Control Act (Division 7 of the California Water Code) (Porter-Cologne Act) provides the basis for water quality regulation in the State. The SWRCB administers water rights, water pollution control, and water quality functions throughout the state, while the nine Regional Water Quality Control Boards (RWQCBs) conduct planning, permitting, and enforcement activities. The Porter-Cologne Act authorizes the SWRCB to adopt, review, and revise policies for all waters of the state (including both surface and groundwater). Each RWQCB is required, by law, to develop, adopt, and implement a Basin Plan for their entire region that describes the beneficial uses that the RWQCB will protect, the water quality objectives necessary to protect the designated beneficial uses, and strategies and timelines for achieving them. Water quality objectives to protect beneficial uses of water bodies are typically achieved through the regulation of dischargers using "waste discharge requirements" or WDRs which are enforceable provisions of NPDES permits.

North Coast Regional Water Quality Control Board Cannabis Cultivation Waste Discharge Regulatory Program (Order)

The Order establishes water resource protection requirements and provides a mechanism for cannabis cultivators to meet the requirements of the federal Clean Water Act, California Water Code, State Nonpoint Source Policy, and the Basin Plan for the North Coast region. Under the Order, operations with 2,000 square feet or more of cannabis canopy area, or any amount of cultivation that poses a threat to

water quality, that is located on private lands in the North Coast region are required to enroll in the program. The Order includes enforceable requirements which cultivators must meet to ensure that their operations do not impact water resources and includes "Standard Conditions" related to the following:

1) Site maintenance, erosion control and drainage;
2) Stream crossing maintenance and improvement;
3) Stream and wetland buffers;
4) Spoils management;
5) Water storage and use;
6) Irrigation runoff;
7) Fertilizers and soil amendments;
8) Pesticides;
9) Petroleum products and other chemicals;
10) Cultivation-related wastes;
11) Refuse and human waste; and
12) Remediation, cleanup, and restoration activities.

The Order specifically states that the over-diversion of surface water for cannabis cultivation creates a significant impact on instream water quality and beneficial uses. The RWQCB may therefore request that the DWR considers various water rights actions and can refer cases to the Office of Enforcement. Additionally, the RWQCB may require information pertaining to the diversion and use of surface water and make inspections of the discharge facilities.

Compliance with the Standard Conditions can be achieved through the implementation of site-specific pollution prevention measures or BMPs that are designed to protect water quality. All BMPs are considered enforceable conditions under the Order as applicable to a given site.

Based on the nature of the cannabis cultivation operation and associated threat to water quality, enrollees are placed into one of three "tiers" with Tier 1 having the least environmental effects and Tier 3 having the greatest environmental effects. Tier 2 and Tier 3 enrollees must have a Water Resource Protection Plan (WRPP) prepared by a qualified professional that identifies the development within the cultivation site that is subject to compliance with the Standard Conditions and specifies a monitoring and reporting program that complies with the Order. For any development within the cultivation site that does not comply with the Standard Conditions, BMPs are described that would bring the site into compliance with the Order, and a timeline for compliance is contained within the WRPP. All enrollees must monitor their sites periodically and prepare annual monitoring reports that include verification of conformance with the applicable Standard Conditions, the effectiveness of the BMPs being implemented, and compliance with a Water Resource Protection Plan which is required to be developed based on the site's specific conditions.

Per the Order, a WRPP must include the following elements:

1) Property map including: areas of operation, roads, water bodies, all cleared/developed areas, and general drainage patterns and directions;
2) Design drawings for watercourse structures, fish passages, roads, septic tanks, fill prisms, pads, ponds, or any constructed feature that has been designed or engineered;
3) Assessment of current conditions and identification of any features needing improvements to correct the function of roads or developed areas, drainage features, encroachments into riparian buffer areas, controllable sediment delivery sites, including stream crossings in need of correction;
4) Detailed list of specific management practices designed to meet the Standard Conditions, incorporating applicable BMPs necessary to bring the site into compliance with the Standard Conditions;

5) If problems are identified, a prioritization and implementation schedule for corrective action;
6) List of chemicals on site;
7) Monitoring plan; and
8) Water use plan detailing the water source, providing documentation of an approved water right, and a record of the amount of water used monthly (including any conservation measures). The water use plan is used to ensure that the quantity and timing of water use is not impacting water quality objectives or beneficial uses of the water body from which the diversion is taking place.

Enrollment in the program and compliance with the Order does not preclude the need for permits that may be required by other government agencies or supersede any requirements, ordinances, or regulations of any other regulatory agency.

It is important to note that the Order does not cover or authorize the expansion of existing cannabis cultivation sites or the development of new sites at previously undisturbed locations. New cultivation sites may be approved where prior activity such as residential or other construction has established roads, driveways, culvert crossings or similar features. The Order does not apply to land use activities subject to other permitting programs and does not apply to hazardous waste cleanup, certification and permitting for the application of pesticides and herbicides, or requirements related to the handling and disposal of solid and domestic wastes. In addition, cannabis cultivators that disturb more than one acre of land must also obtain coverage under the RWQCB General Permit for Dischargers of Storm Water Associated with Construction Activity (Construction General Permit 2009-0009-DWQ).

Division of Water Rights Permitting

A water right is legal permission to use a reasonable amount of water for a beneficial purpose such as swimming, fishing, farming or industry (State Water Resources Control Board 2016 (b)). A riparian right is a right to use the natural flow of water on riparian land. Only the natural flow of water can be diverted under a riparian right. Because a riparian right only allows the use of natural flow, it is possible to have water available under a riparian right during wetter years or months and not during drier years or months (State Water Resources Control Board (b) 2016). Conversely, an appropriative right allows someone to take water for use on adjacent lands or use water that would not be there under natural conditions (i.e. water storage for more than thirty (30) days). The right to divert surface water in California is based on the type of right being claimed and the priority date. Water right permits specify the season of use, purpose of use and place of use for the quantity of water authorized under the permit or license (State Water Resources Control Board 2016 (a)).

SWRCB Policy for Maintaining Instream Flows in Northern California Coastal Streams and Watershed-Specific Assessments

The Policy for Maintaining Instream Flows in Northern California Coastal Streams (Policy) establishes principles and guidelines for maintaining instream flows for the protection of fishery resources, while minimizing water supply impacts on other beneficial uses of water, such as irrigation, municipal use, and domestic use. The geographic scope of the Policy encompasses coastal streams from the Mattole River to San Francisco and coastal streams entering northern San Pablo Bay, and extends to five counties: Marin, Sonoma, and portions of Napa, Mendocino, and Humboldt Counties. The Policy applies to applications to appropriate water, small domestic use, small irrigation use, and livestock stockpond registrations, and water right petitions.

The Policy:

1) Establishes guidelines for evaluating the potential impacts of water diversion projects on stream hydrology and biological resources;
2) Includes principles to ensure that new water appropriations and changes to existing water right permits and licenses will not affect the instream flows needed for fish spawning, migration and rearing, or the flows needed to maintain natural flow variability, which protects the various biological functions that are dependent on that variability; and
3) Contains principles to ensure that migration paths to spawning and rearing habitats are not blocked.

The Policy does not establish specific instream flow requirements for particular rivers or streams, approve any particular water diversion projects, or specify the terms and conditions that will be incorporated into water right permits, licenses, or registrations (State Water Resources Control Board 2014).

Because the Policy only extends to coastal watersheds between the San Francisco Bay and the Mattole River, the SWRCB's Division of Water Rights is in the process of assessing "instream flow requirements" that extend regionally to watersheds (both coastal and inland) where cannabis is cultivated. It is anticipated the SWRCB will expand the Policy to involve inland watersheds. On a watershed basis a baseline or minimum flow that will be required to be sustained at all times regardless of water rights and will be established and relied upon to guide the issuance of water diversion permits to cannabis cultivators. As with the Policy, the flow requirements are intended to protect fish safety in the streams, and protect other functions such as first flush sediment dispersal. Development of the flow requirements will require an instream winter flow study and establishment of dry season requirements for hydrologically connected groundwater basins.

Under the instream flow requirement policies, cannabis cultivators will be required to estimate their annual water use requirements (both for domestic and irrigation purposes) and build storage to divert water during the low flows, typically in the summer months. The SWRCB, in consultation with CDFW, will use the mean annual flow and drainage area, along with data regarding senior water right holders, to determine a minimum bypass flow for a specific location. The cultivator will not be allowed to divert water when the watercourse reaches the minimum bypass flow. The cultivator, in consultation with the SWRCB and CDFW can determine appropriate water storage capacity depending on when the watercourse typically reaches the minimum bypass flow. Cultivators will not be allowed to obtain a CDFA license under its commercial cannabis program until they certify a legal source of water.

Once the flow requirements are in place, the SWRCB retains the authority to provide curtailment notices to water users when there is an insufficient amount of water available to support all water rights holders. In times of drought and limited supply, the most recent ("junior") right holder must be the first to discontinue use. Even more senior water right holders, such as some riparian and pre-1914 water right holders may also receive a notice to stop diverting water if their diversions are downstream of reservoirs releasing stored water and there is no natural flow available for diversion (State Water Resources Control Board (b) 2016) If a curtailment order or emergency regulation is enacted, cultivators will be required to cease direct diversion from a watercourse and rely upon water storage until the curtailment period has ended.

While some cultivators will have riparian water rights, they may need appropriative rights, which allow for water storage for more than thirty (30) days, to ensure they have a sufficient amount of water to cultivate throughout the entire growing season. In some cases, cultivators may not be able to obtain appropriative rights, depending on the number of senior water rights holders in the watershed and the baseline flow that is required to sustain beneficial uses. Instead, they will be directed to supplement their riparian water rights

by storing rainwater or using other non-jurisdictional water sources to subsist throughout the summer months.

Based on the results of the streamflow baseline, it is possible that there will not be enough water for all cultivators in a particular watershed. These cultivators will be limited to other water supply options, such as wells or rainwater capture, which are described in more detail below.

