



California Environmental Quality Act
Public Review Document
Initial Study & Proposed Mitigated Negative Declaration

February 2, 2021 Maple Creek Ranch Corporation APN 313-145-006/Applications #12154 and #15197

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California Environmental Quality Act Public Review Document Initial Study & Proposed Mitigated Negative Declaration

Maple Creek Ranch Corporation (APN:313-145-006, Permit Applications #12154 and #15197)

Prepared for:



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Acronyms and Abbreviations

AB Assembly Bill

ADA Americans with Disabilities Act

AE Agricultural Exclusive

AG Agricultural

APE Area of Potential Effect

APN Assessor Parcel Number

ARB Air Resources Board

BAAQMD Bay Area Air Quality Management District

BACT Best Available Control Technology

BA/EFHA Biological Assessment/Essential Fish Habitat Assessment

BMPs Best Management Practices

C Candidate

CA Cultivation Area

CalEEMod California Emissions Management Agency

CalEMA California Emergency Management Agency

CalEPA California Environmental Protection Agency

CAL FIRE California Department of Forestry and Fire Protection

Cal-OSHA California Division of Occupational Safety and Health

Caltrans California Department of Transportation

CARB California Air Resource Board

CBC California Building Code

CCC California Coastal Commission

CCR California Code of Regulations

CCLUO Commercial Cannabis Land Use Ordinance

CDFW California Department of Fish and Wildlife

CDOC California Department of Conservation

CDP Coastal Development Permit

CEQ Council on Environment Quality

CEQA California Environmental Quality Act

CGS California Geological Survey

CH₄ Methane

CNDDB California Natural Diversity Database

CNPS California Native Plant Society

CO₂ Carbon dioxide

CPR California Public Resources Code

CRC California Redwood Company

CUP Conditional Use Permit

CMMLUO Commercial Medical Marijuana Land Use Ordinance

CRHR California Register of Historic Resources

CWA Clean Water Act

D Delisted

dB Decibel

dBA A-Weighted Sound Level

DTSC Department of Toxic Substances Control

E Endangered

EFH Essential

EPA Environmental Protection Act

ESHA Environmentally Sensitive Habitat Area

FEIR Final Environmental Impact Report

FEMA Federal Emergency Management Agency

GHG Greenhouse Gas

GIS Geographic Information System

HCAOG Humboldt County Association of Governments

HRER Historical Resources Evaluation Report

HWMA Humboldt Waste Management Authority

ICLEI International Council on Local Environmental Initiatives

IS Initial Study

Ldn Day-night Average Sound Level

Lmax Maximum Instantaneous Noise Level

LOC Letter of Concurrence

LRA Local Responsibility Area

LUST Leaking Underground Storage Tank

MBTA Migratory Bird Treaty Act

MCR Maple Creek Ranch

MLD Most Likely Descendant

ND Negative Declaration

MTCO2e Metric tons carbon dioxide equivalent

MSDS Material Safety Data Sheet

N2O Nitrous Oxide

NAHC Native American Heritage Commission

NCAB North Coast Air Basin

NCRA North Coast Railroad Authority

NCRWQCB North Coast Regional Water Quality Control Board

NCUAQMD North Coast Unified Air Quality Management District

NEHRP National Earthquake Hazards Reduction Program

NEPA National Environmental Policy Act

NES Natural Environmental Study

NMFS National Marine Fisheries Service

NOAA National Oceanographic and Atmospheric Administration

NPDES National Pollutant Discharge Elimination System

NRC National Research Council

NRHP National Register of Historic Places

NSR New Source Review

NWIC Northwest Information Center

NWPRR Northwest Pacific Railroad

PM2.5 Fine Suspended Particulate Matter

PM10 Suspended Particulate Matter

PPV Peak Particle Velocity

PRC Public Resources Code

PSB Public Resources Boundary

PSD Prevention of Significant Deterioration

RCEA Redwood Coast Energy Association

ROW Right-of-way

RWQCB Regional Water Quality Control Board

RRR Retirement, Remediation, and Relocation Program

RUSLE Revised Universal Soil Loss Equation

SDC Seismic Design Control Board

SLR Sea Level Rise

SONCC Southern Oregon/Northern California Coast

SVOC Semivolatile Organic Compounds

SWL Still Water Elevation

SWPPP Stormwater Pollution Prevention Plan

SWRCB State Water Resource Control Board

T Threatened

TWL Total Water Level

TPZ Timberland Production

USACE United States Army Corps of Engineers

USDA United States Department of Agriculture

USFWS United States Fish and Wildlife Services

USGS United States Geological Survey

USLE Universal Soil Loss Equation

VFG Valley and Foothill Grassland

Project Overview

1. Project Title: Maple Creek Ranch Cannabis Cultivation and Processing Project

2. Lead Agency:

Humboldt County
Department of Planning
3015 H St.

Eureka, CA 95501

3. Contact Person

Cliff Johnson

707-445-7541

4. Project Location: The Maple Creek Cannabis Farms (MCR) project is located within Humboldt County near the community of Maple Creek, California. Maple Creek Ranch Corporation is the owner of the property with assessor's parcel number (APN) 313-145-006. Based on County of Humboldt Geographical Information System (GIS), the parcel totals 411.21 acres.

5. Applicants Name and Address:

Maple Creek Ranch Corporation

PO Box 1212

Eureka, CA 95502

6. General Plan Designation

The current General Plan Designation is T (Timber).

Zoning

The current zoning for the sites is AE/TPZ (Agricultural Exclusive and Timber Production). All proposed cultivation and cultivation activities would occur within the AE zone. Based on the current zoning and the general plan description the sites are eligible for cannabis cultivation and facilities for processing.

8. Project Description

The current project is proposing 4 Conditional Use Permits (CUPs) under the CMMLUO for 174,240 ft 2 (4.0 ac) of outdoor cannabis cultivation area with a proposed additional 4,800 ft 2 (0.10 ac) for development of an ancillary support facility (i.e.

drying/processing) and 6,600 square feet of proposed ancillary nursery space. The project includes an additional Zoning Clearance Certificate (ZCC) under the CCLUO for the relocation of 27,000 square feet of cannabis from APN 315-011-009 to the subject parcel. Refer to section 1.1-1.5 for more detail.

9. Surrounding land use

The parcels immediately surrounding the parcel are located within the AE (Agriculture Exclusive) and TPZ (Timberland Production) zoning districts. Uses for these include agriculture, timber production, nurseries, and greenhouses.

10. Other public agencies whose approval is required (e.g. permits, financing approval, or participation agreement.

Humboldt County is the lead agency for the proposed project and has discretionary authority over the primary project proposal. To implement this project, the applicant may need to obtain, at a minimum, the following discretionary permits/approvals from other agencies:

- Humboldt County Department of Environmental Health
- Humboldt County Department of Public Works
- California Department of Fish and Wildlife (Region 1)
- California State Water Quality Control Board
- California Department of Food and Agriculture
- 11. **Tribal Consultation:** Tribal consultation pursuant to AB 52 was initiated by the Humboldt County Planning Department. The local tribes did not requests official consultation under AB 52.
- 12. **Purpose of this Document:** This document seeks to analyze the environmental impacts of development for cannabis cultivation and ancillary processing.

1. INTRODUCTION

1.1 Introduction and Regulatory Guidance

This document is an Initial Study (IS) that summarizes the technical studies prepared for the proposed Maple Creek Ranch (MCR) Conditional Use Permits (CUPs) project and provides justification for a Negative Declaration (ND). This document has been prepared in accordance with the current California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq., and the State CEQA Guidelines. The purpose of this document is to evaluate the potential environmental impacts of the proposed MCR Cannabis Conditional Use Permits project. Mitigation measures have been proposed to avoid or minimize any significant impacts that were identified.

MCR is proposing 4 Conditional Use Permits (CUPs), as defined in Humboldt County's Commercial Medical Marijuana Land Use Ordinance (CMMLUO) Section 55.4.5-55.4.14. MCR is also proposing to develop a facility for ancillary cannabis processing and drying in accordance with the requirements as stated in the CMMLUO and current adopted building code. Further, MCR is proposing a Zoning Clearance Certificate, as defined in Humboldt County's Commercial Cannabis Land Use Ordinance (CCLUO) Sections 55.4.6.5.9 and 55.4.6.6 for the relocation of 27,000 square feet of outdoor cannabis cultivation from APN 315-011-009 to the subject parcel.

1.2 Purpose and Need

CEQA requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before acting on those projects. An Initial Study (IS) is a public document used by the decision-making lead agency to determine whether a project may have a significant impact on the environment. If the agency finds that the proposed project may have a significant impact on the environment, but that these impacts will be reduced to a less than significant level through revisions to the project and/or implementation of specific mitigation measures, a Mitigated Negative Declaration (ND) shall be prepared.

This IS/MND is a public information document that describes the proposed project, existing environmental setting at the project site, and potential environmental impacts of construction and operation of the proposed project. It is intended to inform the public and decision-makers of the proposed project's potential environmental impacts and to document the lead agency's compliance with CEQA and the State CEQA Guidelines.

1.3 Review Process

This IS/MND is being circulated for public and agency review as required by CEQA. Because state agencies will act as responsible or trustee agencies, Humboldt County will circulate the IS/MND to the State Clearinghouse of the Governor's Office of Planning and Research for distribution and a 30-day review period.

During the review period, written comments to the County must be considered before adoption of the MND. Comments can be submitted to:

Planning and Building Department 3015 H St. Eureka, CA 95501

Contact Person: Cliff Johnson

1.4 Project Location and Setting

1.4.1 Location

MCR is located near the community of Maple Creek, 15 miles west-southwest of Eureka, California in Humboldt County. The assessor's parcel number for the property on which the proposed project would be developed is 313-145-006, with a parcel centroid location of latitude 40.7729 and longitude -123.8846 and a total area of 544.5 acres. The site is in Section 30, Township 5N, Range 3E, Humboldt Basin Meridian. The property is in the Korbel California USGS 7.5-minute quadrangle map. (Figure 1)

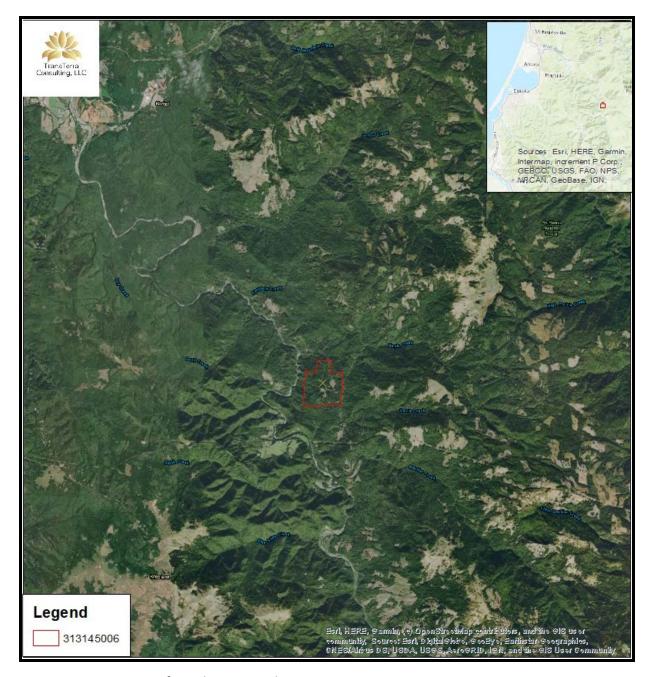


Figure 1. Vicinity Map for Subject Parcel.

PROJECT SITE

DIRECTIONS TO SITE:

FROM EUREKA, CA

-HWY 101 N EXIT 299 EAST -299 EAST EXIT BLUE LAKE BLVD. -BLUE LAKE BLVD. TO MAPLE CREEK RD. -MAPLE CREEK RD. APPROX 14 MILES TO PROJECT LOCATION

MAPLE CREEK RANCH CORP. **CONDITIONAL USE PERMIT**

APN: 313-145-006

VICINITY MAP NOT TO SCALE

PROJECT DESCRIPTION:

MAPLE CREEK RANCH CORP. IS PROPOSING TO PERMIT NEW CANNABIS CULTIVATION ACTIVITIES IN ACCORDANCE WITH THE COUNTY OF HUMBOLDT'S (COUNTY) COMMERCIAL MARIJUANA LAND USE ORDINANCE (CMMLUO), ORDINANCE NO. 2554. THE NEW OPERATION INCLUDES APPROXIMATELY 154,000 SQUARE FEET (SF) OF OUTDOOR CANNABIS CULTIVATION AND APPRÒXIMATELY 6,600 SQUARE FEET (SF) OF NURSERY CANNABIS CULTIVATION. THE PROJECT PROPOSAL INCLUDES THE DEVELOPMENT OF FACILITIES APPURTENANT TO THE CULTIVATION, INCLUDING GREENHOUSES, FACILITIES FOR DRYING AND CURING OF CANNABIS, WATER DIVERSION WORKS AND APPROPRIATE WATER STORAGE.

GENERAL NOTES:

- DRAWING SCALE AS NOTED. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS.
- THIS IS NOT A BOUNDARY SURVEY. BOUNDARY INFORMATION DEPICTED HAS BEEN OBTAINED FROM HUMBOLDT COUNTY 2015 GIS DATA. NORTHPOINT CONSULTING GROUP, INC. HAS NOT VERIFIED THIS PROPERTY BOUNDARY.
- THERE ARE NO NEARBY SCHOOLS, SCHOOL BUS STOPS, PLACES OF WORSHIP, PUBLIC PARKS OR TRIBAL RESOURCES WITHIN 600 FEET OF THE PROPOSED CULTIVATION AREA.
- 4. THERE ARE NO RESIDENCES ON ADJOINING PARCELS WITHIN 300 FEET OF THE PROPOSED CULTIVATION AREAS.
- 5. ANY EXISTING DEVELOPMENT CONSTRUCTED WITHOUT THE BENEFIT OF COUNTY REVIEW WILL BE SUBJECT TO THE HUMBOLDT COUNTY BUILDING DEPARTMENT UPON APPROVAL OF THE CONDITIONAL USE PERMIT.
- CLASSIFICATION OF WATERCOURSES AS IDENTIFIED IN THE WATER RESOURCES PROTECTION PLAN.



22x34 SHEET: 1"=500'

11x17 SHEET: 1"=1000'

PROJECT INFORMATION:

APPLICANT:
MAPLE CREEK RANCH CORP. PO BOX 1212 EUREKA, CA 95502

PROPERTY OWNER: CATHERINE DUNAWAY PO ROX 1212 EUREKA, CA 95502

APPLICANTS AGENT: SIX RIVERS DEVELOPMENT, LLC PO BOX 4215 ARCATA, CA 95518 (707) 498-1791

SITE ADDRESS: APN: 313-145-006 (40.7856, -123.8861)

TREES TO BE REMOVED = NONE

PRIME AGRICULTURAL AREA = 905,612 SQ.FT. (20.79 ACRES) 20% OF PRIME AGRICULTURAL AREA = 181,122 SQ.FT. (4.15)

PROPOSED OUTDOOR CULTIVATION AREA PROPOSED NURSERY AREA = 6,600 SQ.FT PROPOSED CULTIVATION FACILITY FOOTPRINT = 4,800 SQ.FT

EARTHWORK QUANTITIES = TBD CY FILL

= PRIVATE SEWER = PRIVATE

PROPERTY SIZE $= \pm 420$ ACRES

= TPZ; AE ZONING

GENERAL PLAN DESIGNATION = T

BUILDING SETBACKS:

	TPZ	AE	SRA
FRONT	20'	30'	30'
SIDE	30'	20'	30'
REAR	30'	10'	30'

SRA AREA IN COASTAL ZONE: IN 100 YR FLOOD ZONE: = YES

SHEET INDEX:

CO - PLOT PLAN, VICINITY MAP, & PROJECT NOTES

C2 - PROPOSED SITE PLAN C3 - AREA 1

C4 - AREA 2

LEGEND:

---> = SPRING

− > = WATER LINE

= STREAMSIDE MANAGEMENT AREA

= PRIME AGRICULTURAL SOILS AREA

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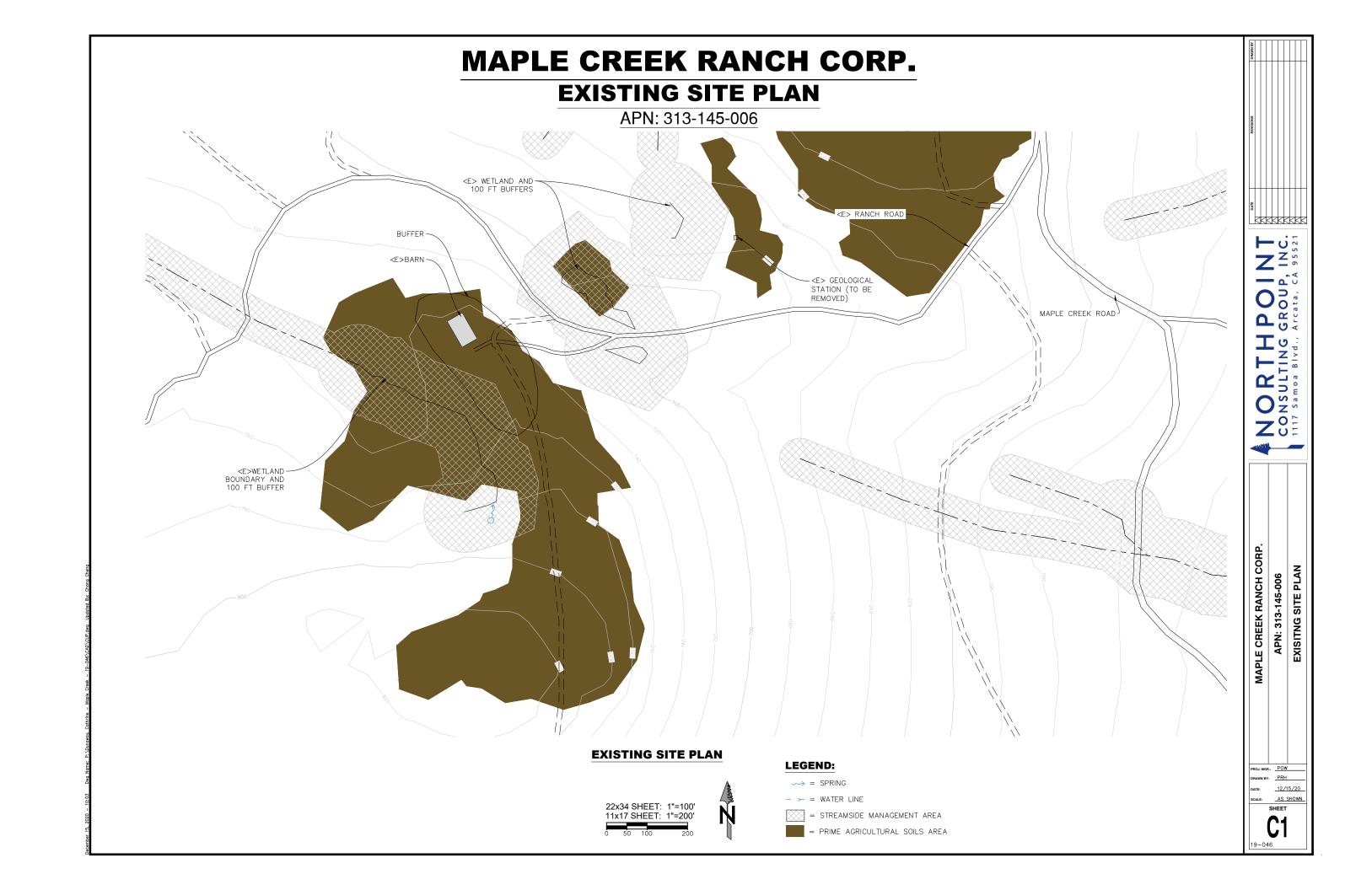
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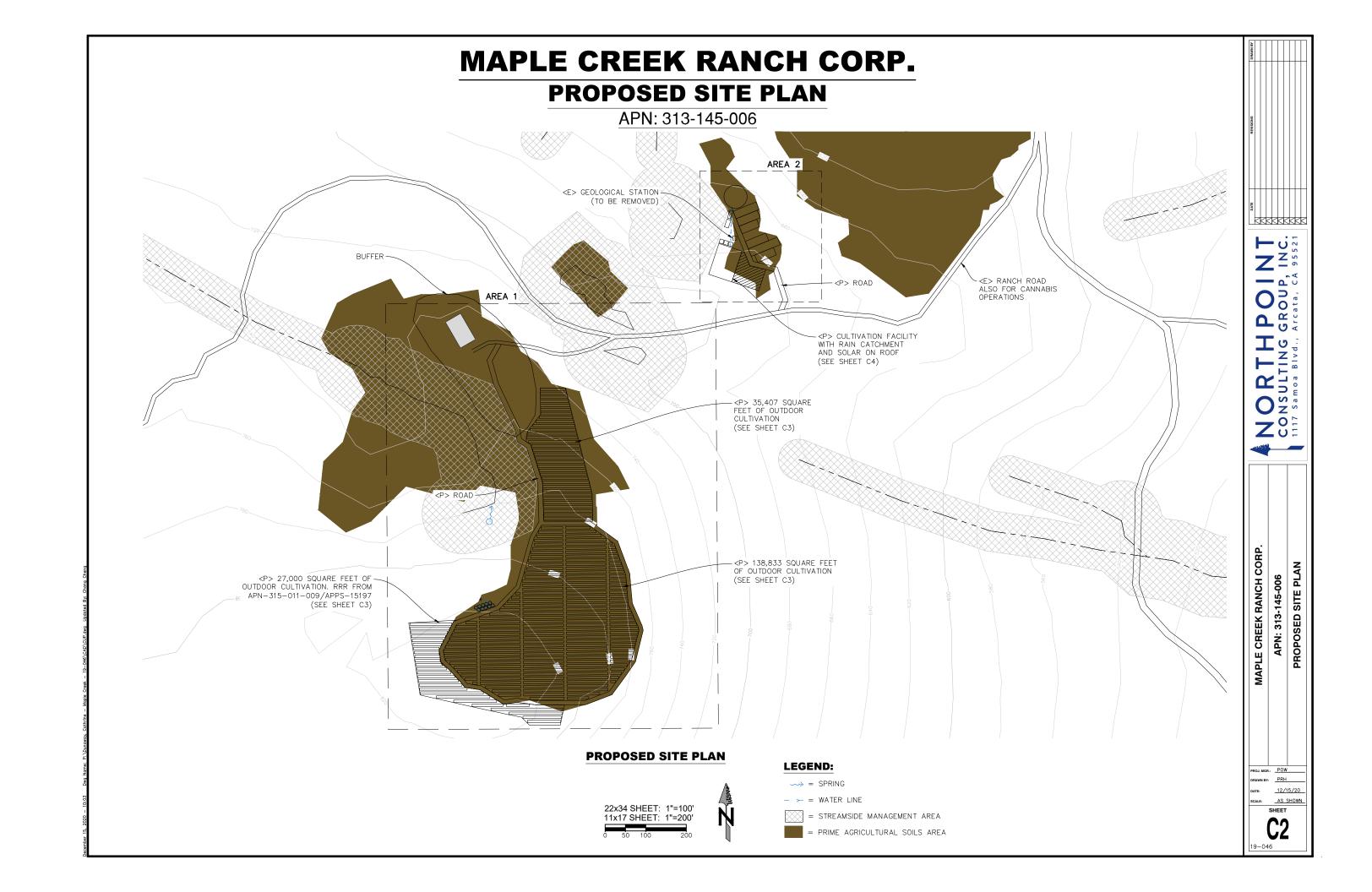
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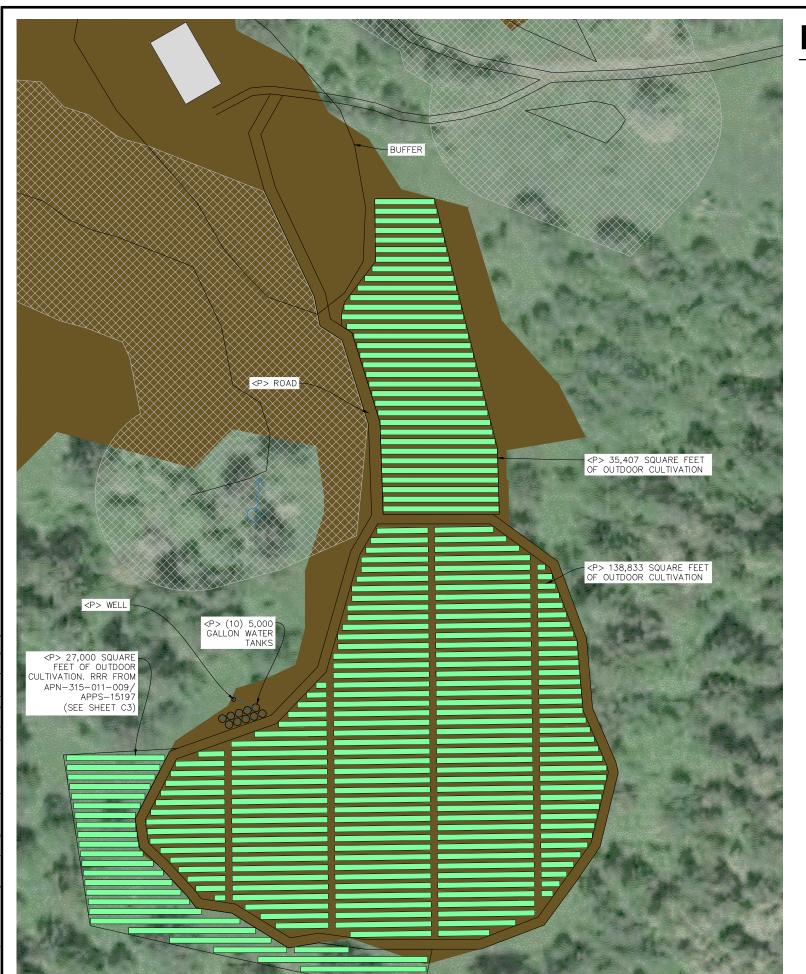
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MAPLE (

PROJ. MGR.: POW DRAWN BY: PRH 12/15/20 AS SHOWN SHEET







MAPLE CREEK RANCH CORP. **PROPOSED SITE PLAN - AREA 1**

APN: 313-145-006

LEGEND:

○→ = SPRING

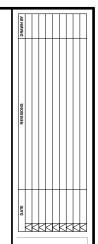
− > = WATER LINE

= STREAMSIDE MANAGEMENT AREA

= PRIME AGRICULTURAL SOILS AREA

PROPOSED STRUCTURES AND USE

- -201,240 SQUARE FEET OF OUTDOOR CANNABIS CULTIVATION
- -ROAD LEADING TO OUTDOOR CULTIVATION AREA
- -(10) 5,000 GALLON WATER TANKS



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APN: 313-145-006

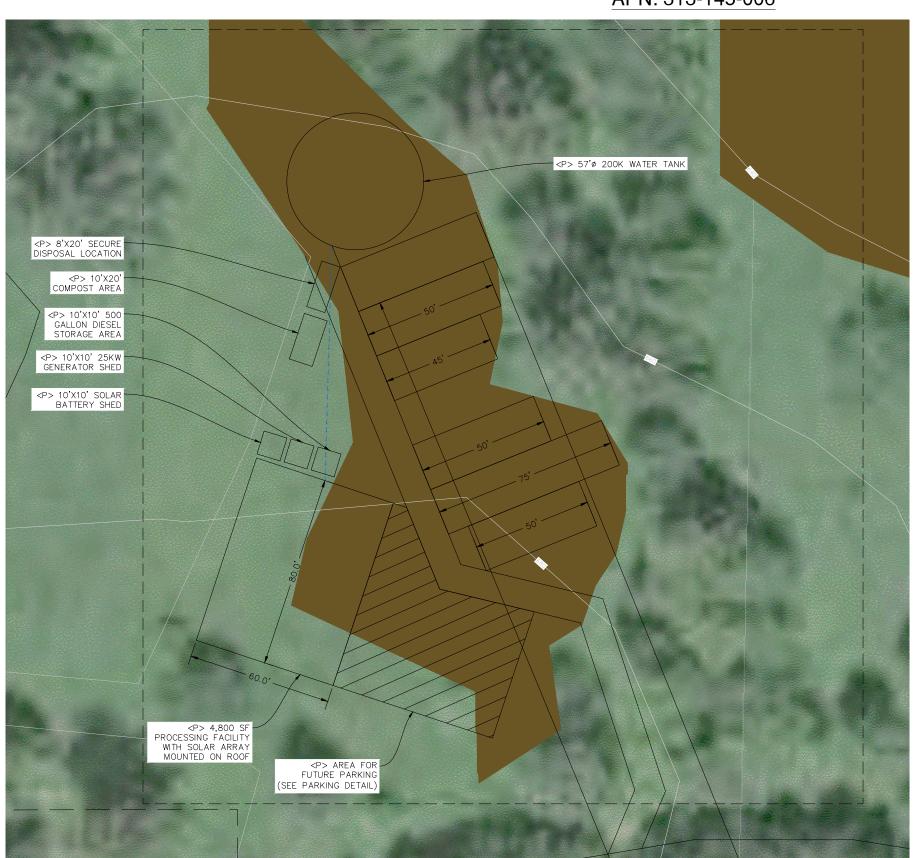
MAPLE CREEK RANCH CORP.

12/15/20 AS SHOWN SHEET

AREA 1 22x34 SHEET: 1"=50' 11x17 SHEET: 1"=100'

MAPLE CREEK RANCH CORP. **PROPOSED SITE PLAN - AREA 2**

APN: 313-145-006



LEGEND:

= STREAMSIDE MANAGEMENT AREA

EXISTING STRUCTURES AND USE:

-GEOLOGICAL STATION (TO BE REMOVED)

- -200,000 GALLON WATER STORAGE TANK
- -SECURE DISPOSAL LOCATION
- -25KW GENERATOR SHED
- -SOLAR BATTERY SHED
- -4,800 SQUARE FOOT PROCESSING FACILITY

→ = SPRING

− > = WATER LINE

= PRIME AGRICULTURAL SOILS AREA



PROPOSED STRUCTURES AND USE

-NURSERY GREENHOUSES - 6,600 SQUARE FEET FOR CANNABIS NURSERY AND PROPAGATION SPACE

- -COMPOST AREA
- -500 GALLON DIESEL SHED

- -AREA FOR FUTURE PARKING

AREA 2 22x34 SHEET: 1"=20' 11x17 SHEET: 1"=40'





APN: 313-145-006

MAPLE CREEK RANCH CORP.

DRAWN BY: PRH 12/15/20 AS SHOWN

SHEET

1.4.2 Climate

The climate is Mediterranean. Most precipitation falls as rain from October to May. The elevation of the project location is approximately 400-815 feet, so little to no snowfall occurs annually. The average annual amount of precipitation for Maple Creek is 64.5 inches, with 80 inches or more falling in wet water year types (Figure 2). The month with the most precipitation on average is December with 12.3 inches of precipitation, with the summer months having close to 0.0 inches of precipitation (Figure 2).

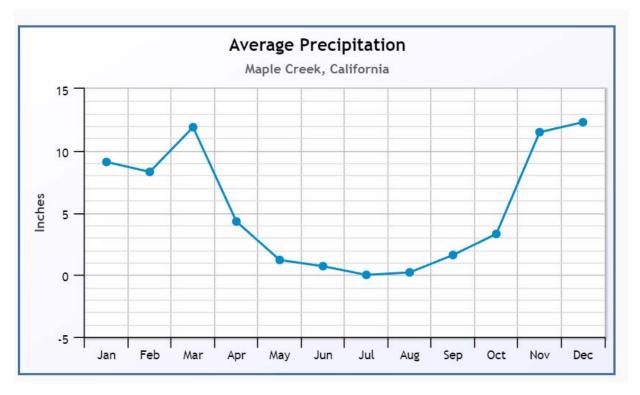


Figure 2. Monthly precipitation averages for Maple Creek, CA. Average annual rainfall is 64.5 inches¹.

The average temperature for the year in Maple Creek is 53.0°F (11.7°C). The warmest month, on average, is August with an average temperature of 63.8°F (17.7°C). The coolest month on average is January, with an average temperature of 43.3°F (6.3°C). The highest recorded temperature in Maple Creek is 103.0°F (39.4°C), which was recorded in September. The lowest recorded temperature in Maple Creek is 9.0°F (-12.8°C), which was recorded in December (Weatherbase 2019).

¹ Weatherbase, 2019. (https://www.weatherbase.com/weather/weather.php3?s=880040&cityname=Maplecreek-California-United-States-of-America)

1.4.3 Biological Setting

The proposed project is located within an existing large, open, naturally occurring prairie on the parcel. Vegetation is variable throughout the parcel, but primarily composed of mixed evergreen forest. Dominant trees species included Pseudotsuga menziesii var menziesii (Douglas fir), Umbellularia californica (California bay), Acer macrophyllum (big leaf maple), Quercus kelloggii (California black oak), Fraxinus latifolia (Oregon ash), and Arbutus menziesii (madrone). Shrub species and density were variable depending upon hydrology and canopy. Most areas were dominated by Rosa gymnocarpa (wood rose), Baccharis pilularis (coyote brush), Rubus armeniacus (Himalayan blackberry), R. parviflorus (thimbleberry), R. leucodermis (white-stemmed raspberry), Pteridium aquilinum var. pubescens (Western bracken fern), Toxicodendron diversilobum (poison oak), Symphoricarpos mollis (creeping snowberry), Holodiscus discolor (oceanspray), Cotoneaster sp. (cotoneaster), and Rhamnus purshiana (coffeeberry) as well as small tree species. The herb layer ranged from very dense to sparse, also dependent upon canopy and hydrology. Open areas where the majority of the cultivation is proposed are primarily dominated by pasture grasses and forbs with scattered shrubs. Species observed included Hypericum perforatum (Klamathweed), Leucanthemum vulgare (oxeye daisy), Holcus lanatus (velvet grass), Prunella vulgaris (self-heal), Rubus ursinus (California blackberry) Plantago lanceolata (English plantain), Anthoxanthum odoratum (sweet vernal grass), Mentha pulegium (pennyroyal), Parentucillia viscosa (yellow glandweed), Briza major (large rattlesnake grass), Cynosurus echinatus (hedgehog dogtail grass), Anaphalis margaritacea (pearly everlasting), Trifolium sp., Cirsium sp., Avena sp.. Various hydrophytic plants including Carex obnupta (slough sedge), Juncus sp. (rush), Ranunculus (buttercup) and Alnus sp. (alder) occurred throughout the property both in areas with observed wetland hydrology as well as upland areas with compaction or mesic/shady conditions. Nomenclature follows the most current scientific names in The Jepson Manual of Higher Plants of California Second Edition to the greatest degree feasible.²

1.5 Project Description

Current Project Description

Maple Creek Ranch Corporation proposes a project for 4.6 acres of new cannabis cultivation on APN 313-145-006 (APPS# 12154). The project includes 4 Conditional Use Permits (CUPs) for 4 acres or 174,240 square feet of outdoor cannabis cultivation as defined in Humboldt County's Commercial Medical Marijuana Land Use Ordinance (CMMLUO) Section 55.4.5 – 55.4.14. MCR also proposes development of new ancillary support facilities, including a nursery for propagation of immature plants and a commercial building for drying and processing of harvested cannabis. Further, MCR proposes the relocation of 27,000 square feet of outdoor

² The Jepson Manual: Higher Plants of California Second Edition. University of California Press. January 2012. http://ucjeps.berkeley.edu/jepman.html.

cannabis cultivation from APN 315-011-009/ APPS#-15197 to the subject parcel through a Zoning Clearance Certificate under Section 55.4.6.5.9 of the Commercial Cannabis Land Use Ordinance (CCLUO).

The project (Apps# 12154 and Apps#15197) includes the following elements:

- 4 Conditional Use Permits (CUPs) **each** for 43,560 square feet (1-acre) of new outdoor cannabis cultivation in accordance with CMMLUO section(s) 55.4.5 55.4.14.
- •A 4,800-square foot ancillary support facility for drying and processing of harvested cannabis in accordance with CMMLUO section(s) 55.4.5 55.4.14. The facility will require a commercial building permit and will be constructed in accordance with the requirements established in the CMMLUO and the current adopted building code.
- 6,600 square feet of ancillary nursery facilities for propagation of immature plants.
- Approval for a 25k MQ whisper watt diesel generator with 500-gallons of diesel storage to be used as primary power source for cultivation under the CMMLUO. A solar array will be used as a backup power source and as the primary power source for cultivation under the CCLUO.
- Approval for a 200,000-gallon rainwater catchment storage tank, four 50,000 gallon hard-sided water tanks and the installation of a new well.
- A Zoning Clearance Certificate the relocation of 27,000 square feet of outdoor cannabis cultivation from APN 315-011-009 to the subject parcel in accordance with CCLUO section 55.4.6.5.9.