Rainwater Capture

The Rainwater Recapture Act of 2012 (2012 Cal. Stats. Ch. 537, Sec. 2) allows Californians to legally capture and use rainwater harvested from rooftops. The Act exempts the capture and use of rainwater from rooftops from the SWRCB's permitting authority over appropriations of water. The Act further provides that it is not intended to alter or impair existing rights, change existing water rights law, affect the use of rainwater on agricultural lands, or impair the authority of water suppliers to protect the public health and safety of public water supplies as authorized by California law.

Well Drilling

In California, permitting authority over well drilling activities that are hydrologically disconnected rests solely with the local well permitting agency. Wells that are hydrologically connected to surface waters may also be subject to permitting though the SWRCB and CDFW. In Mendocino County, this is the Division of Environmental Health. If using water from a well, the well must be permitted or approved by the Mendocino County Department of Health and Human Services.

Sustainable Groundwater Management Act of 2014

The Sustainable Groundwater Management Act (SGMA) (AB 1793, SB 1319 and SB 1168) provides a framework for sustainable management of groundwater supplies by local authorities with a limited role for state intervention only if necessary to protect the resource. The SGMA requires the formation of local groundwater sustainability agencies (GSAs) that must assess conditions in their local water basins and adopt locally-based management plans. The Act provides substantial time—20 years—for GSAs to implement plans and achieve long-term groundwater sustainability. The Act is intended to protect existing surface water and groundwater rights and does not impact current drought response measures. Mendocino County officials are currently setting up a new local water management district to monitor groundwater usage per the requirements of the GMSA. This district is expected to be active by June 2017 for the Ukiah Valley basin and will have a groundwater sustainability plan by 2022. The Mendocino County Resource Conservation District and the Mendocino County Water Agency are working toward gauging seasonal and long-term trends in area groundwater levels. The County anticipates additional basins within the County will be required to comply with SGMA with the release of an updated Bulletin 118 by the Department of Water Resources in 2020. The County will continue to meet the requirements for SGMA for all new basins coming into the program.

Mendocino County Flood Hazard – Development Standards and Floodplain Combining Districts

Mendocino County Code Section 20.500.030 establishes a general prohibition on new development within the 100-year floodway unless mitigation measures are included pursuant to Federal Emergency Management Agency (FEMA) guidelines and the FP Flood Plan Combining District (Inland) (County Code Section 20.120). All structural development in the 100-year flood zone requires a Development Permit which provides the County the opportunity to require appropriate development standards to protect people and structures; nonstructural agricultural uses are allowed in the 100 year flood zone. Such measures may

include anchoring, use of flood damage resistant construction materials and methods, elevation of structures above the Base Flood Elevation, or other means of flood proofing.

DISCUSSION

Water use and water pollution associated with cannabis cultivation is a significant statewide issue. Due to the current unpermitted nature of cannabis cultivation in Mendocino County, many cannabis cultivation sites have been developed and use water resources without any regulatory oversight. This has resulted in various levels of watercourse impairment associated with these activities. However, it is difficult to quantify impacts because the number of cultivation sites is unknown.

Hydrological and water quality concerns associated with unregulated irrigation associated with the cultivation of cannabis include the following:

Hydrology

1) Improper stream crossing design;
2) Alteration of drainage and runoff patterns (natural stream flows and floodwater flows);
3) Drying up of streams and alteration of watercourse channels;
4) Blocking or impeding natural stream flows or floodwater flows and the creation of habitat/migration barriers; and
5) Other adverse geomorphological changes.

Water Supply

1. Permitted and unpermitted surface water withdrawals from streams and rivers;
2. Illegal water storage, impoundment, and/or illegally constructed dams/diversions;
3. Reduced water access for some property owners with legitimate water rights;
4. Illegally constructed or unpermitted wells with associated impacts on neighboring well, surface water supplies, in-stream flows, and/or groundwater supply;
5. Impact of depleted water resources on beneficial uses; and
6. Trucking of water to grow sites.

Water Quality

1. Improper storing of fertilizers and pesticides creating the risk of or actual contamination of surface or groundwater;
2. Impact of erosion, transportable sediment, pesticides, and herbicides on water quality and beneficial uses;
3. Temperature impacts from riparian vegetation removal and improper hydro-modification;
4. Impact of compromised aquatic habitat on endangered fish;
5. Improper stream crossings that create a sediment source and create or exacerbate unstable features; and
6. Illegal dumping and improperly sited outhouses and disposal of human waste.

In addition, temporary, flexible water storage bladders are a threat to water quality because they photo-degrade and tend not to be properly maintained. Storage bladders run the risk of failure and discharging to surface waters, with associated erosion/sedimentation effects and impacts on downstream channels and neighbors. Per the Order, “Storage bladders are not encouraged for long term water storage reliability.”

Hydrology and Water Quality a), c), d), and f)

The project has potential to violate water quality standards, alter existing drainage patterns, and cause runoff or otherwise degrade water quality, mitigation is proposed to avoid these impacts. As noted in the discussion there are many impacts to hydrology, water quality, and water quantity associated with existing cannabis cultivation. As a result, the majority of the streams in the North Coast are considered to be impaired by excess sediment and elevated temperatures as a result of nonpoint source pollution or polluted runoff. Sediment pollution is often associated with poorly planned forest clearing, earth-moving activities, and other land use practices. The exponential growth of cannabis cultivation throughout the North Coast has resulted in significant discharges of sediment and nutrients to surface waters, to the cumulative detriment of beneficial uses of water. The baseline condition is impaired watersheds which stand to improve with implementation of the MCCR by the County and regulatory requirements of other involved State agencies.

Under Phase 1 implementation of the proposed MCCR, certain management measures and remediation/cleanup/restoration activities at existing cultivation sites could potentially violate water quality standards or waste discharge requirements if they are not appropriately implemented. Activities necessary to achieve compliance with existing rules and regulations may involve the operation of heavy equipment; disturbance of soils; disruption of drainage conveyances and features; activities on and near unstable features; disturbance and removal of vegetation; creation of spoils; short-term exceedances of water quality objectives necessary to remove and replace instream structures; disruption of instream habitat; and the cleanup or removal of toxic substances. Soils made unstable and toxic substances have the potential to be mobilized in storm water or irrigation runoff and transported to surface waters, potentially violating water quality standards or waste discharge requirements. Implementation of standard construction BMPs (incorporated as Mitigation Measure BIO-2) and required under the Order, reduce the potential for remediation/cleanup/restoration activities to be detrimental to water quality and include the following:

1) Temporal restrictions on construction;
2) Limitations on earthmoving and construction equipment;
3) Guidelines for removal of plants and revegetation;
4) Conditions for erosion and sediment control;
5) Limitations on work in streams;
6) Protection of riparian and wetland areas;
7) Implementation of secondary containment and Spill Prevention Control and Countermeasure plans; and
8) Use of a qualified, licensed professional for design of watercourse replacements and development and oversight of remediation/cleanup/restoration plans.

Similarly, new development of cultivation sites in Phase 3 would be controlled by the Order's standard conditions and BMPs which provide suitable protections for water quality. With the incorporation of Mitigation Measure BIO-2, which requires appropriate BMPs, potential water quality impacts associated with site work will be reduced.

Because many of the watersheds in Mendocino County are impaired or do not have adequate data to assess the current state, without mitigation there is a potential for the issuing new cultivation permits in Phase 3 to be cumulatively significant water quality impact. Watershed specific information is needed to determine if it is appropriate to allow for increased water withdrawals and land disturbing activities that have the potential to release chemicals and sediment into watercourses. There are several programs in place at the state level to collect watershed specific information and assess the proper levels of land use activities and water use.

Proposed MCCR zoning section 20.242.070 requires a watershed assessment to be completed prior to issuing any permits for new cultivation in RR, RL and UR zoning districts. Note Mitigation AG-2 will help to minimize the MCCR water supply impacts by prohibiting new cultivation sites in the RL district. However, it is described at only the most basic level of establishing sufficient water supply to serve the proposed cultivation site and existing uses within the watershed. To provide adequate mitigation for water quality and quantity impacts, this requirement needs to be inclusive of all beneficial uses.

Per Business and Professions Code (§ 19332(d)), the SWRCB—in consultation with CDFW and CDFA—shall ensure that the individual and cumulative effects of water diversion and discharge associated with cannabis cultivation do not affect instream flows needed for fish spawning, migration, and rearing, and flows needed to maintain natural flow variability. Per Water Code (§13149), the SWRCB—in consultation with CDFW—shall adopt principles and guidelines for diversion and use of water for cannabis cultivation in areas where cultivation has the potential to substantially affect in stream flows. These principles and guidelines will include policies for water quality control and will be incorporated into agricultural permits issued by the CDFA under its commercial cannabis program. The principles and guidelines may include requirements that apply to groundwater extractions where the SWRCB determines those requirements are reasonably necessary. In addition, the SWRCB may update the interim principles and guidelines as necessary.

The purpose of the in stream flow requirements are to protect fish safety in the streams, and protect other functions such as first flush sediment dispersal. Development of the flow requirements will require an instream winter flow study and establishment of dry season requirements for hydrologically connected groundwater basins. TMDLs will be considered as part of the in-stream flow policy. Once the flow requirements are in place, the SWRCB will retain the authority to provide curtailment notices to water users when there is an insufficient amount of water available to support all water rights holders. The SWRCB, in consultation with CDFW, will use the mean annual flow and drainage area, along with data regarding senior water right holders, to determine a minimum bypass flow for a specific location (Division of Water Rights, 2016).

The SWRCB is currently developing regional boundaries for cannabis policy development. Currently, Mendocino County is included in both the "North Coast" region and the "AB2121 Policy Area" region. For each region, the SWRCB will develop interim flow requirements for priority areas expected to have high water demand for cannabis cultivation. These requirements will include a surface water diversion forbearance period (or periods) that is based on local climate and hydrology and flow requirements that will include requirements to maintain first flush flows, maintain spring recession flows, and maintain portions of other high flow events, as well as "forbearance" restrictions related to the dry season. Additional principles may include: dry season flow requirements for hydrologically connected groundwater diversions; fish screens for diversions; removal of fish passage barriers; off-stream storage requirements; secondary containment for water storage bladders; and riparian buffers. The SWRCB will be responsible for enforcement and will monitor flow requirements at compliance gauges. The program is expected to begin rolling out in 2017 (Division of Water Rights, 2016).