Total cultivation proposed is 201,240 square feet of full sun, outdoor cannabis cultivation

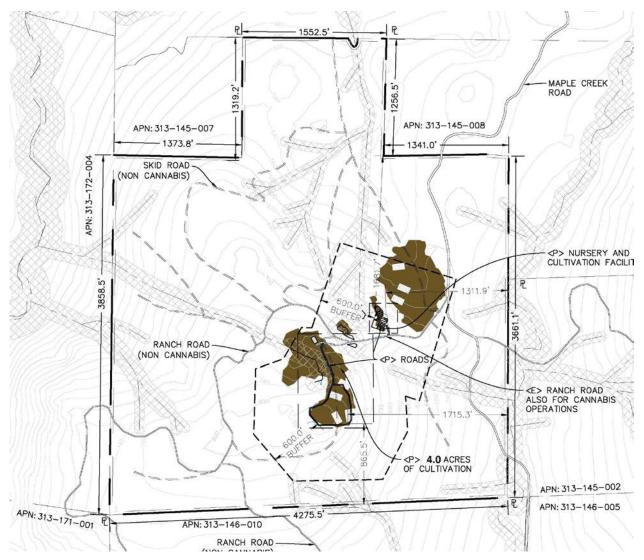


Figure 3. Plot plan for MCR, cultivation and processing areas, access roads, and water storage. The proposed 27,000 sf will be located immediately southwest of the bottom corner of the prime soils. The brown polygons delineate areas where prime agricultural soils were identified.³

³ (Project map created by Northpoint Consulting Group, Inc. NTS)

1.6 Project Construction

Maple Creek Ranch Corporation, in consultation with various professional consultants, has identified a strategy for development of the cannabis cultivation sites and ancillary support facilities that complies with best practices for environmental safety and with local and state regulations regarding cannabis cultivation. The site will be constructed in accordance with a Site Plan, Operations Plan, and various technical documents approved by the County of Humboldt. It will meet all required setbacks of cultivation areas and other features required by the CMMLUO and County Code. Access roads for the cultivation areas and ancillary support facilities will comply with the Performance Standards for Road Systems in section 55.4.12.1.8. Roadways will be improved and maintained with the installation of water bars and run-off outlets (i.e. culverts). Consulting specialists, including licensed engineering firms, licensed professional foresters, and water professionals have contributed to MCR's development strategy to ensure adherence to the environmental and building code requirements outlined by local and state regulatory agencies. The outdoor cultivation areas, totaling 174,240 ft² or 4 acres, will be constructed in existing open areas without infringement upon forested areas. The cultivation area will be developed utilizing native soils and planting directly in the ground. Organic fertilizers and amendments will be purchased from a local provider and irrigation and fertigation systems will be utilized to ensure water and fertilizers will be applied at agronomic rates. Water meters will be installed, and usage will be logged and submitted annually to regulatory agencies.

Energy Sources

The proposed power sources for the components of the project occurring under the CMMLUO is a 25kw Whisper Watt diesel generator. Power will also be supplied by a solar power system installed on the roof of the proposed drying/processing facility.

The proposed power source for the 27,000 square feet of cannabis cultivation to be relocated under the CCLUO will be the solar power system, in accordance with the requirement that cannabis cultivated under the CCLUO have a renewable energy source. The generator will only provide power to support this cultivation as a backup power source.

All electrical equipment will be installed by a licensed electrician in accordance with current adopted National Electrical Code Standards. Power requirements will be established based on the equipment utilized, which will include but not be limited to, irrigation pumps, security systems, egress lighting, support and nursery facilities.

Soils Management Plan

MCR plans to cultivate cannabis within the native soils on the project site using standard cultivation techniques Upon approval, minimal excavation, grading and tillage of the proposed cultivation site will be conducted to maximize the sites potential.

All soils originating from the excavation and grading process will be evenly distributed throughout the proposed cultivation area alleviating the need to remove and or dispose of the soils during the earth working process. During the initial development process, amendments will be purchased from local providers and applied to the cultivation area at agronomic rates to condition the native soils and to promote healthy crop growth. Periodically, as needed, additional amendments will be added. The amendments and frequency of application will be cataloged and recorded manually onsite. Records will be transposed digitally at the end of the growing cycle. Disposal of any spent soils will occur at an approved waste management facility within the County of Humboldt.

Environmental Protection

Procedures will be implemented to minimalize effects on the watershed and environment in accordance with the applicant's Site Management Plan and other submitted documents. Hay waddles will be utilized to control runoff reducing the threat of discharge into the watershed. Monitoring points will be established based on the contours and slope of the developed site. Water use will be metered, recorded and submitted annually to regulatory agencies.

The cultivation areas to be developed will be lightly graded to provide a workable surface for agricultural crop production. The grading work will be conducted by a licensed contractor in accordance with grading or earthwork plans prepared by a licensed engineer and approved by the Humboldt County Building Department. Site and road development will implement best practices to minimalize erosion and runoff, such as out sloping of the roads, installation of water bars, culverts, and rock to maintain the integrity of the site.

Irrigation Plan

Irrigation will be provided by an existing, permitted groundwater well located on an adjacent parcel under common ownership. The applicant is also proposing to develop a new irrigation well in the same area as the cultivation operation. The projected annual water usage for the site is approximately 800,000 gallons which is low for the amount of cultivation area but is accomplished due to a drip tape irrigation style and in-ground plantings. Water conservation techniques will be implemented to utilize water efficiently. The total water storage capacity on the site will be 250,000 gallons in the form of a 200,000-gallon rain catchment tank and ten 5,000-gallon hard tanks. Water will be conveyed to the cannabis plants via a drip irrigation system with in-line commercial-grade analog water meters Irrigation of the site will occur in the early morning or evening, as to provide maximum soil saturation and to limit evaporation due to excessive heat caused by daytime temperatures. The applicant will accurately monitor and report their water usage in accordance with State regulations. On site water usage logs will be maintained and recorded daily. The water usage logs will be transposed digitally monthly and provided to PWA for monitoring and recoding requirements for the SWQCRB and NCRWQRB.

Access Roads

Currently the site is serviced by two County-maintained roads, Maple Creek Road or Butler Valley Road. A short driveway entrance from each road is rocked and gated. A Road Assessment has been performed and the County-maintained access roads have the functional capacity of a Category 4 Road capable of accommodating the traffic from this site and other commercial cannabis cultivation sites in the area. In addition to existing access to the site, MCR proposes to improve existing legacy ranch roads on the subject parcel that serve as access to the cultivation site. Minimal grading and rocking is required to accomplish this work. With the exception of one portion of the cultivation access road, all other roads are existing ranch roads that will be improved. In one location the existing ranch road is located within the buffer of two seasonal wetlands..

1.7 Project Operation

Description of Cultivation Activities

Cultivation practices for the proposed project come from years of experience in the industry. MCR plans to contract with a local farm operations and management company that specializes in cannabis cultivation. The cannabis plants will be cultivated in open air and planted in the ground in native soils. Soil amendments will be purchased from a local provider. The farm operations and management company will implement outdoor cultivation techniques and best practices. MCR, by way of their farm management contractor, will implement established cultivation methods and industry specific techniques for cultivating cannabis.

MCR will source rooted clones or seed stock with verified genetics from a licensed nursery. Clones will be provided to MCR in three-inch (3") pots, and seeds will be purchased in bulk allotments. The clones and/or seeds will be transported to the cultivation site and transplanted into the ancillary nursery area to acclimate prior to being planted in the cultivation area where they will be grown to maturity. After clones and/or seeds are transplanted into the cultivation area, irrigation and fertigation will commence. Custom commercial irrigation systems affixed with commercial grade water meters will be utilized for the fertigation requirements of the crop. Monitoring and recording procedures will be implemented for tracking water and fertilizer as well as pesticide usage as required by the State Water Resource Control Board (SWRCB) and the Department of Pesticide Regulation (DPR). MCR will implement a Site Management Plan (SMP) in consultation with Pacific Watershed Affiliates to address water needs for the project and measures to protect the local watershed in accordance with State regulations.

Cultivation Cycles

April 1st- July 1st: Acquire clones/seeds from Nursery, Transplant and Vegetative Phase

All of the plants to be cultivated on site will originate as a clone from mature and healthy plant stock in the vegetative state and/or from seed and will be initially cultivated in the proposed

ancillary nursery facility. After approval of the genetics to be used for the cultivation cycle, employees of the operations and management company will commence the transplanting of the clones and/or seeds into the cultivation area, where they will remain until maturity. At this point in the cultivation cycle, it will be imperative that the plants receive high amounts of nitrogen for rapid new growth development. The operations and management team have developed a proprietary blend of fertilizers and supplements that will be used to accomplish this task. Cultivation staff will follow local and state regulations regarding application of all fertilizers and supplements used onsite at agronomic rates and with safe handling procedures.

<u>June 1st- July 1st: Crop Irrigation and Fertigation, Pesticide and Fungicide Control, Start clones/Seeds for second crop</u>

The plants will be irrigated using a pump-driven irrigation system with adjustable emitters that can be adjusted from 0-10 gallons a minute. This system is specifically designed for large-scale crop irrigation and is effective in delivering precise amounts of fertilizer at agronomic rates to each plant. The irrigation system will be affixed with a commercial-grade water meter for monitoring and recording purposes in conjunction with the SWRCB's regulatory requirements. Pesticide and Fungicides will be applied by utilizing sprayers at agronomic rates and the amounts applied to the plants will be recorded.

<u>July 1st – October 1st: Crop harvest, Replant, Irrigation and Fertigation, Pesticide and Fungicide</u> <u>Control</u>

The first crop will be harvested, and the second crop will be planted. The plants will be irrigated using a pump-driven irrigation system with adjustable emitters that can be adjusted from 0-10 gallons a minute. This system is specifically designed for large-scale crop irrigation and is effective in delivering precise amounts of fertilizer at agronomic rates to each plant. The irrigation system will be affixed with a commercial-grade water meter for monitoring and recording purposes in conjunction with the SWRCB's regulatory requirements. Pesticide and Fungicides will be applied by utilizing sprayers at agronomic rates and the amounts applied to the plants will be recorded.

October 1st – November 1st: 2nd Crop harvest, Processing, and Farm Winterization

During this time the crop will be nearing the end of its cycle and it will be harvested upon ripeness. Pesticides and fungicides will no longer be applied, but irrigation of the crop will continue until the crop is harvested. Fertilization of the crop will cease as the leaching of nutrients is desired. The final harvest will occur by mid- October and the farm will be decommissioned for the off season. Plants will be removed cut down and hung to dry in the proposed 4,800-square-foot onsite drying and processing facility. Upon completion of the harvest, root balls from the prior cycle will be removed from the cultivation area and composted. All trash will be bagged and brought to an approved landfill within the County of Humboldt. After the site has been cleaned and prepared for the winter, the cultivation area will

be amended with beneficial microbial inoculants and cover crops to maintain soil condition. Winterization of the farm, and equipment repairs will be made in preparation for the following season. Non-essential equipment will be broken down and stored for the off season.

Processing Location

MCR proposes permitting of an ancillary processing facility. The facility will provide adequate space for minimally processing product produced onsite (i.e. drying and bucking). The proposed facility is 4,800 square feet in size, will require a commercial building permit, and will be designed to adhere to all local and state building code requirements for the facility. The facility will be utilized for drying, curing, processing and storing of product ahead of sale to a licensed distributor or manufacturer.

Staffing and Hours of Operation

MCR, by way of their contracted management and operations team, will employee four (4) full time employees throughout the year to carry out cultivation-related tasks, and ten (10) part time or seasonal employees for harvesting and processing. The operations and management team provide safety trainings consistent with State agricultural laws and workers compensation coverage as well as manages payroll. Work hours will be Monday – Saturday from 8am to 5:30pm with adequate rest periods consistent with State labor laws during the workday regarding breaks and time off.

MCR's proposed 4,800-square-foot processing facility will adhere to all local and state building code requirements and will require an Onsite Wastewater Treatment System (OWTS) and an ADA-accessible restroom. Until the facility is constructed, portable toilet and handwashing facilities will be provided onsite for employee use. In all cases antibacterial soap to prevent contamination and disposable paper hand towels will be provided. Signage will be posted within the restroom facilities in compliance with the Department of Health's regulations.

MCR will provide non-communal purified drinking water via bottled water purchased from a local store. All off-street parking for the proposed processing facility will adhere to the requirements outlined in the Humboldt County Zoning Regulations section 313-109.1.

2. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

		Agriculture/Forestry			
Aesthetics		Resources		Air Quality	
Biological					
Resources	\boxtimes	Cultural Resources	\boxtimes	Geology Soils	\boxtimes
Hazards &					
Hazardous		Hydrology/Water			
Materials		Quality		Land Use/Planning	
Mineral					
Resources		Noise	X	Population/Housing	
Public Services		Recreation		Transportation/Traffic	\boxtimes
				Greenhouse Gas	
Energy	\boxtimes	Wildfire	\boxtimes	Emissions	\boxtimes
Utilities/Service		Mandatory Findings of			
Systems	\boxtimes	Significance			
Determination (T	n ha co	mnlated by the Lead Ager	10V) R	acad on this initial avaluation	nn'

stermination. (To be completed by the Lead Agency.) Based on 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.

Cliff Johnson, Supervising Planner Planning and Building Department County of Humboldt

2-1.2021

3. EVALUATION OF ENVIRONMENTAL IMPACTS

This section identifies the environmental impacts of this project by answering questions from Appendix G of the CEQA Guidelines, the Environmental Checklist Form. The environmental issues evaluated are listed in Section 2 above.

For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and an answer is provided according to the analysis undertaken as part of the Initial Study. The analysis considers the long-term, direct, indirect, and cumulative impacts of the development. To each question, there are four possible responses:

No Impact. The development will not have any measurable impact on the environment.

Less Than Significant Impact. The development will have the potential for impacting the environment, although this impact will be below established thresholds that are considered to be significant.

Potentially Significant Impact Unless Mitigation Incorporated. The development will have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the development's physical or operational characteristics can reduce these impacts to levels that are less than significant.

Potentially Significant Impact. The development will have impacts which are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

All answers must consider the whole action involved, including potential off- and on-site, indirect, direct, construction, and operation, except as provided for under State *CEQA Guidelines* Section 15183 and State *CEQA Statute* Section 21083. The setting discussion under each resource section in this chapter is followed by a discussion of impacts and applicable mitigation measures.

3.1.1 Aesthetics

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				\boxtimes
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?				\boxtimes
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				\boxtimes

Setting: The project area is located near Maple Creek. It is comprised of forested areas and ranch lands. Neighboring parcels with residents are sparsely distributed throughout this area and not visible from the project area due to vegetation and parcel spacing. The County has not designated specific scenic vistas in the project area and there are no designated state scenic highways or scenic highway corridors in the vicinity of the project (CalTrans). The images below from Google Maps (September 2019) demonstrate the rural character and setting as well as the separation of parcels and traffic flow. Cultivation will be full-sun outdoor in the ground with plants generally being auto-flower varieties of 6 feet in heigh or less. The proposed processing building and nursery greenhouses are the only proposed structures, and while these may be partially visible from the roadside these sort of agricultural structures are commonplace in the watershed and are not expected to degrade the existing visual character.

Discussion:

- a) No Impact. The project site is not located on or adjacent to a designated scenic vista.
- b) **No Impact.** Project development would have no short- or long-term visual effects on the immediate area surrounding the areas of development because the project is primarily agricultural plantings of less than 6-8 feet in height and the project area is mostly buffered by existing vegetation. The proposed project area is primarily composed of grassland vegetation, scattered brush, and hardwood and conifer areas, so removal or loss of vegetation would be minimal. There are no historic buildings on the project site and the site is not located on or accessed from a state scenic highway.
- c) **No Impact.** The proposed project is set in a grassy meadow on the subject parcel behind existing vegetation that serves as a visual buffer from the public road.,. Any views from

- the road would be of the the proposed nursery greenhouse and processing building. These types of structures are commonly found on most surrounding parcels in the vicinity.
- d) **No Impact.** Light pollution occurs when nighttime views of the stars and sky are diminished by an over-abundance of light coming from the ground. Light pollution is a potential impact from the operation of any light source at night. Light sources should be used consciously with regards to neighboring residents and animals. Minimal light use is proposed. There will be no supplemental lighting associated with the vegetative and flowering operations of the cannabis cultivation sites. Most of the harvesting and upkeep of the site will occur during the daytime. If supplemental lighting is used in the ancillary nursery, it will be shielded in compliance with International Dark Sky Standards and County Code such that no light escapes between 30 minutes prior to sunset and 30 minutes after sunrise. Any lights used to illuminate the parking spaces or driveways shall be designed and located so that direct rays are confined to the property where the parking is located. Security lights will be motion activated and down-facing.

Mitigation Measures: None required.

Documentation:

California Scenic Highway Mapping System. California Department of Transportation.

Cultivation and Operations Plan Maple Creek Ranch Corporation.

3.1.2 Agricultural and Forest Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	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 nonagricultural 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 Public Resources Code 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 forest land to non-forest use?				×

Setting: The County's Zoning Classification of the parcel is AE (Agriculture Exclusive) and TPZ (Timber Production) under the Resource district. The current General Plan categorizes the parcel as T (Timber) (2017).

Historical and previous use of the land consists of farming of livestock, cattle grazing, and logging. The property contains agricultural outbuildings, skid roads, fences, drainage ditches, culverts, and associated structures installed to support these uses.

. Per the CMMLUO, new commercial cannabis cultivation is an allowable in AE zones.

Discussion:

- a) No Impact. . MCR, by way of Pacific Watershed Affiliates and Dirty Business Soil Analytics, has performed a slope analysis of the proposed new cultivation site and the areas to be utilized meet the requirements of this section. Slope is not exceeding 15 percent. MCR has performed the necessary prime agricultural studies in accordance with the requirements from section, 55.4.8.2.1, Approvals for New Outdoor and Mixed-Light Cultivation Areas. As described in the Project Background and Technical Reports in Section 1.5, the soil studies were performed on the subjectparcel.. Project maps provided by North Point Consulting and Applicant show 20.79 acres of prime agricultural soils and in accordance with the County's CMMLUO, 20% of that total equates to 4.15 acres of eligible cultivation area. Under the current zoning of the property, AE/TPZ, agriculture is a permitted use. The applicant proposes 4.62 acres of new outdoor cultivation entirely within the AE portion of the property and mostly within lands meeting the definition of prime agricultural soilsAs the proposed use is agricultural crop to be grown in the native soil, this use does not covert prime or important farmland soils. The cannabis cultivation would not conflict with any of the current zoning, or cause rezoning of forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)).
- **b) No Impact.** The proposed site is not under a current Williamson Act contract. The zone designation specifically allows for agricultural use (AE).
- c) No Impact. The subject parcel is partially zoned TPZ (Timberland Production Zone) however none of the cultivation is proposed within the TPZ zoned area. Google Earth Pro historic imagery (2019) confirmed that the meadow on the property has been present since 1988. Themeadowed area where cultivation is proposed has been present for at least 30 years..
- d) and e) **No Impact.** The project is agricultural operation to be located entirely in the AE and zoned portion of the property that has historically been open meadow area.

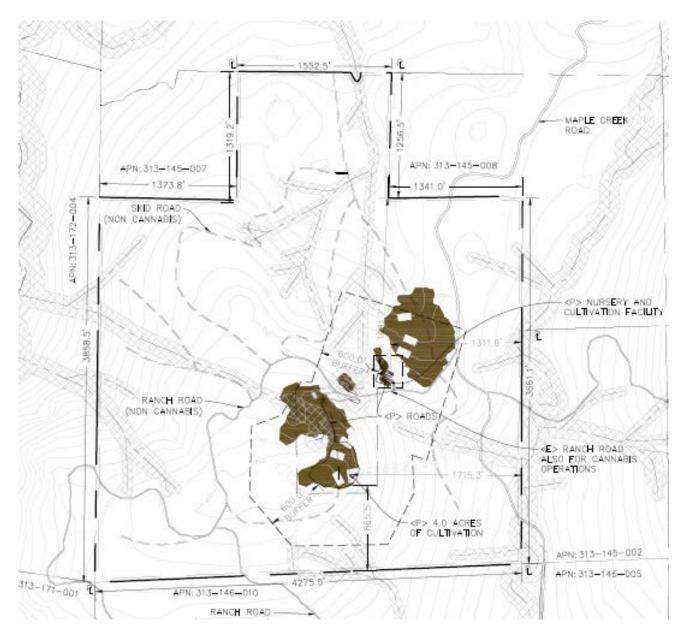


Figure 4. Prime Agricultural Area (20.79 acres) total proposed use is less than 20%. (Provided by North Point Consulting)

Mitigation Measures: None required.

Documentation:

Google Earth Pro. U.S. Geological Survey. 2019.

Humboldt County Web GIS. Department of Planning and Building. https://humboldtgov.org/1357/Web-GIS.

Humboldt County General Plan. Board of Supervisors et al., Humboldt County, Ca. October 2017.

Cultivation and Operations Plan Maple Creek Ranch Corporation.

3.1.3 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:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporate d	Less Than Significant Impact	No Impact				
a) Conflict with or obstruct implementation of the			\bowtie	П				
applicable air quality plan?								
b) 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)?								
c) Expose sensitive receptors to substantial pollutant concentrations?			×					
d) Create objectionable odors affecting a substantial number of people?			×					

Setting: MCR's proposed cultivation areas are in a relatively isolated area apart from a few neighboring houses approximately a quarter mile away. The project area is well-sheltered by the arborescent foliage surrounding MCR's property. All cultivation of vegetative and flowering cannabis will occur outdoors in full sun and will not require the development of new structures. Proposed development of new structures is limited to a 6,600-square foot greenhouse to be used as an ancillary nursery and a 4,800-square foot commercial warehouse building to be used for the drying and processing of harvested cannabis. Cultivation and processing of cannabis has a mild associated odor.

The project is in Humboldt County, which is a part of the North Coast Air Basin (NCAB). The NCAB extends for 250 miles from Sonoma County in the south to the Oregon border. The climate of NCAB is influenced by two major topographic units: the Klamath Mountains and the Coast Range provinces (NCUAQMD 2018). The climate is moderate with the predominant weather factor being moist air masses from the ocean. Average annual rainfall in the area is approximately 50 inches with the majority falling in January (Weatherbase 2019).

Project activities are subject to the authority of the North Coast Unified Air Quality Management District (NCUAQMD) and the California Air Resources Board (CARB). The

NCUAQMD is listed as "nonattainment" or "unclassified" for all the federal and state ambient air quality in Humboldt County for particulate matter (PM10). The only exception is for 24-hour particulate (PM10) standards in Humboldt County, while the County is listed as "attainment" for fine particulate matter (PM2.5). The nonattainment designation means that the air quality in this region is rated below the Nation Ambient Air Quality Standards in the Clean Air Act. With this designation higher regulations and requirements are put forth. Due to the large size of the NCUAQMD, it is well understood that particulate matter can travel from other areas into Humboldt County and affect air quality. In the NCUAQMD, particulate matter has been determined to be primarily from vehicles, with the largest source of fugitive emissions from vehicular traffic on unpaved roads.

Table 1. Federal and state ambient air quality standards.⁴

Pollutant	Federal	State
Ozone	Unclassified/Attainment	Attainment
Sulfur Dioxide	Unclassified	Attainment
Nitrogen Dioxide	Unclassified/Attainment	Attainment
Particulate Matter 2.5 Microns or Smaller (PM _{2.5})	Unclassified/Attainment	Attainment
Particulate Matter 10 Microns or Smaller (PM ₁₀)	Unclassified	Non-attainment
Sulfates	No Standard	Attainment
Lead	Unclassified/Attainment	Attainment
Hydrogen Sulfide	No Standard	Attainment
Vinyl Chloride	No Standard	Attainment
Carbon Monoxide	Unclassified/Attainment	Attainment

https://humboldtgov.org/DocumentCenter/View/58841/Section-312-Air-Quality-Revised-DEIR-PDF

Table 2. Annual PM10 emissions estimated percent contribution by source.⁵

Source	PM ₁₀ Percent of Total
Service and Commercial	<0.1
Other Mobile Sources	0.6
Cooking	0.4
Farming Operations	0.5
Electric Utilities	0.5
Off-Road Equipment	0.5
Mineral Processes	1.1
Fugitive Windblown Dust	1.4
On-Road Vehicles	2.1
Construction And Demolition	3.8
Manufacturing And Industrial	2.0
Ocean Going Vessels	1.3
Wood And Paper	4.5
Paved Road Dust	5.0
Residential Fuel Combustion	7.8
Managed Burning And Disposal	8.6
Unpaved Road Dust	58.2
Service And Commercial	0.1
Other Mobile Sources	1.5
Electric Utilities	0.8
Cogeneration	0.4
Food And Agriculture	0.1
Farming Operations	0.6
Cooking	0.7
Total	100

In determining whether a project has significant air quality impacts on the environment, agencies often apply their local air district's thresholds of significance to project in the review process. The District has not formally adopted specific significance thresholds, but rather utilizes the Best Available Control Technology (BACT) emissions rates for stationary sources as defined and listed in the NCUAQMD Rule and Regulations, Rule 110 - New Source Review (NSR) and Prevention of Significant Deterioration (PSD), Section 5.1- BACT (pages 8-9) (NCUAQMD, 2017).

Sensitive receptors (e.g. children, senior citizens, and acutely or chronically ill people) are more susceptible to the effect of air pollution than the general population. Land uses that are considered sensitive receptors typically include residences, schools, parks, childcare centers, hospitals, convalescent homes, and retirement homes. The nearest sensitive receptors to the project site are residences (0.8 miles) and the homes and Jewett School in Maple Creek (1.7miles).

⁵ https://humboldtgov.org/DocumentCenter/View/58841/Section-312-Air-Quality-Revised-DEIR-PDF

Discussion:

- a) Less than Significant Impact. Since Humboldt County is in nonattainment for state air quality standards in PM10, the project is subject to the Draft Particulate Matter Attainment Plan, May 1995. The project design is consistent with the Draft Particulate Matter Attainment Plan because it incorporates control measures that are identified by this plan such as rocking the existing ranch roads and incorporating solar power into the design.
- b) Less than Significant Impact. While the proposed project is located in a region that is in non-attainment for PM10, it is not likely to have a considerable impact upon the air quality nor contribute a cumulatively considerable net increase of PM10 emissions. . Dust emissions would be minor and insignificant. Vehicle traffic associated with the project is not expected to generate dust emissions that would cause a substantial increase in PM10 within Humboldt County or the NCUAQMD.
 - Construction activities proposed by the project is minimal as the vast majority of the project is in-ground agricultural cultivation occurring with no grading or development proposed. Construction for the nursery and processing building may create minor amounts of dust from construction of greenhouses and processing facilities, but these activities are considered minor activities and would not create dust emissions that would require specialized abatement practices.
- c) Less than Significant Impact. There are no sensitive receptors on-site. There are potential sensitive receptors within a mile of the project area including a residence (0.8 mi). There is a forested buffer between these locations which would minimize the impact to these receptors. Any pollutant concentrations associated with the project would be contained to the property.
- d) Less than Significant Impact. The primary odor of the proposed project would be due to outdoor cannabis cultivation activities. While the odor from flowering cannabis plants can be strong within the immediate vicinity of cultivation sites, the distance of the operation from sensitive receptors (0.8 mi) and the application of standard conditions of approval for cannabis cultivation, nursery development and distribution operations outlined in the County Cannabis Ordinances, will result in cannabis odors from the operations not being a significant issue to offsite sensitive receptors.

Mitigation Measures: None required.

Documentation:

Air Quality. North Coast Unified Air Quality Management District. 2018. http://www.ncuaqmd.org/index.php?page=air.quality.

California Greenhouse Gas Emissions for 2000 to 2016, Trends of Emissions and Other Indicators. 8th Edition. California Air Resources Board (CARB). 2018.

District Rules and Regulations. North Coast Unified Air Quality Management District. 2017. http://www.ncuaqmd.org/index.php?page=rules.regulations.

Final Environmental Impact Report: Amendments to the Humboldt County Code Regulating Commercial Cannabis Activities. January 2018. Prepared by Ascent Environmental. (Accessed via https://humboldtgov.org/DocumentCenter/View/62689/Humboldt-County-Cannabis-Program-Final-EIR-60mb-PDF).

Health Risk Assessments for Proposed Land Use Projects. CAPCOA Guidance Document. Prepared by CAPCOA Planning Managers. July 2009.

North Coast Unified Air Quality Management District Particulate Matter (PM10) Attainment Plan. Adopted 1995 Accessed via

http://www.ncuaqmd.org/files/NCUAQMD%20Attainment%20Plan%205-95.pdf.

Cultivation and Operations Plan Maple Creek Ranch Corporation. Unpublished. Date Unknown.

Weatherbase, 2019. (https://www.weatherbase.com/weather/weather.php3?s =880040&cityname= Maple Creek-California-United-States-of-America).

3.1.4 Biological Resources

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	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, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?			X	
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?			\boxtimes	
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?				×

Setting: The project is situated on lands historically used for grazing and logging. Various habitat types exist throughout the parcel including grasslands, riparian areas and streams, riparian forest and mixed evergreen forest. The site is occupied by wildlife and numerous rare species have been documented in the Maple Creek watershed. The project area is approximately 400-815 feet in elevation and does not contain serpentine or volcanic soils or other unique geological features. The project is in the Mad River Watershed, the Maple Creek Mad River HUC 12 Watershed, and the Dry Creek and Maple Creek Super Planning Watersheds.

California Endangered Species Act

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

California Native Plant Protection Act (NPPA) of 1977

The NPPA (Fish and Game Code, Sections 1900-1913) prohibits importation of rare and endangered plants into California, take of rare and endangered plants, and sale of rare and endangered plants. The CESA defers to the NPPA, which ensures that state-listed plant species are protected when state agencies are involved, and projects are subject to CEQA. In this case, plants listed as rare under the NPPA are not protected under CESA, but rather may receive protection in response to potentially significant impacts, in accordance with CEQA

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

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

California Fish and Game Code —Fully Protected Species

Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code describe the take prohibitions for fully protected birds, mammals, reptiles and amphibians, and fish. Species listed under these statutes may not be taken or possessed at any time and no incidental take permits can be issued for these species except for scientific research purposes or for relocation to protect livestock.

California Fish and Game Code Section 1602—Streambed Alteration

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

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

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

Oak Woodlands Conservation Act

The Oak Woodlands Conservation Act (Senate Bill [SB] 1334) was signed into California law on September 24, 2004. Section 21083.4 of the California Public Resources Code requires counties to determine if a project within their jurisdiction may result in conversion of oak woodlands that would have a significant adverse effect on the environment. If the County determines that a project would result in a significant adverse effect on oak woodlands, mitigation measures to reduce the significant adverse effect of converting oak woodlands to other land uses are required.

Discussion:

- a) Less than Significant Impact with Mitigation Incorporated. Information on special-status plant species was compiled through a review and database searches. The CDFW and the CNPS recommend an assessment area for a project be a minimum of nine USGS quadrangles with the projected located in the central quad. The assessment area was defined as the USGS 7.5' minute quadrangles in which the project is located and the surrounding quadrangles. The following sources were reviewed to determine which special-status natural communities, plant and wildlife species have been documented in the vicinity of the project alignment:
 - A Manual of California Vegetation Second Edition (Sawyer et al. 2009)
 - California Natural Diversity Database (CNDDB) records (CDFW 2019)
 - CNPS Inventory of Rare and Endangered Vascular Plants (CNPS 2019)

A Biological Report was prepared for the project by the applicants' consultant, TransTerra Consulting (2019). The evaluation found that the parcel contains the following habitat types. Not all habitats are found within the proposed cultivation areas:

Mixed Evergreen Forest: Included in coast ranges of Broadleaved Upland Forest (BUF), these trees retain their leaves for an entire year. Stands of evergreen or deciduous, broadleaved trees 5 meters or taller, forming closed canopies. Many, but not all, with very

poorly developed understories. This habitat type exists in a patchy mosaic around the cultivation areas.

Valley and Foothill Grassland (VFG): Introduced, annual Mediterranean grasses and native herbs. On most sites the native bunch grass species, such as needle grass, have been largely or entirely supplanted by introductions. Stands rich in natives usually found on unusual substrates, such as serpentinite or somewhat alkaline soils. This is the dominant habitat type in existing and proposed cultivation areas and would be most impacted by the proposed project.



Primary vegetation type in project area

Riparian Forest: Broadleaved, winter deciduous trees, forming closed canopies, associated with low- to mid-elevation perennial and intermittent streams. Most stands even-aged, reflecting their flood-mediated, episodic reproduction. These habitats can be found in every county and climate in California. This habitat is located along the Maple Creek and other areas with shallow ground water. This habitat type exists along perennial watercourses near the area.

Marshes and Swamps: Emergent, suffrutescent herbs adapted to seasonally or permanently saturated soils. These include salt, brackish, alkali, and freshwater marshes, as

well as swamps, with their woody dominants and hydrophytic herbs. Found throughout California. This habitat type is fairly abundant in the pasture areas adjacent to the proposed cultivation.



Wetland areas identified near project area

Riparian Scrub: Thickets dominated by one or more hydrophytic shrubs and small trees. This habitat type exists on the property outside of the project area.

The potential of habitat for Threatened, Endangered, or Sensitive (TES) wildlife and plants was investigated throughout the property (See Table 1 and Table 2). Based on results from CNDDB and CNPS suitable habitat in the area, multiple TES plants and animals were interpreted to have "No", "Unlikely", "Possible", or "Yes" presence on the property.

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Table 3. CNPS Rare Plant Inventory nine-quad search results with habitat suitability.

Scientific Name	Common Name	List	Habitat	Low (ft)	High (ft)	Habitat Present on Site
Abronia umbellata var. breviflora	pink sand-verbena	1B.1	Coastal dunes	0	35	No-Project too high in elevation. Coastal dunes not present.
Angelica lucida	sea-watch	4.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Marshes and swamps (coastal salt)	0	490	No- Project outside of coastal dunes/scrub habitat.
Antennaria suffrutescens	evergreen everlasting	4.3	Lower montane coniferous forest (serpentinite)	1640	5250	No-Project likely too low in elevation. Serpentine not present.
Astragalus rattanii var. rattanii	Rattan's milk-vetch	4.3	Chaparral, Cismontane woodland, Lower montane coniferous forest; gravelly streambanks	95	2705	Possible-LMCF and gravelly streambanks present.
Astragalus umbraticus	Bald Mountain milk-vetch	2B.3	Cismontane woodland, Lower montane coniferous forest; sometimes roadside	490	4100	Possible-LMCF and roadsides present.
Bensoniella oregona	bensoniella	1B.1 CR	Bogs and fens, Lower montane coniferous forest (openings), Meadows and seeps; mesic	3000	4595	No-Project likely too low in elevation.
Cardamine angulata	seaside bittercress	2B.2	Lower montane coniferous forest, North Coast coniferous forest; Wet areas, streambanks	80	3000	Possible-LMCF, NCCF, wet areas and streambanks present.
Carex arcta	northern clustered sedge	2B.2	Bogs and fens, North Coast coniferous forest (mesic)	195	4595	Possible-mesic NCCF present.
Carex lyngbyei	Lyngbye's sedge	2B.2	Marshes and swamps (brackish or freshwater)	0	35	No-Project too high in elevation.
Carex praticola	northern meadow sedge	2B.2	Meadows and seeps (mesic)	0	10500	Possible-Meadows, seeps and other mesic areas present.
Castilleja ambigua var. humboldtiensis	Humboldt Bay owl's-clover	1B.2	Marshes and swamps (coastal salt)	0	10	No-Project too high in elevation.
Chloropyron maritimum ssp. palustre	Point Reyes bird's-beak	1B.2	Marshes and swamps (coastal salt)	0	35	No-Project too high in elevation
Chrysosplenium glechomifolium	Pacific golden saxifrage	4.3	North Coast coniferous forest, Riparian forest; Streambanks, sometimes seeps, sometimes roadsides	30	1495	Possible-NCCF, riparian forest, streambanks, seeps and roadsides present.
Collomia tracyi	Tracy's collomia	4.3	Broadleafed upland forest, Lower montane coniferous forest; rocky, sometimes serpentinite	980	6890	No-Project likely too low in elevation