As mitigation to protect water quantity, quality, and hydrologic functions, Mitigation Measure HYD-1 is proposed. This mitigation measure applies to new cultivation sites, primarily in Phase 3 but possibly with relocation of an existing site in Phase 1, and requires that the "watershed assessment" described in the Zoning chapter be defined as the in-stream flow policy consistent with the State Water Resources Control Board program. In conjunction with Mitigation Measure AG-2, which prohibits new cultivation in the RL district, Mitigation Measure HYD-1 will prevent the issuance of new cultivation permits in RR and UR zoning districts until the in-stream flow policy is developed in the watershed. This mitigation is selected because it is

consistent with the State's approach to reduce cannabis cultivation impacts in watersheds, and is likely the best mechanism to obtain the most comprehensive information regarding water quality, quantity and beneficial uses within a watershed.

With mitigation incorporated there will be a less than significant impact on water quality standards, existing drainage patterns, run-off and water quality will not be otherwise degraded.

Hydrology and Water Quality b)

Groundwater is Mendocino County's main source for municipal and individual domestic water systems and contributes significantly to irrigation. Storage capacity estimates for the three largest basins are Ukiah Valley/90,000 acre-ft; Little Lake Valley/35,000 acre-ft; and Laytonville Valley/14,000 acre-ft (USGS, 2012).

The Ukiah Valley Groundwater Basin has been ranked by DWR as a medium priority basin requiring creation of a Groundwater Sustainability Agency and a Groundwater Sustainability Plan. Water in the Ukiah Valley for domestic and agricultural use has been determined to be fully allocated by the DWR. The Mendocino County RCD and the Mendocino County Water Agency are working toward gauging seasonal and long-term trends in area groundwater levels to better understand what is coming into and going out of this basin.

Per subsection B of Sec. 20.242.050 of the proposed MCCR zoning code amendments related to Existing Medical Cannabis Cultivation Sites:

> "All medical cannabis cultivation sites located *outside an industrial zoning district (I1, I2, and P1) must demonstrate there is adequate water to serve the cultivation site by providing evidence of an existing water right."*

Per subsection C of Sec. 20.242.070 of the proposed MCCR zoning code amendments related to New Medical Cannabis Cultivation Sites:

> *"All new medical cannabis cultivation sites located outside an industrial zoning district (I1, I2, and P1) or AG (Agriculture) zoning district shall demonstrate there is adequate water to serve the cultivation site by providing (1) a watershed assessment that establishes there is adequate water to serve the cultivation site and existing uses within the watershed, and (2) a water right exists to serve the cultivation site."*

Potential difficulties gaining or perfecting necessary water rights could inadvertently incentivize well drilling. Elements of the Order that may encourage the development of alternative water sources include requirements to remove instream impoundments and create off-stream water storage sufficient to provide adequate irrigation water for the size of the area to be cultivated. Based on current requirements, regulatory trends and initial concepts developed by the SWRCB Division of Water Rights, water used for the cultivation of cannabis will need to be sourced on-site from a surface water diversion, permitted well, or other water source (Cannabis Interim Principles and Guidelines).

Regulated cannabis cultivation represents an increased potential for increased groundwater pumping, with greater associated impacts during dry months and drought conditions. Anecdotal evidence provided by CDFW enforcement officials suggests that cannabis cultivators are shifting to groundwater wells to avoid surface water diversion restrictions (Mendocino County Resource Conservation District, 2016).

Potential impacts associated with an increase in groundwater pumping as a result of the new regulations will be somewhat reduced by requirements in the Order and provisions of the proposed MCCR. The Order requires the implementation of water conservation measures, irrigation at agronomic rates, and limiting groundwater withdrawals in consideration of beneficial use by other water users in the same watershed. In addition, cultivators registered with the RWQCB are required to implement water conservation practices to document their monthly water use and develop an approach to ensure water use is not impacting water quality.

Although water conservation provisions may reduce overall water use mitigation is required in order to prevent groundwater supplies from depleting. Mitigation Measure HYD-2 requires that a water availability analysis be completed for any new or relocated cultivation site outside of an AG district where an existing or new well is the proposed water source. The water availability analysis must 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. With mitigation incorporated, the impact would be less than significant.

Hydrology and Water Quality e)

The Order contains standard conditions designed to remedy existing site conditions that create or contribute to runoff. The MCCO incorporates the standard conditions from the Order for all approved cultivation sites. In some cases, improvements that are required to bring existing sites into compliance may include the construction of infiltration basins, grading activities, road improvements, and in-stream restoration. While each of these activities has the potential to cause or contribute to increased runoff, the improvements are required to be designed by a qualified professional and use BMPs that effectively minimize the contribution of additional runoff.

The potential for implementation of the proposed MCCR to create or contribute to an increase in runoff which would exceed the capacity of existing or planned storm water drainage systems, or provide substantial additional sources of polluted runoff is less than significant.

Hydrology and Water Quality g) and h)

The implementation of provisions in the proposed MCCR would not place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other hazard delineation map. While the proposed MCCR does require a legal residence to obtain most cultivation permits (as modified by Mitigation Measure AG-1), Mendocino County's Flood Ordinance does not allow such structures to be sited within the 100-year flood hazard zone. Therefore, there would be no impact.

Hydrology and Water Quality i) and j)

In Phase 1, all existing structures within the 100-year flood zone will be required to be brought into compliance with the Mendocino County Flood Hazard Ordinance. New structures in any phase will also be required to comply with those standards. The Mendocino County Flood Ordinance requires adequate measures such as elevation of foundations, use of flood resistant materials and methods and other means to protect people and structures from flood damage. Therefore, the risk of such damage is less than significant.

It is possible that cannabis cultivation sites permitted under the proposed MCCR could be inundated by mudflow, particularly on steep terrain. However, measures included in the Order are intended to avoid these conditions and will apply to all cultivators. The potential for the proposed MCCR to cause or be impacted by mudflow is therefore less than significant.

Existing conditions include illicit dams and impoundments of various types that have not been appropriately engineered or permitted. Removal of these structures has the potential to expose people or structures to risk from flooding. However, the Order requires that the construction, removal, or alteration of an impoundment be designed and overseen by licensed professional as part of a plan that incorporates standard construction BMPs and is approved by the Executive Officer of the RWQCB. These requirements will reduce the risk to people from flooding as the result of the failure of a levee or dam to a level that is less than significant with mitigation incorporated.

As previously described, the proposed MCCR permits the cultivation of medical cannabis in various zoning districts throughout Mendocino County, excluding the Coastal Zone. By excluding coastal properties, there is no risk of inundation by tsunami.

MITIGATION MEASURES

Mitigation is incorporated through **BIO-2.**

HYD-1: Mendocino County shall modify the MCCR Zoning chapter prior to its adoption by the Board of Supervisors to require that the watershed assessment (already specified in Section 20.242.070) be 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.

HYD-2: Mendocino County shall modify the MCCO prior to its adoption by the Board of Supervisors to require that a water availability analysis be completed prior to permit issuance for any new or relocated cultivation site outside of an AG district where an existing or new well is the proposed water source. The water availability analysis must 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.

FINDINGS

The Proposed Project would have a **Less Than Significant Impact with Mitigation Incorporated** on Hydrology and Water Quality.

X. LAND USE AND PLANNING. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☒	☐	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

THRESHOLDS OF SIGNIFICANCE: This Initial Study considers to what degree, if any, the proposed project would (a) physically divide an established community; (b) conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or (c) conflict with any applicable habitat conservation plan or natural community conservation plan.

DISCUSSION

Land Use in the area covered by the proposed MCCR is primarily regulated by the Mendocino County General Plan, adopted in 2009, and the Ukiah Valley Area Plan, adopted in 2011. Together, the General Plan and Ukiah Valley Area Plan establish a set of planning principles and include guiding policies regarding a broad range of land use considerations. Note that the proposed MCCR does not permit cultivation of medical cannabis in any location within the Coastal Zone. As such, the Coastal Act, the Mendocino County Local Coastal Program, and related regulations do not apply.

The Mendocino County Inland Zoning Code (Division I of Title 20) is applicable to all properties within the unincorporated area of the County, exclusive of the Coastal Zone. All proposed medical cannabis cultivation operations will be required to comply with the Zoning Code as amended by the proposed project. The Zoning Code provides processing and review requirements for the Administrative Permits and Minor Use Permits as required by the proposed project.

While the cultivation of cannabis is not directly addressed in the current General Plan and UVAP, several of the planning principles and policies that address the Mendocino County's ongoing commitment to agricultural and timber production, resource protection and economic development, all of which are addressed directly or indirectly within the proposed MCCR.

Key planning principles which are relevant to the continued and regulated cultivation of medical cannabis include:

Principle 2-1a: Conservation of Mendocino County's natural resources, farmland, forest land, and open spaces is essential to the rural quality of life desired by residents and visitors alike.

1) Planned growth and compact development forms are essential to conserving environmental resources, farmland and open spaces.

2) Direct new commercial and residential growth to cities and community areas where development can be supported by existing or planned infrastructure and public services, and environmental impacts can be minimized.

Principle 2-1b: Mendocino County's natural, scenic, recreational, historic, and archaeological resources are vital to the quality of life and shall be protected for the enjoyment and economic prosperity of present and future generations.

1) Protection and enjoyment of the outstanding scenic, recreational and natural qualities of Mendocino County require long-term supportive economic and social systems.

Principle 2-2a: Emphasize long-term and sustainable economic and community needs over short-term gains.

1) Promote sustainable and innovative business practices and technologies that advance work force and community health, environmental protection, and use of clean, reliable and renewable energy sources.

Principle 2-2c: Support the county's resource-based economy and take actions that protect and enhance the county's diverse natural resources.