Scientific Name	Common Name	List	Habitat	Low (ft)	High (ft)	Habitat Present on Site
Coptis laciniata	Oregon goldthread	4.2	Meadows and seeps, North Coast coniferous forest (streambanks); Mesic	0	3280	Possible-NCCF, streambanks present.
Cornus canadensis	bunchberry	2B.2	Bogs and fens, Meadows and seeps, North Coast coniferous forest	195	6300	Possible-NCCF present.
Epilobium oreganum	Oregon fireweed	1B.2	Bogs and fens, Lower montane coniferous forest, Meadows and seeps, Upper montane coniferous forest; mesic	1640	7350	Project likely too low in elevation
Epilobium septentrionale	Humboldt County fuchsia	4.3	Broadleafed upland forest, North Coast coniferous forest; sandy or rocky	145	5905	Possible-BUF, NCCF present, not particularly sandy or rocky.
Erythronium oregonum	giant fawn lily	2B.2	Cismontane woodland, Meadows and seeps; sometimes serpentinite, rocky, openings	325	3775	Possible-Meadows and seeps present. Not serpentine.
Erythronium revolutum	coast fawn lily	2B.2	Bogs and fens, Broadleafed upland forest, North Coast coniferous forest; Mesic, streambanks	0	5250	Possible-BUF, NCCF, streambanks, seeps are present.
Fissidens pauperculus	minute pocket moss	1B.2	North Coast coniferous forest (damp coastal soil)	30	3360	Possible-NCCF present with damp soil. No coastal.
Gilia capitata ssp. pacifica	Pacific gilia	1B.2	Coastal bluff scrub, Chaparral (openings), Coastal prairie, Valley and foothill grassland	15	5465	Possible-VFG present.
Glyceria grandis	American manna grass	2B.3	Bogs and fens, Meadows and seeps, Marshes and swamps (streambanks and lake margins)	45	6495	Possible-meadows, seeps, swamps and streambank present.
Iliamna latibracteata	California globe mallow	1B.2	Chaparral (montane), Lower montane coniferous forest, North Coast coniferous forest (mesic), Riparian scrub (streambanks); Often in burned areas	195	6560	Possible-NCCF, LMCF, riparian scrub and streambanks present. Not recently burned.
Lathyrus japonicus	seaside pea	2B.1	Coastal dunes	0	100	No-Project too high in elevation
Layia carnosa	beach layia	1B.1 CE/FE	Coastal dunes, Coastal scrub (sandy)	0	195	No-Project too high in elevation
Lilium kelloggii	Kellogg's lily	4.3	Lower montane coniferous forest, North Coast coniferous forest; Openings, roadsides	5	4265	Possible-LMCF, NCCF, streambanks, openings and roadsides are present

Scientific Name	Common Name	List	Habitat	Low (ft)	High (ft)	Habitat Present on Site
Lilium occidentale	western lily	1B.1 CE/FE	Bogs and fens, Coastal bluff scrub, Coastal prairie, Coastal scrub, Marshes and swamps (freshwater), North Coast coniferous forest (openings)	5	605	Possible-NCCF and freshwater seasonal swamp present.
Lilium rubescens	redwood lily	4.2	Broadleafed upland forest, Chaparral, Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest; Sometimes serpentinite, sometimes roadsides	95	6265	Possible-BUF, LMCF, NCCF, streambanks, seeps are present.
Listera cordata	heart-leaved twayblade	4.2	Bogs and fens, Lower montane coniferous forest, North Coast coniferous forest	15	4495	Possible-LMCF, NCCF, present.
Lycopodium clavatum	running-pine	4.1	Lower montane coniferous forest (mesic), Marshes and swamps, North Coast coniferous forest (mesic); often edges, openings, and roadsides	145	4020	Possible-LMCF, NCCF, marsh/swamp areas and openings/roadsides present.
Microseris borealis	northern microseris	2B.1	Bogs and fens, Lower montane coniferous forest, Meadows and seeps; mesic	3280	6560	No-Project likely too low in elevation.
Mitellastra caulescens	leafy-stemmed mitrewort	4.2	Broadleafed upland forest, Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest; mesic, sometimes roadsides	15	5575	Possible-BUF, LMCF, NCCF, streambanks, seeps and roadsides are present.
Montia howellii	Howell's montia	2B.2	Meadows and seeps, North Coast coniferous forest, Vernal pools; vernally mesic, sometimes roadsides	0	2740	Observed historically on project site
Noccaea fendleri ssp. californica	Kneeland Prairie pennycress	1B.1 FE	Coastal prairie (serpentinite)	2490	2675	No-Project likely too low in elevation.
Oenothera wolfii	Wolf's evening-primrose	1B.1	Coastal bluff scrub, Coastal dunes, Coastal prairie, Lower montane coniferous forest; sandy, usually mesic	5	2625	Possible-LMCF present, not particularly sandy.
Packera bolanderi var. bolanderi	seacoast ragwort	2B.2	Coastal scrub, North Coast coniferous forest; Sometimes roadsides	95	2135	Possible- NCCF and roadsides are present

Scientific Name	Common Name	List	Habitat	Low (ft)	High (ft)	Habitat Present on Site
Piperia candida	white-flowered rein orchid	1B.2	Broadleafed upland forest, Lower montane coniferous forest, North Coast coniferous forest; sometimes serpentinite	95	4300	Possible-BUF, LMCF, NCCF, streambanks, seeps are present. No serpentine.
Pityopus californicus	California pinefoot	4.2	Broadleafed upland forest, Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest; mesic	45	7300	Possible-BUF, LMCF, NCCF, with mesic areas present.
Platanthera stricta	slender bog-orchid	4.2	Lower montane coniferous forest, Meadows and seeps; mesic	3280	7545	No-Project likely too low in elevation
Pleuropogon refractus	nodding semaphore grass	4.2	Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest, Riparian forest; Mesic	0	5250	Possible-LMCF, NCCF, streambanks, riparian forest and seeps are present
Ribes laxiflorum	trailing black currant	4.3	North Coast coniferous forest; sometimes roadside	15	4575	Possible-NCCF with roadsides are present.
Sanguisorba officinalis	great burnet	2B.2	Bogs and fens, Broadleafed upland forest, Meadows and seeps, Marshes and swamps, North Coast coniferous forest, Riparian forest; often serpentinite	195	4595	Possible-BUF, NCCF, meadows, seeps, marsh/swamp and riparian forest present. No serpentine.
Sanicula tracyi	Tracy's sanicle	4.2	Cismontane woodland, Lower montane coniferous forest, Upper montane coniferous forest; openings	325	5200	Possible-LMCF and openings are present.
Sedum laxum ssp. flavidum	pale yellow stonecrop	4.3	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Upper montane coniferous forest; Serpentinite or volcanic	1490	6560	No-Project likely too low in elevation
Sidalcea malachroides	maple-leaved checkerbloom	4.2	Broadleafed upland forest, Coastal prairie, Coastal scrub, North Coast coniferous forest, Riparian woodland; Often in disturbed areas	0	2395	Possible-BUF, NCCF, riparian woodland and disturbed areas are present.

Scientific Name	Common Name	List	Habitat	Low (ft)	High (ft)	Habitat Present on Site
Sidalcea malviflora ssp. patula	Siskiyou checkerbloom	1B.2	Coastal bluff scrub, Coastal prairie, North Coast coniferous forest; often roadcuts	45	2885	Possible-NCCF often roadcuts.
Sidalcea oregana ssp. eximia	coast checkerbloom	1B.2	Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest	15	4395	Possible-LMCF, NCCF, seeps are present.
Spergularia canadensis var. occidentalis	western sand-spurrey	2B.1	Marshes and swamps (coastal salt)	0	10	No-Project too high in elevation
Thermopsis robusta	robust false lupine	1B.2	Broadleafed upland forest, North Coast coniferous forest	490	4920	Possible-BUF, NCCF present.
Tiarella trifoliata var. trifoliata	trifoliate laceflower	3.2	Lower montane coniferous forest, North Coast coniferous forest; edges, moist shady banks, streambanks	555	4920	Possible-LMCF, NCCF, streambanks.
Trichodon cylindricus	cylindrical trichodon	2B.2	Broadleafed upland forest, Meadows and seeps, Upper montane coniferous forest; sandy, exposed soil, roadbanks	160	6570	Possible-BUF, seeps are present, roadbanks and exposed soils present.
Usnea longissima	Methuselah's beard lichen	4.2	Broadleafed upland forest, North Coast coniferous forest; On tree branches; usually on old growth hardwoods and conifers	160	4790	Possible-BUF, NCCF and tree branches present
Viola palustris	alpine marsh violet	2B.2	Bogs and fens (coastal), Coastal scrub (mesic)	0	490	No-Coastal scrub and bogs/fens not present.
Wyethia longicaulis	Humboldt County wyethia	4.3	Broadleafed upland forest, Coastal prairie, Lower montane coniferous forest; sometimes roadsides	2460	5005	No-Project likely too low in elevation

Table 4. CNDDB nine-quad search results with habitat suitability.

Scientific Name	Common Name	List	Habitats	General Habitat	Habitat Present On-Site
Accipiter cooperii	Cooper's hawk	-	Cismontane woodland Riparian forest Riparian woodland Upper montane coniferous forest	Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	Possible-Riparian forest and woodlands present with some open areas.

Scientific Name	Common Name	List	Habitats	General Habitat	Habitat Present On-Site
Accipiter gentilis	northern goshawk	-	North coast coniferous forest Subalpine coniferous forest Upper montane coniferous forest	Within, and in vicinity of, coniferous forest. Uses old nests and maintains alternate sites. Usually nests on north slopes, near water. Red fir, lodgepole pine, Jeffrey pine, and aspens are typical nest trees.	Possible-NCCF present and near water. Nest trees species listed not present.
Accipiter striatus	sharp-shinned hawk	-	Cismontane woodland Lower montane coniferous forest Riparian forest Riparian woodland	Ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers riparian areas. North-facing slopes with plucking perches are critical requirements. Nests usually within 275 ft of water.	Possible-LMCF, Riparian forest and woodlands present with north facing slopes and water.
Anodonta californiensis	California floater	-	Aquatic	Freshwater lakes and slow-moving streams and rivers. Taxonomy under review by specialists Generally, in shallow water.	Possible-slow-moving streams and shallow water present.
Aplodontia rufa humboldtiana	Humboldt mountain beaver	-	Coastal scrub Redwood Riparian forest	Coast Range in southwestern Del Norte County and northwestern Humboldt County. Variety of coastal habitats, including coastal scrub, riparian forests, typically with open canopy and thickly vegetated understory.	Possible- Riparian forest present. Some areas with thickly vegetated understory.
Aquila chrysaetos	golden eagle	-	Broadleaved upland forest Cismontane woodland Coastal prairie Great Basin grassland Great Basin scrub Lower montane coniferous forest Pinon & juniper woodlands Upper montane coniferous forest Valley & foothill grassland	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Possible-BUF, LMCF, VFG present. Some large trees. No cliff-walled canyons

Scientific Name	Common Name	List	Habitats	General Habitat	Habitat Present On-Site
Arborimus albipes	white-footed vole	-	North coast coniferous forest Redwood Riparian forest	Mature coastal forests in Humboldt and Del Norte counties. Prefers areas near small, clear streams with dense alder and shrubs. Occupies the habitat from the ground surface to the canopy. Feeds in all layers and nests on the ground under logs or rock	Possible-NCCF, riparian forest, small streams with alder and shrubs present. Logs and rocks present.
Arborimus pomo	Sonoma tree vole	-	North coast coniferous forest Oldgrowth Redwood	North coast fog belt from Oregon border to Somona County. In Douglas-fir, redwood & montane hardwood-conifer forests. Feeds almost exclusively on Douglas-fir needles. Will occasionaly take needles of grand fir, hemlock or spruce.	Yes-NCCF present. Resin ducts resembling
Ascaphus truei	Pacific tailed frog	-	Aquatic Klamath/North coast flowing waters Lower montane coniferous forest North coast coniferous forest Redwood Riparian forest	Occurs in montane hardwood-conifer, redwood, Douglas-fir & ponderosa pine habitats Restricted to perennial montane streams. Tadpoles require water below 15 degrees C	Possible-LMCF, NCCF, riparian forest present. Stream temperature not measured but likely too warm in Maple Creek and adjacent tributaries.
Bombus caliginosus	obscure bumble bee	-		Coastal areas from Santa Barabara county to north to Washington state. Food plant genera include Baccharis, Cirsium, Lupinus, Lotus, Grindelia and Phacelia	Possible-not coastal. Baccharis, Lupinus, Lotus and Cirsium present.
Bombus occidentalis	western bumble bee	-		Once common & widespread, species has declined precipitously from central CA to southern B.C., perhaps from disease.	Possible-Habitat not described.
Brachyramphus marmoratus	marbled murrelet	FT/CE	Lower montane coniferous forest Oldgrowth Redwood	Feeds near-shore; nests inland along coast from Eureka to Oregon border and from Half Moon Bay to Santa Cruz. Nests in old-growth redwood-dominated forests, up to six miles inland, often in Douglas-fir.	Unlikely-Old growth, redwood dominated forest not present.

Scientific Name	Common Name	List	Habitats	General Habitat	Habitat Present On-Site
Corynorhinus townsendii	Townsend's big- eared bat	-	Broadleaved upland forest Chaparral Chenopod scrub	Throughout California in a wide variety of habitats. Most common in mesic sites.	Possible-BUF, seeps, riparian woodland and forest, VFG present with mesic areas.
Emys marmorata	western pond turtle	-	Aquatic Artificial flowing waters Klamath/North coast flowing waters Klamath/North coast standing waters Marsh & swamp Sacramento/San Joaquin flowing waters Sacramento/San Joaquin standing waters South coast flowing waters South coast standing waters Wetland	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation.	Possible-Streams, ditches and wet areas present.
Entosphenus tridentatus	Pacific lamprey	-	Aquatic Klamath/North coast flowing waters Sacramento/San Joaquin flowing waters South coast flowing waters	Found in Pacific Coast streams north of San Luis Obispo County, however regular runs in Santa Clara River. Size of runs is declining.	Possible-North coast flowing waters and streams present.

Scientific Name	Common Name	List	Habitats	General Habitat	Habitat Present On-Site	
Erethizon dorsatum	North American porcupine	-	Broadleaved upland forest Cismontane woodland Closed-cone coniferous forest Lower montane coniferous forest North coast coniferous forest Upper montane coniferous forest	Forested habitats in the Sierra Nevada, Cascade, and Coast ranges, with scattered observations from forested areas in the Transverse Ranges.	Possible-BUF, LMCF, NCCF present.	
Haliaeetus leucocephalus	bald eagle	FD/CE	Lower montane coniferous forest Oldgrowth	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water.	Possible-LMCF and rivers present.	
Lasionycteris noctivagans	silver-haired bat	-	Lower montane coniferous forest Oldgrowth Riparian forest	Primarily a coastal and montane forest dweller, feeding over streams, ponds & open brushy areas.	Possible-LMCF, riparian forest present with brushy areas.	
Margaritifera falcata	western pearlshell	-	Aquatic	Aquatic.	Possible-Habitat not described. Aquatic areas present.	
Martes caurina humboldtensis	Humboldt marten	CCE	North coast coniferous forest Oldgrowth Redwood	Occurs only in the coastal redwood zone from the Oregon border south to Sonoma County.	Unlikely-Old growth, redwood dominated forest not present.	
Myotis evotis	long-eared myotis	-		Found in all brush, woodland and forest habitats from sea level to about 9000 ft. Prefers coniferous woodlands and forests.	Possible- Woodland and forest present with brushy areas.	
Nycticorax nycticorax	black-crowned night heron	-	Marsh & swamp Riparian forest Riparian woodland Wetland	Colonial nester, usually in trees, occasionally in tule patches.	Possible-Marsh/swamp, riparian woodland/forest and other wetlands present with trees.	
Oncorhynchus clarkii clarkii	coast cutthroat trout	-	Aquatic Klamath/North coast flowing waters	Small coastal streams from the Eel River to the Oregon border.	Possible-small North coastal streams present.	
Oncorhynchus kisutch pop. 2	coho salmon - southern Oregon / northern California ESU	FT/CT T	Aquatic Klamath/North coast flowing waters Sacramento/San Joaquin flowing waters	Federal listing refers to populations between Cape Blanco, Oregon and Punta Gorda, Humboldt County, California.	Yes-small North coastal streams present.	

Scientific Name	Common Name	List	Habitats	General Habitat	Habitat Present On-Site	
Oncorhynchus mykiss irideus pop. 16	steelhead - northern California DPS	FT	Aquatic Sacramento/San Joaquin flowing waters	Coastal basins from Redwood Creek south to the Gualala River, inclusive. Does not include summer-run steelhead. Yes-small North coastal str		
Oncorhynchus mykiss irideus pop. 36	summer-run steelhead trout	-	Aquatic Klamath/North coast flowing waters Sacramento/San Joaquin flowing waters	No. Calif coastal streams south to Middle Fork Eel River. Within range of Klamath Mtns province DPS & No. Calif DPS.	Yes-small North coastal streams present.	
Oncorhynchus tshawytscha pop. 30	chinook salmon - upper Klamath and Trinity Rivers ESU	-	Aquatic Klamath/North coast flowing waters	Spring-run chinook in the Trinity River and the Klamath River upstream of the mouth of the Trinity River.	Yes-small North coastal streams present.	
Pandion haliaetus	osprey	-	Riparian forest	Ocean shore, bays, freshwater lakes, and larger streams.	Possible-riparian forest and larger streams present.	
Pekania pennanti	fisher - West Coast DPS	СТ	North coast coniferous forest Oldgrowth Riparian forest	Intermediate to large-tree stages of coniferous forests and deciduous-riparian areas with high percent canopy closure.	Possible-NCCF, riparian forest with larger trees and high percent canopy closure present.	
Plethodon elongatus	Del Norte salamander	-	Oldgrowth	Old-growth associated species with optimum conditions in the mixed conifer/hardwood ancient forest ecosystem.	Unlikely-Old growth, redwood dominated forest not present	
Rana aurora	northern red- legged frog	-	Klamath/North coast flowing waters Riparian forest Riparian woodland	Humid forests, woodlands, grasslands, and streamsides in northwestern California, usually near dense riparian cover.	Yes-North coast flowing waters, riparian forest, riparian woodland, humid forest, grasslands and streamsides with riparian cover present. CNDDB layer within parcel	

Scientific Name	Common Name	List	Habitats	General Habitat	Habitat Present On-Site	
Rana boylii	foothill yellow- legged frog	ССТ	Aquatic Chaparral Cismontane woodland Coastal scrub Klamath/North coast flowing waters Lower montane coniferous forest Meadow & seep Riparian forest Riparian woodland Sacramento/San Joaquin flowing waters	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats.	Possible-North coast flowing waters, LMCF, meadows and seeps, riparian forest and woodlands present with shallow streams and rocky substrates CNDDB layer within parcel	
Rhyacotriton variegatus	southern torrent salamander	-	Lower montane coniferous forest Oldgrowth Redwood Riparian forest	Coastal redwood, Douglas-fir, mixed conifer, montane riparian, and montane hardwood-conifer habitats. Old growth forest.	Possible-LMCF, riparian forest, Douglas-fir, and riparian forest present. No old growth.	
Riparia riparia	bank swallow	СТ	Riparian scrub Riparian woodland	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert.	Possible-riparian scrub and woodlands present.	
Thaleichthys pacificus	eulachon	FT	Aquatic Klamath/North coast flowing waters	Found in Klamath River, Mad River, Redwood Creek, and in small numbers in Smith River and Humboldt Bay tributaries.	Unlikely-generally located in more coastal areas.	

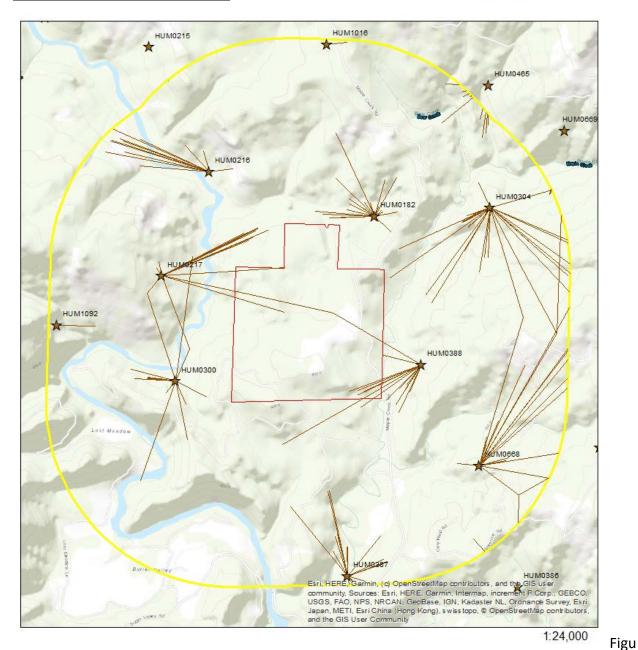
Upon review of species range and occurrence records, multiple special-status wildlife species identified as having the potential to occur within the nine-quad search were determined to be unlikely to occur in the project area. It was determined that various other species would not likely be impacted as their habitat would not be affected by the proposed project. Due to the limitations of the nine-quad search and the listing process, many species may be within or nearby the project area or adjacent areas that would be subject to CEQA 14 CCR § 15380 for Endangered, Rare or Threatened Species. Protocol level surveys for plant species were conducted by Kyle Wear in 2019. Rare plant species were not observed.

Potential land use conversion and development proposed by this project and other projects in the vicinity could adversely affect several special-status wildlife species, including reptiles, amphibians, nesting birds, and mammals. Project implementation may include ground disturbance, minor vegetation removal, and overall conversion of wildlife habitat, which could result in the disturbance or loss of individuals and reduced breeding productivity of these species. Special-status wildlife species are protected under ESA, CESA, California Fish and Game Code, CEQA, or other regulations. The loss of special-status wildlife species and their habitat due to the cumulative impact projects in the county would be a potentially significant impact.

Foothill yellow-legged frog, Western pond turtle and Pacific tailed frog were listed in the nine-quad scooping. Northern red-legged frog, red-bellied newt, and southern torrent salamander are additional species that could be present in wetlands on-site. One All are CDFW species of special concern that could exist in the project area Cannabis-related development could result in injury to special-status amphibians, if the species occur at the site, through disturbance to suitable habitat during ground disturbance activities, such as construction of storage ponds and installation cultivation sites. Several performance standards related to water storage are included in the Humboldt County ordinance, such as setbacks from streams and wetlands reduce impact to amphibian species.

The area adjacent to proposed cultivation activities contains suitable nesting and/or foraging habitat for several raptor species, and other special status bird species. All of these species are fully protected under California Fish and Game Code. Project implementation associated with potential impacts to habitat and vegetation removal could disturb nesting birds if they are present, potentially resulting in nest abandonment, nest failure, or mortality of chicks or eggs. Additionally, human presence associated with construction of cultivation sites, roads, and cultivation activities (generators and other equipment) could result in increased noise and visual disturbance to nesting birds. The potential loss of birds and their nests resulting from the cumulative impact of cannabis project in the county would be a potentially significant impact. Northern Spotted Owl have been observed historically within one mile, with the closest NSO activity center being approximately 0.40 miles to the east across Maple creek Road from the project site. Northern Spotted Owl surveys were conducted by Blair Forestry Consultants for

the Maple Creek Ranch NTMP, occurring between 2018 and 2020. There were no spotted owl detections for any of these years.



re 5. Northern spotted owl locations near the project area. (Map created using ArcMap 10.6 and CDFW NSO layers)

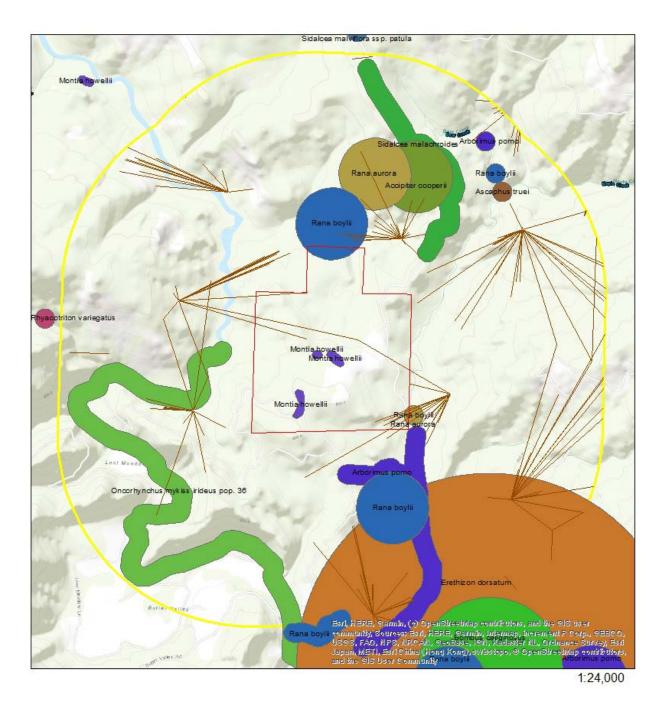


Figure 6. CNDDB observations near the project area. (Map created using ArcMap 10.6 and CDFW NSO layers)

Various mammal species including fisher, Humboldt marten and other carnivores are known to forage and or den in habitats present on or near the site. Bats, voles, ungulates and other mammals also occupy habitat in the area, and many are special-status species Proposed cannabis-related activities could result in conversion of suitable habitat, vegetation removal, and ground-disturbance activities, which could cause the

direct loss of mammals if currently occupying burrows within the site. . . Fishers, martens, and other carnivores in Humboldt County and surrounding counties have experienced mortality because of exposure to rodenticides used on cannabis sites.

Mitigation Measures BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, and BIO-6 will ensure that there are no potentially significant adverse impacts.

b) **Less than Significant Impact.** Riparian areas are those vegetated areas adjacent to rivers, streams and lakes with specific overstory and/or understory plant species that meet the definition of riparian by the CDFW. Vegetated areas (scrub, woodland and forest) adjacent to Maple Creek and other streams as well as isolated wetland can be considered riparian. These areas are important habitat for many species as well as for water quality protection.

Riparian forests in California often lie outside the plain of ordinary high water (OHW) regulated under Section 404 of the CWA, and often do not have all three parameters (wetland hydrology, hydrophytic vegetation, and hydric soils) sufficiently present to be regulated as a wetland. However, riparian forests are frequently included within CDFW regulatory jurisdiction under Section 1602 of the California Fish and Game Code.

The CDFW jurisdictional limits are not as clearly defined by regulation as those of the USACE. They include riparian habitat supported by a river, stream, or lake regardless of the presence or absence of hydric and saturated soils conditions. In general, the CDFW extends jurisdiction from the top of a stream bank or to the outer limits of the adjacent riparian vegetation (outer drip line), whichever is greater. The proposed project does not include any development within any regulated riparian setbacks.

Other Sensitive Natural Communities as described by CDFW were not identified in the project area.

There is no proposed development to riparian habitats identified on the property. Based upon this information there will be less than significant impact. (North Point Consulting Project Maps)

c) Less than Significant Impact. A wetlands delineation was prepared for the project by Kyle Wear June 2019 and Updated in August of 2019. Wetland mapping for this report relies on information provided by this report, maps provided by North Point Consulting and available databases including the National Wetlands Inventory (NWI). The wetland delineation establishes that the wetlands on-site are seasonal wetlands, which require a 50 foot setback under the Humboldt County General Plan (2017). All proposed new development will observe a minimum 100 foot setback from the wetlands, with the exception of a small portion of the existing ranch road that provides access to the

proposed cultivation site. This existing road encroaches into the 50 foot setback from two seasonal wetlands and adding rock to the existing road is proposed. Such addition of rock is routine maintenance of the existing ranch road and will not result in a substantial adverse impact on the seasonal wetlands. Such road maintenance is exempt from the wetland setbacks under the Humboldt County Streamside Management and Wetland Ordinance due to its presumption of limited adverse impact.

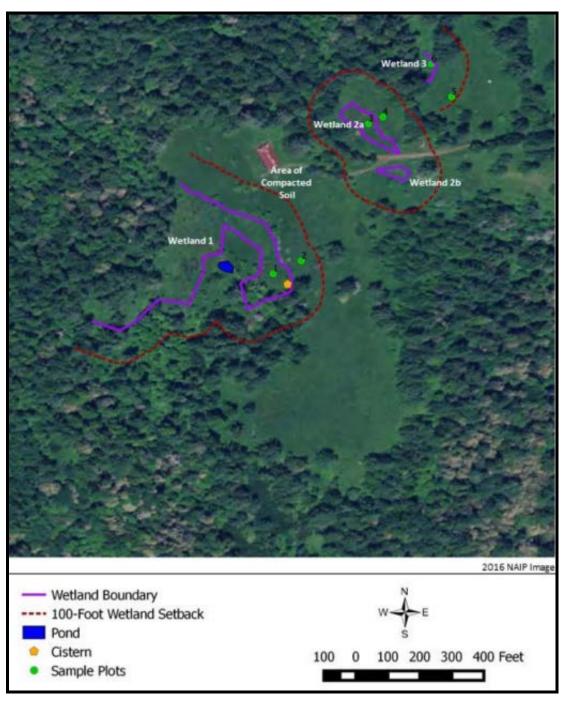


Figure 7. Wetland Delineation (Source Kyle Wear 2019)

d) Less than Significant Impact with Mitigation Incorporated Wildlife movement corridors are areas that connect suitable wildlife habitat areas in a region otherwise fragmented by rugged terrain, changes in vegetation, or human disturbance. Natural features such as canyon drainages, ridgelines, or areas with vegetative cover provide wildlife corridors. Wildlife movement corridors are important because they provide access to mates, food, and water; allow the dispersal of individuals away from high population density areas and facilitate the exchange of genetic traits between populations. Species listed in Table 5 that potentially occupy habitat present in these areas could be impacted by the proposed activities. Deer and other wildlife may currently use the pasture for forage and this project would impact the availability of the pasture for this purpose but is not expected to impact wildlife corridors or mobility. Corridors may be impacted cumulatively with multiple cannabis projects in the watershed. It is expected that the Humboldt County Planning Department and CDFW will consider this when approving cannabis zoning and permitting. As there are no proposed or approved cannabis cultivation sites within a half mile of the subject parcel, it is unlikely that approval of this project will impede the movement of wildlife through the greater area.

Migratory birds are protected under the Migratory Bird Treaty Act, which makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory birds listed in 50 CFR Part 10. Loss of fertile eggs or migratory birds, or any activities resulting in migratory bird nest abandonment, would be an adverse effect. Construction and maintenance activities associated with the project could have a temporary effect on protected migratory birds however mitigation measures BIO-3 and BIO-4 will ensure there is no potentially significant adverse impact.

e) Less than Significant Impact. The Humboldt County General Plan and Cannabis Ordinance includes several policies to protect biological resources. The County includes a policy to avoid significant habitat modification or destruction consistent with federally adopted Habitat Recovery Plans or interim recovery strategies (Policy BR-P2); a policy for sensitive habitat to be protected, including the range of Roosevelt Elk which is nearly the entirety of the county; a policy for wetland identification (Policy BR-P7); a policy to protect oak woodlands (Policy BR-P9); and a policy to manage and control noxious and exotic invasive plant species (Policy BR-P10); a policy for projects requiring discretionary review to preserve large trees, where possible, and mitigate for carbon storage losses attributable to significant removal of trees (Policy AQ-P17). The project will not impact wetlands or riparian areas, will not reduce the habitat of Roosevelt elk or any rare, threatened and endangered species. The project would not conflict with applicable

- Humboldt County General Plan policies protecting biological resources. The project does not conflict with any local policies or ordinances protecting biological resources.
- f) **No Impact.** Currently there is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plans that cover the project area.

Mitigation for Biological Resources:

- **BIO-1:** Preconstruction surveys for western pond turtle and special-status amphibian species shall be conducted throughout the proposed construction area and a 400-foot buffer around the proposed development area. Surveys shall consist of "walk and turn" surveys of areas beneath surface objects (e.g., rocks, leaf litter, moss mats, coarse woody debris) for newts and salamanders, and visual searches for frogs.
 - If western pond turtle, red-bellied newt or southern torrent salamander or special status frogs are detected during the preconstruction survey, the proposed development shall not occur within 200 feet from the occurrence(s) measured as a horizontal line perpendicular to, and moving away from, the SMA until such time as surveys demonstrate that the species are not present.
- **BIO-2:** No ground disturbing activities or vegetation removal shall occur between February 1 and August 31 unless a qualified biologist has conducted preconstruction surveys for nesting raptors that identifies that there are no active nests within 500 feet of the proposed development area.
- **BIO-3:** No ground disturbing activities or vegetation removal shall occur between February 1 and August 31 unless a qualified biologist has conducted preconstruction surveys for nesting special status bird species that identifies that there are no active nests within 100 feet of the proposed development area.
- **BIO-4:** The generator supplying power to the project shall be kept in an enclosed structure or otherwise muffled such that project-generated sound does not exceed 50 decibels at 100 feet from the generator or at the edge of forest habitat, whichever is closer.
- **BIO-5:** No additional road work or rocking of the access road shall occur until a seasonally appropriate (March to Mid-April) survey for Howell's montia is performed. If any Howell's montia would be affected by the road work the applicant shall relocate and restoration the impacted area at a 2:1 ratio on -site. Successful relocation and restoration shall include the following:

- A mitigation plan that includes the details on the methods to be used, including collection, storage, propagation, receptor site preparation, installation, long-term protection, and management, monitoring and reporting requirements and success criteria.
- Success criteria for preserved and compensatory populations shall include:
 - The extent of occupied area and plant density (number of plants per unit area) in compensatory populations will be equal to or greater than the affected occupied habitat.
 - Compensatory and preserved populations shall be self-producing. Populations will be considered self- producing when:
 - Plants reestablish annually for a minimum of five years with no human intervention such as supplemental seeding; and
 - Reestablished and preserved habitats contain an occupied area and flower density comparable to existing occupied habitat areas in similar habitat types in the project vicinity.

BIO-6: Rodenticides are prohibited from use associated with the project.

Implementation of the proposed recommendations would reduce impacts on special-status plants and wildlife species because it would require applicants to identify and avoid special-status plants and wildlife or provide compensation for the loss of special-status plants through enhancement of existing populations, creation and management of off-site populations, conservation easements, or other appropriate measures.

Documentation:

A Manual of California Vegetation Second Edition. California Native Plant Society. Sawyer et al. 2009.

Botanical and Aquatic Resources Survey. Maple Creek Ranch (APN: 313-145-006) Kyle Wear. August 2019.

California Cannabis Land Use Ordinance. Board of Supervisors, Humboldt County, Ca. Ord no. 2559, May 2018.

California Natural Diversity Database. California Department of Fish and Wildlife. 2019. https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data.

Commercial Medical Marijuana Land Use Ordinance. Board of Supervisors, Humboldt County, Ca. Ord no. 2559, Sept 2016.

Humboldt County General Plan. Board of Supervisors et al., Humboldt County, Ca. October 2017.

Inventory of Rare and Endangered Vascular Plants. California Native Plants Society. 2018. http://rareplants.cnps.org/.

National Wetland Inventory. California Department of Fish and Wildlife. May 2019.

USACE 1987 Manual, Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coastal Regions. Version 2.0. USACE 2010.

3.1.5 Cultural Resources

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	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?		\boxtimes		
d) Disturb any human remains, including those interred outside of dedicated cemeteries?		\boxtimes		

Setting:

The California Environmental Quality Act (CEQA) requires a Lead Agency to consider the possible adverse effects a project could have to historical resources (PRC Sections 21084 and 21084.1). CEQA's intent ensures that government decision makers consider the potential significant environmental effects of proposed projects before taking action. CEQA applies to all discretionary projects and equates a substantial adverse change in the significance of a historical resource with a significant effect on the environment (PRC 21084.1). The Lead Agency is responsible for determining whether adverse change will occur and whether it can be mitigated to a level considered less than significant. Where evidence indicates that a significant adverse effect will occur, the Lead Agency shall prepare an Environmental Impact Report which discusses the potential impacts and feasible means of avoiding or reducing it. Where adverse effects can be mitigated to a level of insignificant through changes in the project or other requirements, a mitigated negative declaration can be prepared.

Section 15064.5(a) of the CEQA Guidelines defines "historical resource" as the following:

- (1) A resource listed in or determined to be eligible for listing in, the California Register of Historical Resources
- (2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Lead agencies must treat any such resource as significant unless a preponderance of the evidence demonstrates otherwise

- (3) Any object, building, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (PRC 5024.1, Title 14 CCR, Section 4852) including the following:
 - 1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
 - 2) Is associated with the lives of persons important in our past;
 - 3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
 - 4) Has yielded, or may be likely to yield, information important in prehistory or history.
- (4) The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources, or identified in an historical resources survey does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1."

Based on Section 15064.5(b)(2), a project would have a significant adverse effect on historic resources if the project causes a substantial adverse change in the significance of a historical resource. This includes demolishing or altering the physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources or a local historic register, or by disturbing any human remains including those interred outside of formal cemeteries.

Section 15064.5(c) applies to effects on archaeological sites as follows:

- (1) When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource, as defined in subsection (a).
- (2) If a lead agency determines that the archaeological site is an historical resource, it shall refer to the provisions of this section and Section 15126.4 of the Guidelines.
- In addition, the CEQA Guidelines (Section 15064.5(c) (3), and (4)) provide tests for significance for archaeological resources, as summarized below:
- (1) If the site does not meet the criteria [for a historical resource] (a), but does meet the definition of a unique archaeological resource in Section 21083.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of section 21083.2.

(2) If an archaeological resource is neither a unique archaeological nor an historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment.

In addition to meeting one or more of the above criteria, the resources must be at least 50 years of age. A resource less than 50 years of age may qualify if it is exceptionally important to understanding our more recent history.