1) Support the protection and diversification of the county's agricultural and timber-based businesses;
2) Promote and enhance the county's tourism and recreational sectors, including tourism tied to historic resources;
3) Tourism and recreation-based activities must be located in areas with adequate access and services, and minimal impacts to surrounding areas and resources;
4) The use of County funds to attract companies to Mendocino County should be focused on those firms that can produce or utilize renewable energy; and
5) Promote small-scale or niche manufacturing using local resources for local or general use.

In addition, the following General Plan and UVAP policies are implemented by one or more provisions of the project or by mitigation measures proposed to address potential impacts of the project.

General Plan Policy Compliance

General Plan Document: Element	Policy Number	Policy Summary	Implementing Project Regulation or Mitigation Measure
General Plan: Development Element	DE-58	Adopt buffer provisions designed to limit incompatibilities between industrial and non-industrial operations.	• Cultivation for nursery stock production shall be set back at least 100 feet from any parcel under separate ownership. • All new MCCO cultivation sites are required to be setback 1,000 feet from identified sensitive uses. • All new MCCO cultivation sites which are not fully enclosed (Type 1A and Type 2A) are required to be setback 100 feet from residences and 50 feet from property lines.
General Plan: Development Element	DE-64	Work cooperatively with all industries to identify greenhouse gas impacts from their operations and develop a long-term plan for reducing emissions.	See Air Quality and GHG Sections. • Limit on lighting intensity for indoor and mixed-light cultivations. • Prohibition on the use of generators as a primary source of power.
General Plan Resource Management Element	RM-1	Require adequate buffers for all projects potentially impacting stream corridors and/or their associated riparian habitat.	See Biology and Hydrology and Water Quality Sections • Application required to include enrollment in and compliance with Tier 1, 2 or 3 North Coast Regional Water Quality Control Board Order 2015-023 or equivalent. Said Order establishes cultivation setbacks ranging from 50 feet to 200 feet based on the type of stream and type of cultivation. The Order includes a mechanism to establish site specific buffers as needed to protect water quality. • Sites that do not require enrollment are still required to meet the standards conditions applicable to all dischargers. Additionally Mitigation Measure BIO- 2 requires the incorporation of applicable BMPs from the water board order for all cultivation permits which provide for adequate riparian buffers.

General Plan Document: Element	Policy Number	Policy Summary	Implementing Project Regulation or Mitigation Measure
General Plan Resource Management Element	RM-27	Identify and maintain wildlife movement corridors to support biodiversity and healthy natural processes.	See Biology Section • Application required to include enrollment in and compliance with Tier 1, 2 or 3 as described by the Order or equivalent. Said Board order establishes cultivation setbacks ranging from 50 feet to 200 feet based on the type of stream and type of cultivation. The Order includes a mechanism to establish site specific buffers as needed to protect water quality. • Mitigation Measure BIO-1 requires review by CDFW to confirm that there is not a negative impact to special status species. • Mitigation Measure HYD-1 requires in-stream flow policies to be met prior to issuing new cultivation permits in RR and UR Districts which provides for riparian habitat diversity and protects fish passage.
General Plan Resource Management Element	RM-29	The County shall require all public and private discretionary projects to 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.	• Direct impacts to wetlands are regulated by Section 401 and Section 404 of the US Clean Water Act. • Application is required to include enrollment in and compliance with Tier 1, 2 or 3 as described by the Order or equivalent. Said Order does not authorize dredge and fill activities that result in a permanent loss of wetlands. Further wetland protections in the Order require sensitive design and location of roads, clearings, fill prisms and terraced areas, a 50 foot setback from all wetlands, and maintenance of the essential functioning of wetlands. • Sites that do not require enrollment are still required to meet the standards conditions applicable to all dischargers. Additionally Mitigation Measure BIO- 2 requires the incorporation of applicable BMPs from the water board order for all cultivation permits. Per these provisions, cultivation sites are not allowed in wetlands.

General Plan Document: Element	Policy Number	Policy Summary	Implementing Project Regulation or Mitigation Measure
General Plan Resource Management Element	RM-35	Work with the Mendocino County Air Quality Management District, Mendocino County Solid Waste, and fire agencies to reduce outdoor burning impacts on populated areas.	• Mitigation Measure AIR-2 prohibits the burning of excess plant products related to cannabis cultivation.
General Plan Resource Management Element	RM-43	Continue to inform applicants about Mendocino County Air Quality Management District dust control and grading requirements.	• Mitigation Measure AIR-1 requires a referral to the MCAQMD and concurrence from MCAQMD that all air quality policies including fugitive dust rules are met. Applicants will be informed of MCAQMD standards through this process.
General Plan Resource Management Element	RM-50	Reduce Mendocino County's greenhouse gas emissions by adopting measures that reduce the consumption of fossil fuel energy resources	See Air Quality and GHG Sections. • Limit on lighting intensity for indoor and mixed-light cultivations. • Prohibition on the use of generators as a primary source of power.
General Plan Resource Management Element	RM-61	Prior to development, require evaluation of slope stability in areas with the potential for landslides, including structural foundation engineering and potential impacts to adjacent lands. The Building Official may waive this evaluation for existing single-family lots.	See Hazards section • Special Findings required for Administrative Permits and Minor Use Permit require cultivations to avoid or minimize impacts on environmentally sensitive areas including hillsides exceeding 15 percent.
General Plan Resource Management Element	RM-79	Provide information to landowners, developers, and the public on the importance and value of maintaining wildlife corridors.	See Biology Section • Application required to include enrollment in and compliance with Tier 1, 2 or 3 as described by the Order or equivalent. Said Board order establishes cultivation setbacks ranging from 50 feet to 200 feet based on the type of stream and type of cultivation. The Order includes a mechanism to establish site specific buffers as needed to protect water quality. This also provides for wildlife corridors.

General Plan Document: Element	Policy Number	Policy Summary	Implementing Project Regulation or Mitigation Measure
General Plan Resource Management Element	RM-98	Support State and Federal measures to protect and enhance the freshwater and marine ecology into the development process, such as: • Stream corridor protection and restoration. • Riparian vegetation protection and restoration. • Erosion and sediment control measures. • Surface mining controls.	See Biology and Hydrology Sections • Application required to include enrollment in and compliance with Tier 1, 2 or 3 as described by the Order or equivalent. Said Order establishes cultivation setbacks ranging from 50 feet to 200 feet based on the type of stream and type of cultivation. The Order includes a mechanism to establish site specific buffers as needed to protect water quality. • Sites that do not require enrollment are still required to meet the standards conditions applicable to all dischargers. Additionally Mitigation Measure BIO- 2 requires the incorporation of applicable BMPs from the Order for all cultivation permits. This includes riparian protections. • All activities prohibited to create erosion or result in contaminated runoff into any stream, creek, river or body of water. • Mitigation Measure HYD-1 requires in-stream flow policies to be met prior to issuing new cultivation permits in RR and UR Districts which provides for riparian habitat diversity and freshwater ecology.
General Plan Resource Management Element	RM-98	Update all County application forms as needed to provide for indication of the source of water for all water development projects.	Permit application requirements include: • Copy of statement of water diversion or other permit, license or registration if applicable. • An irrigation plan and projected water usage as well as a description of legal water source.
General Plan Resource Management Element	RM-101	Develop vertical integration opportunities for adding value to natural resources, including local agricultural and timber processing facilities.	• Cultivation permitted in agricultural and industrial zones. • Mendocino County will have the opportunity to consider appropriate regulation of cannabis processing as State regulations are adopted.

General Plan Document: Element	Policy Number	Policy Summary	Implementing Project Regulation or Mitigation Measure
General Plan Resource Management Element	RM134	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.	See Aesthetics Section • Limit on lighting intensity for indoor and mixed-light cultivations. • All lights used for the "mixed-light" cultivation of medical cannabis 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.
UVAP Water Management Chapter	WM 4.1	Streambank Protection Develop, adopt, and oversee Best Management Practices for bank stabilization and erosion control to prevent erosion and siltation in drainage swales and streams.	• Application required to include enrollment in and compliance with Tier 1, 2 or 3 as described by the Order or equivalent. Said Board order establishes cultivation setbacks ranging from 50 feet to 200 feet based on the type of stream and type of cultivation. The Order includes a mechanism to establish site specific buffers as needed to protect water quality. (See Biology and Hydrology Sections). • All activities prohibited to create erosion or result in contaminated runoff into any stream, creek, river or body of water.
UVAP Open Space and Conservation Chapter	OC 1.1	River Corridor Uses - Develop and adopt regulations establishing standards applicable to River Corridors. Until the regulations and the final Stream Setbacks are adopted, require that land use and development comply with the following principles. Allow or consider allowing the following uses within any River Corridor area: •Streamside maintenance, fire fuel management, and restoration. • Livestock grazing. • Agricultural cultivation, but not within 100 feet of top of bank for the Russian River and 25 feet for Other Riparian Corridors. • Public projects, including water-dependent public recreational facilities. • Timber operations conducted in accordance with an approved timber harvest plan. • Mining operations conducted in accordance with the County Surface Mining regulations. • Road, street, and utility crossings. • Streamside maintenance, fire fuel management, and restoration.	Application is required to include enrollment in and compliance with Tier 1, 2 or 3 as described by the Order or equivalent. Said Order establishes cultivation setbacks ranging from 50 feet to 200 feet based on the type of stream and type of cultivation. The Order includes a mechanism to establish site specific buffers as needed to protect water quality. • Such setbacks exceed the requirement of the General Plan.