Discussion:

- a) No Impact. The Maple Creek Barn and Lithic Scatter is a multi-component site containing both a Native American lithic scatter and a historic-era fruit orchard and barn. The barn and orchard predate a 1942 air photo of the area and were likely constructed sometime in the 1930's. Surface observations of the lithic scatter were relatively sparse and included 4 Franciscan chert interior flakes. Two 50cm by 50cm test units excavated to 20cmbs and seven 30cm shovel test units excavated to 40cmbs, assisted surveyors in determining the extent of the archaeological deposit and providing a preliminary assessment of its information potential. Excavations resulted in the identification of one chert biface fragment, one obsidian pressure flake, two exhausted chert cores, one quartzite secondary core reduction flake, twenty-one interior chert flakes, four chert pressure flakes, five pieces of chert shatter and three indeterminate chert flakes. Additionally, one mortar was found in the barn, which shows evidence of pecking and grinding. (Roscoe and Associates 2017). Preliminary excavations at this site reveal the presence of formal tools and obsidian, which typically indicate information potential. The fact that this site has the potential to answer questions important in understanding prehistory, qualifies it for listing on the California Register of Historical Resources, under Criterion 4. (Roscoe and Associates 2017). The project has been designed to avoid disturbance in the area where these resources are located. The proposed project occurs outside of the area of the Maple Creek Barn and Lithic Scatter and will have no impact.
- b) Less than Significant Impact with Mitigation Incorporated The records search at the NWIC revealed that two previous cultural resource investigations, S-46072 (Childs 2001) and S-13131 (Ostrovsky and Schenk 1966). S-46072 (Childs 2001). All the resources identified by Childs in 2001 (S-46072) and Ostrovsky and Schenk in 1966 (S-13131) are located outside the proposed cultivation areas. (Roscoe and Associates 2017)

Additionally, multiple resources surveys have been conducted within ½ mile of, but outlying, the proposed cultivation areas. These investigations collectively resulted in the identification of one Native American archaeological site (P-12-000241) and two railroad grades (P-12-001262), both located within ½ mile of, but outlying the cultivation areas. (Roscoe and Associates 2017, 2019). All project development is outside of the identified archaeological resources. *Tribal Consultation and Marking of Lithic Scatter Boundaries*

The Cultural Resources Study discussed above was sent to the Tribal Historic Preservation Officers (THPOs) of the Bear River Band, the Wiyot Tribe, and the Blue Lake Rancheria. After reviewing the Survey as well as Site Maps for the project, the THPOs recommended that no ground disturbance or cultivation activities will occur within the lithic scatter site boundaries, as shown in the revised Plot Plans as "buffer area", and that the South border of the buffer area be marked with survey whiskers attached to wooden stakes placed every 5 meters. This will be included in the project as a Condition of Approval. The THPO's also requested adherence to the inadvertent discovery protocols which are included as Mitigation Measures CU-1 and CU-2.

c) Less than Significant Impact with Mitigation Incorporated. There are no known burial sites on the proposed project site. If human remains are unearthed during future development of the site, the provisions of California Health and Safety Code Section 7050.5 shall apply and work will be stopped.

Mitigation Measures:

CUL-1: If human remains are discovered during project construction, work will stop at the discovery location, within 20 meters (66 feet), and any nearby area reasonably suspected to overlie adjacent to human remains (Public Resources Code, Section 7050.5). The Humboldt 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 relating to the disposition of Native American burials, which fall within the jurisdiction of the NAHC (Public Resources Code, Section 5097). The coroner will contact the 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 the person responsible for the excavation work for means of treatment and disposition, with appropriate dignity, of the human remains and any associated grave goods, as provided in Public Resources Code, Section 5097.98.

CU-2: If cultural materials (chipped or ground stone, historic debris, building foundations, or bone) are discovered during ground-disturbance activities, work shall be stopped within 20 meters (66 feet) of the discovery, per the requirements of CEQA (January 1999 Revised Guidelines, Title 14 CCR 15064.5 (f)). Work near the archaeological finds shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the materials and offered recommendations for further action.

Documentation:

A Cultural Resource Investigation Report for the Maple Creek Ranch Commercial Cultivation Permit (APN 313-145-006 and 313-146-004). Roscoe and Associates. Eureka CA. May 2017 and Amendment 2019

CalTrans Cultural Resources Handbook. CalTrans. 2014

3.1.6 Energy

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				

Setting:

In 2003, the California Public Utilities Commission, the California Energy Commission, and the California Power Authority adopted an Energy Action Plan to meet California's electricity and natural gas needs. The plan was revised and updated in 2005 and again in 2008. The primary objectives of the plan are to invest in energy efficiency, renewable resources, and a clean conventional electricity supply. Senate Bill (SB) 100, passed in 2018, sets in place a goal for to produce 50 percent renewable energy by 2026, 60 percent renewable energy by 2030, and 100 percent renewable energy by 2045 within the California electricity grid. As of 2017, renewable energy sources, including biomass, geothermal, hydrologic, solar, and wind, accounted for 29 percent of California's power mix (CEC 2019).

Discussion:

- (a) —Less than Significant Impact. The proposed project is for full-sun outdoor cultivation which will require no power other than for the ancillary nursery, the well, and the on-site processing/drying building. Power will be provided by both solar and generator.
- (b) **No Impact.** The project would provide power by a mix of renewable and non-renewable energy and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Mitigation: None

3.1.7 Geology and Soils

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential				
substantial adverse effects, including the risk of loss,				\boxtimes
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				\boxtimes
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			\boxtimes	
liquefaction?				
iv) Landslides?				\boxtimes
b) Result in substantial soil erosion or the loss of				\boxtimes
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-				\boxtimes
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),			\boxtimes	
creating substantial risks to life or property?				
e) Have soils incapable of adequately supporting the				
use of septic tanks or alternative wastewater				\boxtimes
disposal systems where sewers are not available for	_	_	_	_
the disposal of wastewater?				
e) Directly or indirectly destroy a unique				
paleontological resource or site or site or unique				\boxtimes
geological feature.				

Setting:

The subject parcel is in the Maple Creek drainage. Slopes and other topographical features have been described in previous sections.

The main soil type within the project area is Lepoil-Candymountain complex [257]. These soil types are not considered hydric. They are considered well drained soil complexes that are usually found on slopes ranging from 2-15 percent The Lepoil series consists of very deep, well drained soils formed in marine deposits derived from mixed sources. Lepoil soils are on nearly level to steeply sloping, dissected marine terraces and have slopes 0 to 50 percent. The Candymountain series consists of very deep, well drained soils formed in marine deposits from mixed sources. Candymountain soils are on uplifted marine terraces and hillslopes on slopes of 0 to 75 percent.⁶ Areas adjacent to the project contain Mooncreek-Noisy-Tossup complex [462] of 9-30 percent slope, Coppercreek-Slidecreek-Lackscreek [542] complex of 30-50 percent slopes.

 6 Web Soil Survey. Natural Resources Conservation Service, United States Department of Agriculture. 2019. https://websoilsurvey.sc.egov.usda.gov/.



Figure 8. Soil map for the proposed project area showing the dominant soil types (Estimated parcel boundaries) 7 .

⁷ Web Soil Survey. Natural Resources Conservation Service, United States Department of Agriculture. 2019. https://websoilsurvey.sc.egov.usda.gov/.

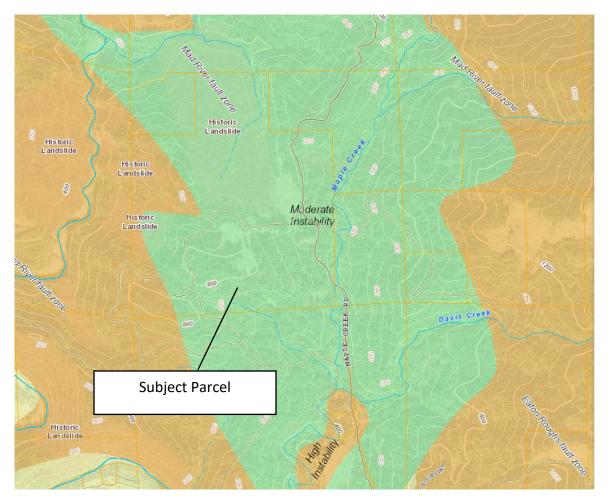


Figure 9. Humboldt County GIS layer showing seismic safety and known fault lines.

Discussion:

- a) The project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - i. No Impact. Rupture of known earthquake fault: The California Geological Survey (CDC 2019) has the responsibility for mapping active earthquake faults in California, through legislation referred to as the Alquist-Priolo Earthquake Fault Zoning Act (GHD 2018). There are two known faults located in and adjacent to the subject parcel. The Mad River fault zone and the Eaton Roughs Fault zone. (Humboldt GIS 2019). The proposed cultivation operation of in ground outdoor plans and associated accessory buildings will not rupture a known fault.
 - ii. Less than Significant Impact. Strong seismic ground shaking: Strong seismic shaking is a regional hazard that could cause major damage to the project area. The extent of ground-shaking during an earthquake is controlled by the earthquake magnitude and intensity, distance to the epicenter, and the geologic

- conditions in the area. Humboldt County is in an active earthquake area. The proposed project is primarily for outdoor agricultural cultivation which does not have the potential for injury or death of structural failings. The proposed cultivation nursery and processing structure will be the only structures associated with the project and will be utilized only during limited time frames. These structures are required to meet building code provisions to ensure the stability during an earthquake.
- iii. **Less than Significant Impact.** Seismic-related ground failure: The property is mapped as having high instability due to seismic activity. It is not in an area of potential liquefaction.
- iv. No Impact. Landslides: The project area is on slopes of less than 15 percent. There are three historic landslides documented on the Humboldt County GIS layer towards the northwestern side of the subject parcel and landslides are common throughout the Maple Creek drainage (Humboldt County GIS 2019), however the project area is relatively flat and has no potential for landslides
- b) **No Impact.** Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water. "Erosion factor Kw (whole soil)" indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments. The project area has a Kw value of 0.32, meaning it is moderately susceptible to water erosion (USDA 2019) however the project site itself is relatively flat and will not result in any substantial erosion hazards.
- c) No Impact The National Earthquake Hazards Reduction Program (NEHRP) (FEMA et al 2019) rates the project area has Geological Unit C, having soft rock and very dense soil. The parcel and surrounding areas have no historic landslides listed. The project area is on a low slope with sturdy soil types making liquefaction and landslides unlikely.
- d) Less than Significant Impact. Expansive soils are generally high in certain clay types and are prone to large volume changes that are directly related to changes in water content. Soils along the project area are generally sandy clay loam (USDA 2019) and are dry, well drained soils which have the potential for expansion however the cultivation will be in ground outdoor cultivation which will not result in any substantial risks to life or property.
- e) **No Impact.** There is currently an unpermitted septic system on-site for domestic use which is contracted to be evaluated by the Humboldt County Department of

Environmental Health. Upon employee arrival portable toilets and handwashing stations will be delivered. All septic systems with a nexus to cannabis will require retroactive permitting from the Department of Environmental Health pursuant to a required Septic Suitability Test. Commercial building used for ancillary processing must be served by a permitted septic system.

f) No Impact. There are no known or identified unique resources in the project area.

Mitigation Measures: None required.

Documentation:

California Geological Survey. California Department of Conservation (CDC). 2018. https://www.conservation.ca.gov/cgs

Cultivation and Operations Plan Maple Creek Ranch Corporation. Unpublished. Date Unknown.

National Earthquake Hazards Reduction Program (NEHRP). FEMA et al. June 2019. https://www.nehrp.gov/.

Web Soil Survey. Natural Resources Conservation Service, United States Department of Agriculture. May 2019. https://websoilsurvey.sc.egov.usda.gov/.

3.1.8 Greenhouse Gas Emissions

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, 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?				⊠

Setting: In early 2019, Humboldt County local governments decided to take a regional approach to climate action planning. The Regional CAP partnership consists of Redwood Coast Energy Authority (RCEA), the County of Humboldt and the cities of Arcata, Eureka, Blue Lake, Ferndale, Fortuna, Rio Dell and Trinidad (2019). RCEA recently completed 2015 greenhouse gas inventories, and the County is working with the public to develop a plan to reduce emissions while taking into the unique nature of Humboldt County. Greenhouse gases (GHGs) are a contributor to climate change, sea level rise, ocean acidification, and endangerment of sensitive organisms. Climate, unlike weather, refers to the overall trends of temperature, rainfall, and other atmospheric conditions. With the contribution of gases from products of combustion (such as compounds present in automotive exhaust) among other sources, have resulted in an influx of nitrous oxide (N_2O), ozone (O_3), carbon dioxide (CO_2), and methane (CH_4) have led to an increase in global temperatures. These gases allow visible and ultraviolet light through the atmosphere from the sun but keep them from escaping. This increase in temperature melts polar ice caps which increases sea levels, impacting a countless number of species directly, including humans.

California has passed Assembly Bill 32, mandating a reduction in greenhouse gas (GHG) emissions and Senate Bill 97, evaluating and addressing GHG under CEQA. On April 13, 2009, Governor's Office of Planning and Research (OPR) submitted to the Secretary for Natural Resources its proposed amendments to the state CEQA Guidelines for GHG emission, as required by Senate Bill 97 {Chapter 185, 2007} and they became effective March 18, 2010. As a result of these revisions to the CEQA Guidelines, lead agencies are obligated to determine whether a project's GHG emissions significantly affect the environment and to impose feasible mitigation to eliminate or substantially lessen any such significant effects.

Additional laws and policies as well as court cases related to GHGs can be found the HCC DEIR and FEIR

Discussion:

Permitted commercial cannabis cultivation and non-cultivation operations could result in an incremental increase in emissions from short-term construction-related activities and long-term operational-related sources.

- a) Less than Significant Impact. The NCUAQMD does not have rules, regulations, or thresholds of significance for non-stationary GHG emissions (GHD 2018). Humboldt County's General Plan contains policies and implementation measures within the Air Quality Element to reduce greenhouse gas emissions and for the preparation of a Climate Action Plan. The proposed project involves the construction and operation of cannabis cultivation, a nursery and distribution facility. The proposed project could generate both direct and indirect GHG emissions. Direct GHG emissions include emissions from construction activities, area sources, and mobile (vehicle) sources. Typically, mobile sources make up most direct emissions. Indirect GHG emissions are generated by incremental electricity consumption and waste generation. Electricity consumption is responsible for most indirect emissions however the proposed project will be full sun outdoor cultivation which will require electrical power only for the propagation of plants and the drying and bucking of the plant materials, irrigation, security lighting, and the restroom facilities for the workers. The electrical needs will be relatively minor. Electrical power will be provided through a combination of solar and generator power.
- b) **No Impact.** The proposed project involves the construction and operation of a facility for cannabis cultivation, nursery, and distribution means. As a result, the proposed project could generate both direct and indirect GHG emissions. As noted above, there are no local plans that have been adopted for the purpose of reducing the emissions of greenhouse gases.
 - In 2006, the California Global Warming Solutions Act (Assembly Bill 32) definitively established the state's climate change policy and set GHG reduction targets (Health & 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. Recommendations to reduce residential GHG emissions include promoting energy efficiency in new development and improved coordination of land use and transportation planning on the city, county and sub regional level, and other measures to reduce automobile use.

It is noted that the California Air Resources Board (CARB) announced in July 2018, that the State has already met the AB 32 goal of reducing emissions to 1990 levels by 2020

approximately four years early. As stated in the Executive Summary of the 2018 Edition of the California Greenhouse Gas Emissions Inventory: 2000-2016:

"The inventory for 2016 shows that California's GHG emissions continue to decrease, a trend observed since 2007. In 2016, emissions from routine GHG emitting activities statewide were 429 million metric tons of CO_2 equivalent (MMTCO₂e), 12 MMTCO₂e lower than 2015 levels. This puts total emissions just below the 2020 target of 431 million metric tons. Emissions vary from year-to-year depending on the weather and other factors, but California will continue to implement its greenhouse gas reductions program to ensure the state remains on track to meet its climate targets in 2020 and beyond."

The project is subject to a myriad of state regulations applicable to project design, construction, and operation that would reduce GHG emissions, increase energy efficiency, and provide compliance with the California Air Resources Board (CARB) Climate Change Scoping Plan (CARB, 2018). The State of California has the most comprehensive GHG regulatory requirements in the United States, with laws and regulations requiring reductions that affect project emissions. Legal mandates to reduce GHG emissions from vehicles, for example, reduce project-related vehicular emissions. Legal mandates to reduce GHG emissions from the energy production sector that will serve the proposed project would also reduce project related GHG emissions from electricity consumption. Legal mandates to reduce per capita water consumption and impose waste management standards to reduce methane and other GHGs from solid wastes, are all examples of mandates that reduce GHGs. The project will not conflict with any of the adopted plans or policies or regulations.

Mitigation Measures: None required.

Documentation:

Climate Action Plan. Humboldt County Board of Supervisors. 2019.

https://humboldtgov.org/2464/Climate-Action-Plan.

California Greenhouse Gas Emissions for 2000 to 2016, Trends of Emissions and Other Indicators. 8th Edition. California Air Resources Board (CARB). 2018.

Air Quality. North Coast Unified Air Quality Management District. 2018.

http://www.ncuaqmd.org/index.php?page=air.quality.

District Rules and Regulations. North Coast Unified Air Quality Management District. 2017.

http://www.ncuaqmd.org/index.php?page=rules.regulations.

3.1.9 Hazards and Hazardous Materials

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	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?				\boxtimes
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would 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?				×

Setting: Agricultural operations frequently employ the use of chemical and organic fertilizers, pesticides, and herbicides. The area has historically been used for agriculture, however, use of chemicals was likely negligible. Cannabis cultivation is a form of agriculture. In the Site Plan Overview and Cultivation and Operations Plan; the use of chemical fertilizer was noted. These will be stored inside of the proposed processing and drying facility with appropriate secondary containment. All fertilizers and supplements used will follow local and state regulations regarding application at agronomic rates and safe handling procedures. Pesticides and fungicides will be applied using sprayers at agronomic rates with measures taken to avoid pesticide drift.