General Plan Document: Element	Policy Number	Policy Summary	Implementing Project Regulation or Mitigation Measure
		• Permitted summer dams. • Equipment turnaround and access roads associated with agricultural cultivation, provided that the affected area is the minimum necessary for these turnaround and access roads and that a minimum 25' vegetative filter strip is provided and maintained between the affected area and the top of the bank. • Vegetation removal as part of an integrated pest management program administered by the Agricultural Commissioner. Prohibit, except as otherwise listed above, grading, vegetation removal, agricultural cultivation, structures, roads, utility lines and parking lots within any streamside conservation area. Consider an exception to this prohibition if: • It makes a lot unbuildable and if vegetation removal is minimized, or • The use involves only the maintenance, restoration, or minor expansion of an existing structure or other existing use, or • It can be clearly demonstrated through photographs or other information that the affected area has no substantial value for riparian functions, or • The use involves only the maintenance, restoration, or minor expansion of an existing structure or other existing use, or • It can be clearly demonstrated through photographs or other information that the affected area has no substantial value for riparian functions, or • A conservation plan is approved that provides for the appropriate protection of the biotic resources, water quality, flood management, bank stability, groundwater recharge, and other applicable riparian functions.	

Note that, in addition to cannabis-specific requirements, a wide variety of existing local, state and federal laws and regulations apply to activities commonly associated with cultivation. Together, these regulations provide a comprehensive framework for the protection of resources and orderly land use as described in the General Plan and UVAP, cultivators will be required to comply with all of the following, as applicable:

Activity	Applicable Permit	Agency
Movement of earthen material in, or alteration of, the bed and/or banks of a watercourse	1602 Lake and Streambed Alteration Agreement (LSAA)	California Department of Fish and Wildlife (CDFW)
	401 Certification	North Coast Regional Water Quality Control Board (North Coast RWQCB)
	404 Certification	US Army Corps of Engineers
Clearing, grading, and/or conversion of land	Less-Than-Three-Acre Conversion	CAL FIRE
	Construction Storm Water General Permit	North Coast Regional Water Quality Control Board (NCRWQCB)
	Grading Permit	Mendocino County
Structural Development	Building Permit	Mendocino County
Water diversion from hydrologically connected waters of the state and/or storage	1602 Lake and Streambed Alteration Agreement (LSAA)	California Department of Fish and Wildlife (CDFW)
	Appropriative Water Right	State Water Resources Control Board (SWRCB) Division of Water Rights
	Building permit if storage tank is over 5,000 gallons	Mendocino County Planning and Building Services
Waste discharges resulting from Cannabis cultivation or operations with similar environmental effects	General Waiver	North Coast Regional Water Quality Control Board (N C RWQCB)
Human waste facilities, including outhouses and composting toilets.	On-site Wastewater Treatment System	State Water Resources Control Board (SWRCB)
		Mendocino County Environmental Health Division

Land Use and Planning a)

The project does not allow any specific activity or improvement on any specific site. A Zone Clearance, Minor Use Permit or Administrative Permit will be required prior to the issuance of a permit for cultivation or any development related to cannabis activities. New cultivation operations allowed by the proposed MCCR would be located in areas where similar uses are already allowed. No subdivision of land or installation of new infrastructure is included in the project description. No changes to general plan land use designations, zoning classifications, or substantial changes to the allowed uses or purpose of any zoning classification are proposed which could divide an established community. The minimum parcel size on which any cultivation may occur is two (2) acres and the maximum size of each individual operation is 22,000 square feet. Therefore, the project will not divide an established community and no impact would occur.

Land Use and Planning b) and c)

The project as proposed and mitigated would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including—but not limited to—the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

As shown in the Table above, the proposed MCCR, as mitigated, addresses and complies with all of the policies of the Mendocino County General Plan and Ukiah Valley General Plan identified as relevant to the proposed project.

The proposed project does not authorize any property owner to avoid or alter the requirements of an adopted habitat conservation plan or natural community conservation plan if they are applicable to a site. Therefore there would be no impact.

MITIGATION MEASURES

Mitigation is implemented through Mitigation Measures AIR-1, AIR-2, BIO-1, BIO-2 and HYD-1.

FINDINGS

The Proposed Project would have a **Less Than Significant Impact with Mitigation Incorporated** on Land Use and Planning.

XI. MINERAL RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) 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?	☐	☐	☐	☒

THRESHOLDS OF SIGNIFICANCE: This Initial Study considers to what degree, if any, the proposed project would (a) result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state, or (b) 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.

DISCUSSION

As noted in Chapter 4 (Resource Management Element) of the Mendocino County General Plan, a variety of mineral resources are known to exist in the County. The most predominant mineral resource found in the County is aggregate resource minerals, primarily sand and gravel. Three sources of aggregate materials are present in Mendocino County: quarries, instream gravel, and terrace gravel deposits.

Cannabis cultivation is an agricultural activity which does not render the locations on which it occurs unavailable for future mineral extraction. As with other types of farming business (i.e. cattle ranching), mining extraction and cannabis cultivation could occur on the same or contiguous parcels assuming the minimum setback requirements and other operational standards are not impacted by comingling the activities. In some cases, onsite mineral extraction resources would be a cost-effective opportunity if a cultivator needs to complete any onsite restoration activities.

Mineral Resources a)

Though a variety of mineral resources are known to exist in the County, the proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. All medical cannabis cultivation operations would be subject to the provisions included in the proposed MCCR and would need to be consistent with all policies provided in the County General Plan. As such, the proposed project would not result in the loss of availability of a known mineral resource, and no impact would occur.

Mineral Resources b)

The proposed project would not 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. Figure 4.6-5 (Aggregate and Mineral Resources) of Section 4.6 (Geology, Soils, and Mineral Resources) of the County of Mendocino General Plan Update EIR shoes that a variety of mineral resources are known to exist in the County. However, as noted above, all medical cannabis cultivation operations would be subject to the provisions included in the proposed MCCR and would need to be consistent with all policies provided in the County General Plan. As such, no impact would occur.

MITIGATION MEASURES

No mitigation required.

FINDINGS

The Proposed Project will have **No Impact** on Mineral Resources.

XII. NOISE. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Expose persons to or generate excessive ground borne vibration or ground borne noise levels?	☐	☐	☒	☐
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e) 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, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

THRESHOLDS OF SIGNIFICANCE: This Initial Study considers to what degree, if any, the proposed project would (a) expose persons to, or generate, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; (b) expose persons to, or generate, excessive ground borne vibration or ground borne noise levels; (c) result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the proposed project; (d) result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the proposed project; (e) expose people residing or working in the project area to excessive noise levels (only applicable if the proposed project is 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); or (f) expose people residing or working in the project area to excessive noise levels (only applicable if the proposed project is located within the vicinity of a private airstrip).

REGULATORY SETTING

The Mendocino County General Plan includes policies to regulate noise impacts to sensitive receptors. The policies include the following provisions

1) Establishes maximum acceptable noise levels for a variety of land use types;
2) Establishes a standard threshold of significance of 5dB increase in CNEL or LDN;
3) Prohibits regulated uses from generating noise that would exceed the adopted acceptable noise levels and requires mitigation to achieve that goal;
4) Adopts State Noise Insulation Standards and other measures to reduce exposure to noise sources; and
5) Establishes requirements for acoustical studies for new development.

Appendix C of the Mendocino County Zoning Ordinance identifies exterior noise limit standards for various land use types, modified by the location and anticipated background noise levels.

DISCUSSION

One of the main impacts of cannabis cultivation on neighboring property owners and residents includes noise emitting from power generators and air circulation associated with greenhouse mixed-light operations which may significantly degrade the low noise environment found in most rural settings and to some extent may deprive property owners and residents the enjoyment and beneficial use of their yards and other outdoor areas.

Construction and operation of the medical cannabis operations permitted under the proposed MCCR would be anticipated to increase noise in the vicinity of these operations; however, the provisions established under County Code Chapter 10A.17 are intended to restrict the noise impacts of the permitted medical cannabis operations.

Noise a)

While construction and operation of the medical cannabis operations permitted under the proposed MCCR would be anticipated to increase noise in the vicinity of these operations, the proposed project would not expose persons to nor generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Pursuant to the proposed Agriculture Code amendment of the MCCR, Subsection E of Section 10A.17.040 (General Limitations of Cultivation of Medical Cannabis):

> *"All activities associated with the cultivation of medical cannabis shall not exceed the noise level standards as set forth in the County General Plan Policies DE100, 101 and 103."*

Policies DE-100, DE-101, and DE-103 of Chapter 3 (Development Element) of the County General Plan provide the County's standards for maximum exterior noise levels for residential land uses, the noise compatibility guidelines for use in determining the general compatibility of planned land uses, and the County's standards for acceptable indoor intermittent noise levels for various types of land uses, respectively.

The cultivation of medical cannabis would only be permitted in certain zoning districts in the proposed MCCR (pursuant to Section 20.242.020), and would be subject to established setbacks (pursuant to Section 20.242.060). However, a reduction in the setback from a legal parcel line may be allowed with an Administrative Permit. With the opportunity to review the project administratively, findings will be required that the project is compliant with all county noise standards.

Construction and installation of cultivation materials at approved medical cannabis cultivation sites may require earthwork and use of heavy equipment, which has the potential to result in a temporary increase of noise level in the project vicinity. These impacts are temporary in nature and can be mitigated through the permitting process where the time for conducting the activities can be restricted to business hours. Regarding generators, proposed Agriculture Code amendment in the MCCR, Subsection E of Section 10A.17.110 (Performance Standards) of Chapter 10A.17 requires that if a generator is used to support any aspect of the cultivation operations permitted:

> *"the generator shall be equipped with the manufacturer's specified muffler, shall be enclosed in a separate structure (other than the generator housing) designed for sound suppression, and shall comply with General Plan Policies DE100, 101 and 103."*

Further, Subsection E of Section 10A.17.110 of the MCCR provides, in part, the following additional noise limitation on generators that may be operated in association with cannabis cultivation:

> *"…An analysis of the noise levels produced by the generator at full operational speed shall be performed by an accredited acoustical engineer. If this analysis indicates any violation of Mendocino County General Plan Policies DE100, 101 and 103, the generator shall be equipped with a hospital-grade muffler and a second acoustical analysis shall be performed by an accredited acoustical engineer. If this second analysis indicates a violation of Policies DE100, 101 and 103, the generator shall be enclosed in a separate structure (other than the generator housing) designed for sound suppression…"*

Since all proposed medical cannabis operations would need to be in conformance with all established policies and regulations in order to be permitted, a less than significant impact would occur.

Noise b)

With the exception of temporary vibrations created from earthwork and use of heavy equipment that may be utilized during construction and installation of cultivation materials at approved medical cannabis cultivation sites, there will be no elements of the proposed project that would expose persons to or generate excessive ground borne vibration or ground borne noise levels. Therefore, a less than significant impact would occur.

Noise c) and d)

The proposed project would not result in a substantial permanent, temporary, or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. While construction and operation of the medical cannabis operations permitted under the proposed MCCR would be anticipated to increase noise in the vicinity of these operations, the proposed project would not expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Pursuant to Subsection E of Section 10A.17.040 (General Limitations of Cultivation of Medical Cannabis):

> *"All activities associated with the cultivation of medical cannabis shall not exceed the noise level standards as set forth in the County General Plan Policies DE100, 101 and 103."*

Since all existing and proposed medical cannabis operations would need to be in conformance with all established policies and regulations in order to be permitted, a less than significant impact would occur.

Noise e) and f)

Per Chapter 3 (Development Element) of the Mendocino County General Plan, there are six public use airports in the County that provide for regional and interregional needs of commercial and general aviation, in addition to three private use airfields in the County. The following nine airports are located within the County of Mendocino:

Public Use Airports

1) Ukiah Municipal Airport;
2) Willits Municipal Airport (Ells Field);
3) Round Valley Airport, near Covelo;

4) Little River Airport, near the community of Little River;
5) Boonville Airport; and
6) Ocean Ridge Airport, northeast of Gualala.

Private Use Airports

1) Fort Bragg Airport;
2) Lofty Redwoods Airfield, north of Anchor Bay; and
3) Wilson's Field in Gualala.

Though there is the potential for the proposed project to result in medical cannabis cultivation sites being permitted within the vicinity of a private airstrip or within two miles of a public or public use airport, the proposed project would not expose people residing or working in the project area to excessive noise levels. As noted above, since all proposed medical cannabis operations would need to be in conformance with all established policies and regulations in order to be permitted, no impact would occur.

MITIGATION MEASURES

No mitigation required.

FINDINGS

The Proposed Project will have a **Less Than Significant Impact** on Noise.

XIII. POPULATION AND HOUSING. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and/or businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☒	☐	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

THRESHOLDS OF SIGNIFICANCE: This Initial Study considers to what degree, if any, the proposed project would (a) induce substantial population growth in an area, either directly (e.g., by proposing new homes and/or businesses) or indirectly (e.g., through extension of roads or other infrastructure); (b) displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere, or (c) displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

DISCUSSION

The proposed project consists of the adoption of the proposed MCCR, which would permit new and existing medical cannabis cultivation sites within the County. No new homes are proposed under the project.

Population and Housing a)

The proposed project would not directly induce substantial population growth in an area by proposing new homes or businesses. However, as described in the Agricultural Section, above, the proposed MCCR may indirectly encourage new construction of housing through the provision that requires a legal dwelling unit on the same parcel as the cannabis cultivation site. Most cultivation permits outside of industrial zoning districts may only be issued on parcels which are developed with a legal dwelling unit. This requirement applies to existing cultivation permits issued outside of Industrial Zones during Phase 1 as well as to all new cultivation permits issued during Phase 3. New homes that may be constructed pursuant to this provision are expected to be located widely throughout the County, with no particular concentrations in any given area. The requirement for housing in resource production areas such as the AG or TPZ Districts has the potential to encourage population growth in areas that are neither planned nor designated for such development. While not expected to be concentrated, the addition of population in more remote areas with limited access to services is a potentially significant effect to population and housing. Mitigation Measure AG-1 will reduce this potential impact by removing the requirement to establish a legal dwelling unit in the AG, RL, TPZ and FL Districts. Therefore, with mitigation incorporated there will be a less than significant impact.

Population and Housing b)

The proposed project would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere. The proposed MCCR would establish appropriate zoning classifications for each permit types as well as minimum parcel sizes and the type of zoning clearance necessary for each combination of permit type and zoning district, under Chapter 20.242 of the Mendocino County Zoning Ordinance (Inland). The Ordinance would allow for medical cannabis

cultivation sites within 11 specific zoning districts, though no new cultivation sites would be permitted in the FL and TPZ Districts (Section 20.242.050.D) and existing cultivation sites within these zoning district would only be permitted subject to limitations (Section 20.242.050.E).

All new permitted cultivation sites would require a minimum parcel size, ranging from a minimum of two acres for small scale operations (MCCO permit types C, C-A, and C-B) up to a minimum of 10 acres for large scale and nursery operations (MCCO permit types 2, 2-A, 2-B, and 4) would require a minimum parcel size of 5 to 10 acres. Furthermore, per Section 20.242.040(A)(3), the limited cultivation of medical cannabis by a qualified patient or caregiver is allowed as an accessory use to an existing legal dwelling—located on the same legal parcel—where the dwelling is a principal use in the Zoning District in which it is located; further (per Section 20.242.040(A)(5)), the cultivation of medical cannabis is not permitted within any habitable space (i.e., kitchen, bedroom, bathroom, living room, or hallway). Therefore, even though medical cannabis cultivation would be permitted under certain residential zoning districts, subject to these limitations, the proposed project would not displace substantial numbers of existing housing and would therefore not necessitate the construction of replacement housing elsewhere. As such, no impact would occur.

Population and Housing c)

The proposed project would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. As noted above, under the proposed MCCR, the cultivation of medical cannabis would not be permitted within any habitable space (such as a kitchen, bedroom, bathroom, living room, or hallway), per Section 20.242.040(A)(5) of the Mendocino County Zoning Ordinance (Inland). Additionally, per the Zoning Code amendments proposed by the MCCR Section 20.242.040(A)(3), the cultivation of medical cannabis would be allowed as an accessory use to an existing legal dwelling, located on the same legal parcel, where the dwelling is a principal use in the zoning district in which it is located. As such, the proposed project would not displace substantial numbers of people, and no impact would occur.

MITIGATION MEASURES

Mitigation is incorporated through AG-1.

FINDINGS

The Proposed Project will have a **Less Than Significant Impact with Mitigation Incorporation** on Population and Housing.

XIV. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☐	☒

THRESHOLDS OF SIGNIFICANCE: This Initial Study considers to what degree, if any, the proposed project would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or result in 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 (a) fire protection, (b) police protection, (c) schools, (d) parks, or (e) other public facilities**.**

DISCUSSION

As described in the project description, there is widespread unpermitted cultivation of cannabis occurring in Mendocino County. The current baseline does have an impact on public services, particularly on fire and police protection. In the baseline condition, many cultivation sites are located in remote, wooded areas. Due to the high monetary value placed upon cannabis, areas may experience a number of home invasion robberies, thefts, and murders related to cannabis cultivation which impacts law enforcement/services.

The proposed MCCR requires that all applications for permitted cultivation include a security plan (10A.17.090 (Q)). The security plan shall include a statement describing the proposed security measures for the facility that shall be sufficient to ensure the safety of the members and employees—and protect the premises from theft. Implementation of the proposed MCCR may result in the need for additional staffing at the Agricultural Commissioner's Office and the Department of Planning and Building Service in order to provide proper staffing levels to process the anticipated applications and provide monitoring as described in the proposed MCCR. However, these staffing increases are not likely to be so significant to require the physical alteration of existing facilities or construction of new facilities.

Public Services a) and b)

The proposed project will not create the need for additional police or fire protection facilities. The existing baseline conditions have certainly caused increased pressure on local fire and police services. However, for cultivation sites participating in the program described in the proposed MCCR, there should be a reduced need for these public services as compared to cultivation sites that do not come into compliance with the proposed MCCR and sites that are not eligible due to being illegal or trespass cultivation sites. For the cultivation sites that will be covered under the proposed MCCR, the proposed MCCR requires security

plans (10A.17.090 (Q)), compliance with applicable Building Codes (10A.17.090 (W)), and adherence to fire safety standards (10A.17.090 (Y)) which include proper road widths, road signage, emergency water supply, and fuel breaks—among other performance standards—intended to improve safety at the permitted sites and reduce the need police and fire protection services. There will be a less than significant impact as a result of the project.

Public Services c), d), and e)

The proposed project would not cause impacts that would require increased public services related to schools, parks or other public facilities. As the project does not include any form of development or use that would necessitate the development of these facilities. No impact is anticipated.

MITIGATION MEASURES

No mitigation required.

FINDINGS

The Proposed Project will have a **Less than Significant Impact** on Public Services.

XV. RECREATION. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) 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?	☐	☐	☒	☐
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

THRESHOLDS OF SIGNIFICANCE: This Initial Study considers to what degree, if any, the proposed project would (a) 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 (b) include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

DISCUSSION

As noted in Section 3-10 (Parks and Recreation) of Chapter 3 (Development Element) of the Mendocino County General Plan, Mendocino County is a predominately rural county, rich in lands and waters that provide a variety of recreational opportunities. The Mendocino National Forest occupies approximately 81,000 acres in the County, and offers an array of recreational opportunities including, but not limited to, fishing, camping, hiking, boating, wildlife viewing, winter snow play, hunting, wilderness experiences, and mountain biking. Numerous state parks (20 total) are located within the County, with the majority of these state parks (13) located along the coast; seven state parks are located in the inland areas of the County. Additionally, the Jackson Demonstration State Forest, totaling approximately 50,700 acres in size, is predominately used as an experimental forest for forest management techniques, but also provides recreational opportunities for the general public, is located within the County.

The Mendocino County parks system consists of seven (7) parks, plus two (2) public access areas, located throughout the County. These parks typically serve residents of local communities or neighborhoods, depending on the size of the park, improvements, and programs. County residents also have access to parks managed by the incorporated cities.

Recreation a)

The proposed project would not 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. As discussed under Section XIII (Population and Housing) of this Initial Study, the proposed project would not induce substantial population growth in an area, either directly or indirectly. Therefore, the use of existing neighborhood and regional parks or other recreational facilities would not substantially increase, and a less than significant impact would occur.

Recreation b)

The proposed project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. As noted above, since the proposed project would not induce substantial population growth in an area, the use of existing neighborhood or regional parks or other recreational facilities would not substantially increase, necessitating the construction or expansion of recreational facilities. As such, no impact would occur.

MITIGATION MEASURES

No mitigation required.

FINDINGS

The Proposed Project will have a **Less Than Significant Impact** on Recreation.

XVI. TRANSPORTATION / TRAFFIC. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestions management agency for designated roads or highways?	☐	☐	☐	☒
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

THRESHOLDS OF SIGNIFICANCE: This Initial Study considers to what degree, if any, the proposed project would (a) conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit; (b) conflict with an applicable congestion management program including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways; (c) result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks; (d) substantially increase hazards due to design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); (e) result in inadequate emergency access; or (f) conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

DISCUSSION

The proposed project consists of the adoption of the proposed MCCR. As provided in Chapter 3 (Development Element) of the Mendocino County General Plan, the unincorporated areas of the County are served by state highways, county roads, and private roads. The state highway network, under the jurisdiction of the California Department of Transportation (Caltrans), provides interstate, interregional, and intra-county linkages. Highways in the state system include U.S. Highway 101 and State Routes (SR) 1, 20, 128, 162, 175, 222, 253, and 271. The County-maintained road system augments the state highway system

to serve the unincorporated areas of the County, which is primarily comprised of a network of two-lane roads for vehicular movement of goods and people and to provide facilities (such as sidewalks and bicycle lanes) for non-motorized traffic. Not all public roads are in the County-maintained road system. Unless the County accepts responsibility for maintenance, these roads are maintained by property owners or other entities. Additionally, an extensive private road network serves a wide variety of uses throughout the County, such as logging, ranching, and residential subdivisions.

While many private roads were adequate for their original uses, development generated by certificates of compliance and minor subdivisions in particular has resulted in increased traffic on roads with uncoordinated improvements and maintenance and limited circulation patterns. Conflicting road names and ambiguous or unmapped road locations hamper emergency services in some areas. Furthermore, substandard design and construction standards to serve increased development, especially excessive grades in the California Department of Forestry and Fire Protection (CAL FIRE) responsibility areas, restrict emergency vehicle access and raise questions of safety for daily travel. Lack of adequate drainage systems—and inadequate ditch and culvert maintenance—contribute to road deterioration and down slope flooding and water quality problems.

The Mendocino Transit Authority (MTA) provides public transportation services to residents of the County and its incorporated cities. A contract within Sonoma County Transit provides a transit link between the South Coast area and Santa Rosa. MTA also provides services to individuals with special needs, and Greyhound, a private company, provides interregional bus service. Rail service in the County is limited for both passengers and freight.

Six (6) public use airports in the County provide for regional and interregional needs of commercial and general aviation. There are also three private use airfields in the County. The airports play a vital role in the County's emergency service network and several are important to the economy of the areas served.

The greatest concentration of bicycle lanes, which are generally Class II or III, in the County are located within the City of Ukiah. All state routes in the County are open to bicycle traffic, although safety is a major concern. Since the County is predominately a rural county, this limits the opportunity for bikeways to serve large segments of the population or to provide a practical means of transportation for commuting purposes. Intercity routes are impractical due to low demand, distances between cities, and corridor limitations due to topography.

Sidewalks and pedestrian paths are located in communities in the County; however, some areas in the unincorporated county with minimal walkways or intermittent walkways could attract more pedestrian trips with enhanced pedestrian facilities. For pedestrian activity to continue as the County grows, it may be necessary to construct curbs, gutters, and sidewalks along existing and future roadways as areas are developed and provide connections for continuous, accessible pathways.

Proposed Zoning Code amendment in the MCCR includes Section 20.242, which establishes appropriate zoning classifications of each permit type, minimum parcel sizes for mid- sized (Type 1) and larger (Type 2) cultivations, and the type of zoning clearance necessary for each combination of permit type and zoning district. Additionally, to further alleviate potential impacts to the County's transportation system, more intense cultivation sites propose to be located in Industrial zones which are served by existing public infrastructure and transportation networks and may be permitted with a Zoning Clearance. Certain cultivation types are not permitted in certain residential zoning districts (such as RR-2 or RR-5) in order to discourage parcel aggregation or merger, which may reduce housing development which is the intended use with these residential districts.

Transportation/Traffic a)

The project would not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.

As provided in Chapter 3 (Development Element) of the Mendocino County General Plan, the unincorporated areas of the County are served by state highways, county roads, and an extensive private road network. Additionally, MTA provides public transportation services to residents of the County and its unincorporated cities; six public use and three private use airfields are located within the County. Bicycle, sidewalks, and pedestrian paths are limited throughout the County.

Policies related to transportation are provided in Chapter 3 of the County General Plan. There are policies pertaining to the County transportation as a whole, with additional policies pertaining specifically to the road systems, pedestrian and bicycle systems, transit systems, rail, and airports within the County. While traffic may potentially increase due to new medical cannabis cultivation operations, all proposed operations would need to be in conformance with all established policies and regulations in order to be permitted. Furthermore, Zoning Code Section 20.242 was designed in such a way to encourage more intense cultivation sites to be located in industrial zones—which are served by existing public infrastructure and transportation networks—in order to further alleviate potential impacts to the County's transportation system. As such, a less than significant impact would occur.

Transportation/Traffic b)

There are no congestion management programs within the County that would be impacted by the proposed project. Therefore, no impact would occur.

Transportation/Traffic c)

Though several airports are located within the County, the proposed project is not expected to impact the circulation or approach patterns of any airports during construction and operation of new and existing medical cannabis cultivation sites. Therefore, no impact would occur.

Transportation/Traffic d) and e)

The proposed project would not substantially increase hazards due to design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Since all existing and proposed medical cannabis operations would need to be in conformance with all established policies and regulations in order to be permitted—specifically the requirements of Public Resource Code 4290 (included as Section 10A.17.090(Y) of the proposed MCCR Agriculture Code amendments) which requires from CAL FIRE regarding fire safe standards such as road widths, turnouts, turnarounds, and maximum slopes—a less than significant impact would occur. The proposed project would not result in inadequate emergency access. Although inadequate access is noted as a baseline condition, the standards already contained in the proposed MCCR offer improvements to this condition and require permitted cultivation sites to comply with adequate emergency access standards. As such, a less than significant impact would occur.

Transportation/Traffic f)

The project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. Since all existing and proposed medical cannabis operations would need to be in conformance with all established policies and regulations in order to be permitted. No impact would occur.

MITIGATION MEASURES

No mitigation required.

FINDINGS

The Proposed Project will have a **Less Than Significant Impact** on transportation and traffic.

XVII. UTILITIES AND SERVICE SYSTEMS. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☒	☐	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☒	☐	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

THRESHOLDS OF SIGNIFICANCE: This Initial Study considers to what degree, if any, the proposed project would (a) exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board; (b) require or result in the construction of new water or wastewater facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; (c) require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; (d) have sufficient water supplies available to serve the project from existing entitlements and resources, or need new or expanded entitlements; (e) result in a determination by the wastewater treatment provider that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments; (f) be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; or (g) comply with federal, state, and local statutes and regulations related to solid waste.

DISCUSSION

The proposed MCCR, considered herein, apply in a variety of zoning districts throughout the County (see project description). Generally speaking the cultivation sites located in TPZ, forest lands, range lands and agricultural zoning districts and many within the rural residential zones will be served by on-site septic systems and on-site water sources. Some cultivation sites—predominately those that could be located in industrial areas and some within rural residential areas—may be served by a Community Services District and have access to a community water or wastewater system. Storm water facilities will likely be provided on-site and may include existing infrastructure in rural residential and industrial zoning districts. Proposed Agriculture Code amendment in the MCCR, Ordinance Section 10A.17.090(l), requires that each application for a medical cannabis cultivation include a cultivation and operations plan describing how the operation will meet or exceed minimum legal standards for 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.

Utilities and Service Systems a)

The project will not result in applicable RWQCB wastewater treatment requirements being exceeded. The proposed Agriculture Code amendment in the MCCR (Section 10A.17.090(L)) requires that each applicant seeking to obtain a permit for medical cannabis cultivation demonstrates enrollment and compliance with (or proof of exemption from) the Order. For cultivation sites which do not require enrollment under the Order per section 10A.17.110—even cultivation sites for which no enrollment in the Order is required—shall still comply with the standard conditions set forth in the Order. As part of the standard conditions applied in the Order (I.A.11 Refuse and Human Waste), disposal of domestic sewage shall meet applicable County health standards, local agency management plans and ordinances, and/or the RWQCB Onsite Wastewater Treatment System policy and shall not present a threat to water or groundwater. By implementing the project, it is likely that many existing on-site wastewater systems will be repaired and maintained in order to show eligibility for the permit—resulting in an overall benefit as the project is implemented. Therefore no impact would occur.

Utilities and Service Systems b) and e)

The proposed project could result in the construction of new water or wastewater facilities or expansion of existing facilities. Generally this will come in the form of on-site sewage disposal systems or wells or water withdrawals with approved water right. These potential impacts are covered in the Geology and Hydrology and Water Quality sections of this document. Some areas eligible for a cultivation permit have access to community water and sewer. In order to ensure that the applicable service district has capacity to serve the cultivation site—in terms of water use and waste disposal—Mitigation Measure UTIL-1 will be implemented, requiring a will-serve letter from the community water or sewer provider prior to permitting the cultivation site. Having a will-serve letter also allows the provider to review the project to determine that it has adequate capacity to serve the use given other commitments. With mitigation incorporated, there will be a less than significant impact.

Utilities and Service Systems c)

The proposed project would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities; the construction of such facilities could cause significant environmental effects. For the vast majority of cultivation sites, storm-water will be handled on-site and addressed through the standard conditions of the RWQCB Order—specifically sections I.A.1 Site Maintenance, Erosion Control and Drainage features, and I.A.2. Irrigation Runoff. As mentioned previously, even cultivation sites that do not require enrollment under the Order are still required to meet the standard conditions. The industrially zoned cultivation sites may have storm water facilities that ultimately tie into municipal or other communal storm water systems. Handling all materials in a manner consistent with the Order standard conditions will ensure that inputs to the system are compliant. Therefore, a less than significant impact will occur.

Utilities and Service Systems d)

The permitting process for cultivation sites includes demonstrating that there are sufficient water supplies available to serve the existing or proposed level of cultivation and that the supply is legally available. This may require obtaining new or expanded entitlements for new cultivation sites or at existing cultivation sites

where legal water rights have not been secured. The Order standard condition I.A.5. Water Storage and Use requires that the size and scope of the cultivation operation be conducted is such a manner that the amount of water used shall not adversely impact water quality or beneficial uses and the implementation of water conservation measures. Therefore, a less than significant impact will occur.

Utilities and Service Systems f) and g)

It is anticipated that the project will result in implementation of management measures and remediation/cleanup/restoration activities at existing cultivation sites. This could result in an increase of solid waste disposed at landfills. Currently there are sites where waste is being stored and accumulated, but not properly disposed of in a timely manner (RWQCB Order IS, 2015). The Order, standard conditions I.A.10 (Cultivation related waste) and I.A.11 (Refuse and human waste), require that waste be handled in accordance with local and State laws. This could result in an influx to the local transfer stations and out of county landfills, but this is not expected to occur on a scale that would impact the capacities of the landfills accepting the waste (RWQCB Order IS). Therefore, a less than significant impact would occur.

MITIGATION MEASURES

UTIL-1: Mendocino County shall modify the MCCO prior to its adoption by the Board of Supervisors to require the submittal of a will-serve letter for cultivation sites which receive or propose to receive water and or sewer from a community provider.

FINDINGS

The Proposed Project will have a **Less than Significant Impact With Mitigation Incorporated** on Utilities and Service Systems.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).	☐	☐	☐	☒
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

THRESHOLDS OF SIGNIFICANCE: This Initial Study considers to what degree, if any, the proposed project would (a) have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory; (b) have impacts that are individually limited, but cumulatively considerable ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.); or (c) have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly.

Background

The proposed MCCR will provide the entitlements and permitting mechanisms necessary to allow the commercial cultivation of cannabis for medical use within approved zoning districts within Mendocino County based on the cultivation site's size and growth methodology (outdoor, indoor, or mixed-light). Existing and future cannabis cultivation sites will be required to meet and adhere to all of the conditions in a variety of other regulations, some of which are still being developed (*), as described in previous sections. Other existing water quality and resource conservation regulations and required permits may—together with the proposed MCCR reduce the potential to affect the environment—include, but are not limited to, the following:

1) California Department of Food and Agriculture Medical Cannabis Cultivation Permits (available in 2018)*;
2) North Coast Regional Water Quality Control Board Cannabis Cultivation Waste Discharge Regulatory Program Order No. R1-2015-0023 (The Order);
3) NPDES General Permit for Storm Water Discharges Associated with Construction Activity (Order No. 2009-0009-DWQ, NPDES No. CAR000002) (Construction General Permit);
4) Impaired Water Bodies (303(d) list) Total Maximum Daily Load waste load allocations*;
5) California Department of Fish and Wildlife Lake and Streambed Alteration Agreement (Section 1600);

6) State Water Resources Control Board Policy for Maintaining Instream Flows in Northern California Coastal Streams;
7) California Water Action Plan Instream Flow Requirements*;
8) Sustainable Groundwater Act of 2014;
9) Mendocino County Department of Public Health Well Drilling Permit;
10) Mendocino County Williamson Act Ordinance;
11) Mendocino County Grading Ordinance; and
12) North Coast Air Quality Management District Fugitive Dust Rules and other Regulations.

The adoption of the proposed MCCRs would reduce non-point pollutant discharge from existing cultivation facilities enrolled in the RWQCB program and would not result in the relaxation of water quality standards. The adoption of the proposed MCCR will not grant new water rights or relax regulations which require any person diverting and storing water from springs, streams, and rivers to:

1) File an initial statement of use and annual reporting with the SWRCB Division of Water Rights;
2) Measure and report how much water is being used annually; and
3) Secure an Appropriative Water Right from the SWRCB Division of Water Rights.

DISCUSSION OF IMPACTS

Mandatory Findings a)

The purpose of the proposed MCCR, as stated in the Project Description, is to provide the local complement to a variety of actions currently being taken by the State of California to provide a legal framework for the medical cannabis industry as existing cultivation sites are inspected and brought into compliance with state and local regulations, the proposed MCCR will result in a wide variety of environmental improvements, including reducing sediment inputs to creeks and streams; improving water quality; requiring secured water rights; improving channel stability; reducing hazards and unstable features; improving fish habitat; and preserving riparian habitat. These goals would be achieved through compliance with the Order (existing sites) and compliance with CDFA MCCP regulations currently being developed (new sites) as well as the performance standards of the proposed MCCR (as amended by mitigation measures as described in the individual resource sections).

In order to reduce and avoid potential impacts associated with Phase 2 and Phase 3 implementation (new sites). The proposed MCCR includes provisions requiring proof of a secured water right or other water source and sizing of cultivation area based on the amount of water that is available. The environmental impacts of new operations will be reduced through existing regulatory requirements and permitting processes described above and in the previous sections. In order to prevent possible cumulative impacts or conflicts with new regulations or new science, the proposed MCCR includes annual permit renewals at which time the terms or conditions of the permit may be adjusted.

The proposed MCCR applies the requirements, Standard Conditions, and recommended Best Management Practices in the Order to all permitted cultivation sites. As discussed in this Initial Study, the impacts of cannabis cultivation are generally associated with ongoing, operational, and short-term construction impacts which can be mitigated to a less than significant level through the implementation of performance standards and BMPs. The requirements and management measures in the Order, combined with the conservation measures in the proposed MCCR (as amended to comply with proposed mitigation measures) would not degrade the quality of the environment; reduce fish or wildlife habitat; cause fish or wildlife populations to drop below self-sustaining levels; threaten to eliminate a plant or animal community; reduce the number or restrict the range of a rare or endangered plant or animal; or eliminate important

examples of the major periods of California history or prehistory, but rather would serve to eliminate or minimize these impacts. Therefore there would be a less than significant impact.

Mandatory Findings b)

The permitted cultivation sites authorized by the proposed MCCR will be issued for parcels across a large portion of the Mendocino County landscape. In Phase 1, all issued permits will have the effect of upgrading and improving compliance from existing cultivation operations. Phase 2 and Phase 3 permit new operations but only in areas which are appropriately zoned (excluding TPZ and FL Zones) and where environmental risks can be minimized through appropriate regulation, and the requirements to demonstrate adequate water service, avoidance of likely habitat, and other measures are described in the proposed MCCR and in the proposed mitigation measures.

The Mendocino County General Plan EIR and Ukiah Valley Area Plan EIR include discussions of the cumulative effects to the environment expected from overall development within the County over an extended period. The General Plan EIR identifies the following cumulative impacts:

1) Air Quality;
2) GHG emissions;
3) Biological Resources;
4) Groundwater supply
5) Traffic noise;
6) Fire and emergency services protection;
7) Law enforcement; and
8) Traffic.
9)

The Ukiah Valley Area Plan identifies the following cumulative impacts:

1) Water Quality;
2) Construction of new storm drainage facilities;
3) Biological Resources (from urban runoff);
4) Cultural Resources;
5) Air Quality;
6) Noise;
7) Community visual character;
8) Night lighting;
9) Schools;
10) Police protection;
11) Emergency Medical Services;
12) Wastewater treatment;
13) Parks and recreation; and
14) Greenhouse gasses and global climate change.

The General Plan EIR and Ukiah Valley EIR both attribute the majority of the cumulative effects of implementation to the ongoing process of urbanization as population grows and demand for public services increases. These effects are generally not applicable to the use of agricultural and rural parcels for cultivation—limiting the contribution of the operations authorized by the proposed MCCR to the identified potentially considerable cumulative effects.

On a cumulative basis, the effect of the proposed MCCR will be to bring a substantial number of existing cultivation operations into compliance with a wide variety of resource protection laws and regulations or to relocate to environmentally superior locations. While individual cultivation operations approved through the permit process may have non-negligible but less than significant effects to the environment, the overall effect of the proposed MCCR is expected to reduce rather than increase the environmental footprint of the medical cannabis industry in Mendocino County. The proposed MCCR increases environmental protections and requires a reduction in sediment and runoff from existing and future cultivation sites as compared to industry practices in the absence of the regulation. Requirements to demonstrate adequate water supply, comply with a variety of state and local conservation regulations, setbacks from streams and sensitive uses, minimum parcel sizes, maximum cultivation sizes, energy efficiency requirements, limitations on the use of generators, and other restrictions will guide the industry over time to locate in less sensitive areas and to operate in a manner which will have fewer impacts than would otherwise occur.

Therefore, the proposed MCCR project will not have a cumulatively considerable effect on the environment when considered in the context of other projects.

Mandatory Findings c)

The proposed MCCR would not cause any substantial adverse effects to human beings, either directly or indirectly. The proposed MCCR provide a mechanism to correct an ongoing detrimental situation by allowing existing and future cultivators of medical cannabis to conduct their activities within a regulatory framework that provides for the appropriate siting of operations, manages interactions with neighboring uses, and offers resource protections. In the absence of such regulations, the informal and unregulated industry is likely to continue as it has been operating during the baseline condition with negative effects to environmental resources, water quantity and quality, and imposing increasing demands for public services in the enforcement of regulations and the resolution of conflicts. Therefore, the proposed project will have a less than significant impact on human beings, either directly or indirectly.

MITIGATION MEASURES

None Needed

FINDINGS

The Proposed Project will have a **LESS THAN SIGNIFICANT** Impact on Mandatory Findings of Significance

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