Discussion:

- a) Less than Significant Impact. Small amounts of potentially hazardous substances (e.g., petroleum, pesticides, herbicides, and other chemicals used to maintain vehicles and equipment) would be used at the project site. The proposed primary uses will be comprised of fertilizers and herbivorous Insect and Pathogenic Fungus Deterrent. This includes generators and vehicles used during construction and cultivation. Application of fertilizers, herbicides, and pesticides should be limited to cultivation areas only. Fertilizers and other agricultural chemicals should be stored with secondary containment in their original packaging with labels. Used fertilizer and chemical containers should be disposed of according to manufacturer's requirements. Compliance with standard transport and handling procedures of the chemical manufacturers and compliance with the Humboldt County Zoning Ordinance will ensure a less than significant adverse impact.
- b) Less than Significant Impact. With proper storage and application of hazardous materials there is not a foreseeable significant hazard to the public or to the environment. Without the appropriate safety precautions described above, the project could expose workers, the public, or the environment to potential hazards. Small quantities of potentially hazardous substances (e.g., petroleum and other chemicals used to operate and maintain equipment, fertilizers and pesticides) would be used at the proposed project site. Accidental releases of these substances could potentially contaminate soils and degrade the quality of surface water and groundwater, resulting in a public safety hazard. Compliance with hazardous materials handling regulations such as the Certified Unified Program Agency will reduce any impacts to a less than significant level.
- c) **No Impact.** The proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- d) **No Impact.** The proposed project is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. It would not create a significant hazard to the public or the environment.
- e) **No Impact.** The proposed project is not located within an airport land use plan. No plan has not been adopted, within two miles of a public airport or public use airport, therefore, the project would not result in a safety hazard for people residing or working in the project area, having no impact.
- f) **No Impact.** The proposed project is not within the vicinity of a private airstrip, having no impact.
- g) **No Impact.** There are no indications or reason to believe that the proposed project would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The County has a *Humboldt County Community Wildfire Protection Plan* in place, but this project would not interfere with

this under compliance with proper fire safety, prevention, and protection methods. The proposed project would have a less than significant impact.

Mitigation Measures: None required

Documentation:

Cultivation and Operations Plan Maple Creek Ranch Corporation. Unpublished. Date Unknown.

Humboldt County Community Wildfire Protection Plan. Kneeland-Maple Creek Unit Action Plan. 2019.

3.1.10 Hydrology and Water Quality

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?			\boxtimes	
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?			X	
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?			\boxtimes	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or 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 of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				×
j) Inundation by seiche, tsunami, or mudflow				×

Setting: The property is situated on private lands in the Maple Creek-Mad River watershed. SMAs are located through the subject parcel. Wetlands are further described in the wetland delineation performed by Kyle Wear (Wear 2019).

The regulatory setting related to the Clean Water Act is described below. Numerous laws and policies affect water and water quality. A more detailed list of policies can be found in the HCC DEIR and FEIRs.

Clean Water Act

The U.S. Environmental Protection Agency (EPA) is the lead federal agency responsible for water quality management. The Clean Water Act (CWA) is the primary federal law that governs and authorizes water quality control activities by EPA as well as the states. Various elements of the CWA address water quality. These are discussed below.

CWA Water Quality Criteria/Standards

Pursuant to federal law, EPA has published water quality regulations under Title 40 of the Code of Federal Regulations (CFR). Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. As defined by the act, water quality standards consist of designated beneficial uses of the water body in question and criteria that protect the designated uses. Section 304(a) requires EPA to publish advisory water quality criteria that accurately reflect the latest scientific knowledge on the kind and extent of all effects on health and welfare that may be expected from the presence of pollutants in water. Where multiple uses exist, water quality standards must protect the most sensitive use. As described in the discussion of state regulations below, the State Water Resources Control Board (State Water Board) and its nine regional water quality control boards (RWQCBs) have designated authority in California to identify beneficial uses and adopt applicable water quality objectives.

CWA Section 404

In accordance with Section 404 of the CWA, the U.S. Army Corps of Engineers (USACE) regulates discharge of dredged or fill material into waters of the United States (US). Waters of the US and their lateral limits are defined in Title 33, Part 328.3(a) of the CFR to include navigable waters of the US, interstate waters, all other waters where the use or degradation or destruction of the waters could affect interstate or foreign commerce, tributaries to any of these waters, and wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries. Any activity resulting in the placement of dredged or fill material within waters of the US requires a permit from USACE. In accordance with Section 401 of the Clean Water Act, projects that apply for a USACE permit for discharge of dredged or fill material must obtain water quality certification from the appropriate RWQCB indicating that the project will uphold water

quality standards. Waters of the US and wetland protection requirements of the CWA administered by USACE are further discussed in Section 3.3, "Biological Resources."

CWA Section 401 and 402 National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program was established in the CWA to regulate municipal and industrial discharges to surface waters of the US. NPDES permit regulations have been established for broad categories of discharges including point source waste discharges and nonpoint source stormwater runoff. Each NPDES permit identifies limits on allowable concentrations and mass emissions of pollutants contained in the discharge. Sections 401 and 402 of the CWA contain general requirements regarding NPDES permits. "Nonpoint source" pollution originates over a wide area rather than from a definable point. Nonpoint source pollution often enters receiving water in the form of surface runoff and is not conveyed by way of pipelines or discrete conveyances. Two types of nonpoint source discharges are controlled by the NPDES program: discharges caused by general construction activities and the general quality of stormwater in municipal stormwater systems. The goal of the NPDES nonpoint source regulations is to improve the quality of stormwater discharged to receiving waters to the maximum extent practicable.

The RWQCBs in California are responsible for implementing the NPDES permit system (see the discussion of state regulations below).

Impacts to water quality associated with cannabis cultivation activities proposed by the Project are regulated by the North Coast Regional Water Quality Control Board (RWQCB) under Order No. 2015-0023 or other regulations of the State Water Resources Control Board (SWRCB) as applicable to cannabis production.

Discussion:

a-b)

Less than Significant Impact. Wastewater and solid human waste will be managed by onsite portable waste units form B&B per the Cultivation and Operations Plan submitted by Maple Creek Ranch Corps. When the proposed ancillary processing building is constructed, wastewater will also be managed by a permitted septic system, to be approved by the Department of Environmental Health.

Commercial cannabis operations in the County have the potential to deplete local groundwater supplies and affect adjacent wells as a result of cultivation water demands. The existing well is a groundwater well on a large parcel of land, and the proposed well would further be isolated within the large land holding. Groundwater in the County is subject to varying degrees of impairment. Depending on the location of extraction and condition of local groundwater resources, it is possible for drawdown at a well in one location to affect groundwater elevations in other wells. One of the most important factors is distance; larger parcels generally have larger

areas to draw from, thereby reducing the potential to adversely affect adjacent properties. The proximity of wells to other wells, and structure and volume of the groundwater basin (among many factors), can influence if a well would affect other wells. The existing well is a groundwater well on a large parcel of land, and the proposed well would further be isolated within the large land holding.

c-d)Less than Significant Impact. In areas where new construction of commercial cannabis facilities is proposed, the peak flow and volume of storm water runoff generated from such areas would be affected by development through conversion of vegetated or otherwise pervious surfaces to impervious surfaces (e.g. roads, roofs, driveways, walkways) and by the development of drainage systems that might more effectively connect these impervious surfaces to streams or other water bodies. The travel time of runoff originally travelling as overland sheet flow could be reduced when routed into constructed conveyance systems directly from impervious surfaces. Construction of new cultivation areas, roadways or improvement of existing roadways in compliance with the performance standards of the proposed ordinance could alter peak drainage flow rates and result in changes in flood elevations in waterways. Overall, improvements related to commercial cannabis facilities could increase the rate and volume of runoff and eliminate some natural storage and infiltration capacity along drainage paths. Consequently, sites could be subject to on-site ponding, or on-site or off-site flooding.

The project does not propose altering any streams or rivers. The primary water source will be the on-site well and rain catchment that will be stored in water tanks along the property.

Procedures will be implemented to minimalize the effects of fertilizer and pesticide runoff on the watershed and environment. Per the applicant, agricultural chemicals will be applied at agronomic rates to reduce runoff. Hay waddles will be utilized to control runoff that may pose the threat of discharging into the watershed. Monitoring points will be established based on the contours and slope of the developed site. Water use will be metered and recorded and submitted annually to regulatory agencies.

The cultivation areas to be developed will be lightly graded to provide a workable surface for agricultural crop production. The grading work is to be conducted by a licensed contractor in accordance with grading or earthwork plans approved by the Humboldt County Building Department. MCR will work with a licensed engineer to develop grading plans. Site and road development will implement best practices to minimalize erosion and runoff, such as out sloping of the roads, installation of water bars, culverts, and rock to maintain the integrity of the site.

e-f)

Commercial cannabis operations in the County have the potential to modify surface drainage and flows resulting in increased sedimentation and erosion, possibly leading to water quality

degradation. The long-term operational use of pesticides, fertilizers, and other chemicals can also have a negative effect on water quality and ultimately affect the health and sustainability of organisms that rely on high quality waters. Standard 3 of the County ordinance includes provisions to reduce impacts from point source and non-point source pollution, including discharges of sediment or other pollutants that constitute a threat to water quality. Road segments are required to be assessed by a qualified professional engineer and to be designed and maintained in ways that minimize the potential for discharge of sediment, including measures to reduce velocity of runoff, to capture and detain stormwater from road systems to enable settling of transported sediments, and to minimize direct delivery to nearby watercourses to the greatest extent feasible. The cannabis project is required to comply with the Statewide Cannabis General Order issued by the State Water Resources Control Board and compliance with this order will ensure no significant adverse impact on runoff or water quality. Compliance with laws and regulations controlling on-site pollutants would ensure that the threat of pollution from improperly constructed sites would not result in water quality degradation.

g-i) **No Impact.** The property is not located within a 100-year flood hazard (Zone A) (FEMA 2017). Maple Creek, which is adjacent to the property, is marked as a Zone A area, but this outlined area does not intersect the property. No structure or housing will be placed within these zones.



Figure 10. Humboldt Count GIS flood hazard and FEMA layers.

The property is not placed within any designated flood zones or flood hazard zones. There is no significant risk of loss, injury or death by the means of flooding including flooding as a result of the failure of a levee or dam.

j) **No Impact.** There is no history of inundation by seiche, tsunami, or mudflow on or adjacent to the property, nor is not mapped in any of these stated potential hazard zones.

Mitigation: None.

Documentation:

National Wetland Inventory. California Department of Fish and Wildlife. May 2019.

Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effects in the North Coast Region. California Regional Water Quality Control Board. Order No. 2015-0023. August 2015.

https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2015/15_0023_Can nabis_Order.pdf.

Cultivation and Operations Plan Maple Creek Ranch Corporation. Unpublished. Date Unknown.

 ${\it Flood Zones.} \ {\it Federal Emergency Management Agency.} \ {\it June 2017}.$

http://webgis.co.humboldt.ca.us/HCEGIS2.0/.

Wetland Delineation for Maple Creek Ranch. Kyle Wear. June 2019

3.1.11 Land Use and Planning Land Use

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?				\boxtimes
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?				

Setting: The project site is in a rural area near Maple Creek. Previous use of the land consists of farming of livestock, cattle grazing, and logging. Development on the site may be limited due to the proximity of development to neighboring parcels.

The lands at the project site have a County General Plan (2018) Designation of T (Timber) and zoning of AE (Agriculture Exclusive). In response to California State Law that allows cannabis cultivation and distribution, under permitted and controlled conditions, Humboldt County developed County-specific ordinances to regulate commercial cannabis cultivation, distribution and sales within the County. Ordinance 2599, including section 314-55.4 titled, "Commercial Cultivation, Processing, Manufacturing, Distribution, Testing, and Sale of Cannabis Land Use Regulation for the Inland Area of the County of Humboldt" (2018).

The Cannabis Ordinance, in combination with the provisions of the General Plan and requirements of the Zoning Districts are used to determine appropriate land uses of cannabis operations in Humboldt County.

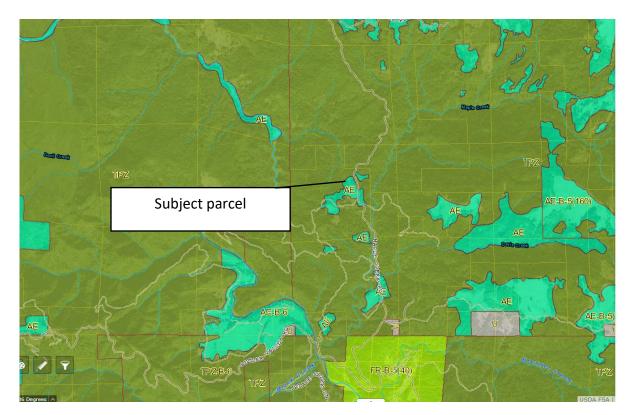


Figure 11. Humboldt County GIS planning and zoning layers.

Discussion: Based on a field review by the Planning Department and other agency staff, information provided by the applicant, existing information available to the Planning Department, and observations made on the project site and in the vicinity, the following findings can be made:

- a) **No Impact.** The project does not have the potential to physically divide an established community. There are gated entrances along the property providing limited access, with partial fencing. No impact has been identified. The County's General Plan (2017) and the Kneeland-Maple Creek Community Plan serves as the overall guiding policy document for land use and development. The Kneeland-Maple Creek Community Plan provides detailed land uses (consistent with the General Plan) and zoning for the Maple Creek planning area, which includes the project site.
- b) **No Impact.** The proposed project area is less than 5 acres in size, located on a parcel that is approximately 420 acres. Based on the proposed uses of the project, these uses do not conflict with the land use designations for the project site, and impacts are considered less than significant.
- c) **No Impact.** The proposed project would not conflict with any applicable habitat conservation plan or natural community conservation plan. There is no adopted Habitat

Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plans for the proposed project site or area.

Mitigation Measures: None required.

Documentation:

Humboldt County General Plan. Board of Supervisors et al., Humboldt County, Ca. October 2017.

Kneeland- Maple Community Plan. Board of Supervisors. September 2016.

https://humboldtgov.org/DocumentCenter/View/71004/49-Kneeland-Maple-Creek-Planning-Unit-Action-Plan_Final_Revised-12719

California Cannabis Land Use Ordinance. Board of Supervisors, Humboldt County, Ca. Ord no. 2559, May 2018.

3.1.12 Mineral Resources

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	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?				×

Setting: The project site is in a grassy meadow surrounded by thick trees and vegetations, on the outskirts of Maple Creek, Ca. The U.S. Geological Survey has no mineral resources, including mines and deposits, mapped in the area (2019).

Discussion:

a-b) **No Impact.** The proposed project may require minor use of imported mineral resources for building greenhouses and other structures, but it is not expected to have any significant impact on locally available minerals or mineral resources valuable to the region or State (USGS 2019). There are no locally important mineral resource recovery sites in the project vicinity, and the project alignment contains no mineral resources that would be impacted by the project.

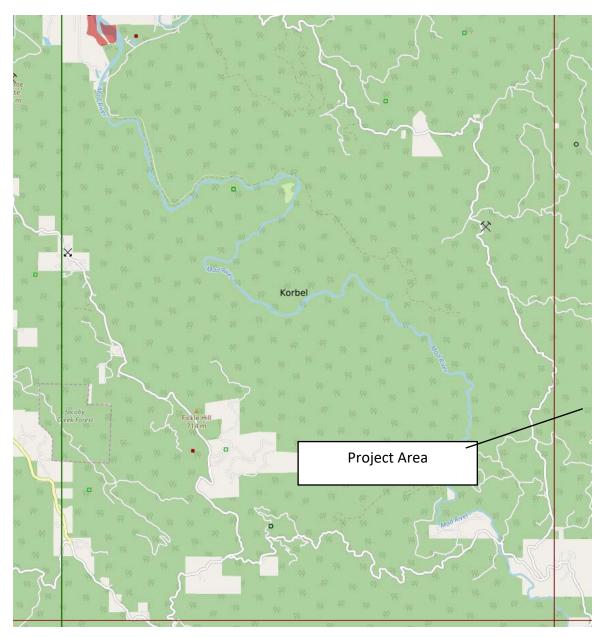


Figure 12. Mineral Resources of the Korbel Quadrangle⁸

Mitigation Measures: None required.

Documentation:

Mineral Resources. U.S. Geological Survey. 2019. https://mrdata.usgs.gov/.

⁸ https://mrdata.usgs.gov/general/map-us.html#home

3.1.13 Public services

a) 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:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Fire protection?				\boxtimes
Police protection?				\boxtimes
Schools?				\boxtimes
Parks?				\boxtimes
Other public facilities?				

Setting: MCR is outside of the town of Maple Creek. There are no schools, parks, or other public facilities within 600 feet of the cultivation area. Maple Creek Road is a "Major Collector" on the Circulation Roads map provided by Humboldt County GIS database layers. Maple Creek School is the nearest school and is approximately 2 miles south of the subject parcel.

Discussion:

a) **No Impact.** The proposed project would not 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 of fire protection, police protection, schools, parks, or any other public facilities (Ascent Environmental 2018). MCR's distance from surrounding public services indicate that the proposed project will have no impact on these services.

Mitigation measures: None required.

Documentation:

Cultivation and Operations Plan Maple Creek Ranch Corporation. Unpublished. Date Unknown.

Final Environmental Impact Report: Amendments to the Humboldt County Code Regulating Commercial Cannabis Activities. Ascent Environmental. January 2018.

https://humboldtgov.org/DocumentCenter/View/62689/Humboldt-County-Cannabis-Program-Final-EIR-60mb-PDF.

3.1.14 Noise

Would the project result in:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies?				X
b) Generation of excessive groundborne vibration or groundborne noise levels?			\boxtimes	
c) For a project located within the vicinity of a private airstrip or an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?				X

Setting: MCR is in a rural location. There are neighboring homes are approximately 0.8 miles from the cultivation area. The extent of the proposal for the MCR property would indicate an increased, but punctuated, flux of noise due to construction. While a 25k MQ Whisper watt diesel generator is proposed to power the site, the generator will be installed in an enclosed generator shed located near the proposed processing facility. The shed will be installed on a concrete slab and will be insulated with soundproofing materials to attenuate the noise produced by the generator.

Discussion:

- a) No Impact. The project would not expose persons or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. The project proposes only minimal construction in addition to generators.
- b) Less than Significant Impact. Outside of the temporary construction activity, the only noise associated with the project will be employees working and the small whisperwatt generator that will be utilized on an as-needed basis. Conditions of approval require the generator to not
- **c) No Impact.** The project is not located in the vicinity of a private airstrip or within two miles of a public airport.

Mitigation Measures: None required.

Documentation:

Cultivation and Operations Plan Maple Creek Ranch Corporation. Unpublished. Date Unknown.

3.1.15 Population and Housing

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				⊠
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				\boxtimes

Setting: MCR is in an already cleared area of mixed evergreen forest and grassland on the outskirts of the town of Maple Creek. There is an existing barn and other structures on the subject parcels.

Discussion:

- a) **No Impact.** The project would not induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). The project would have a less than significant impact in the population.
- b) **No Impact.** The project would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere. There are no homes within the project areas. No new permanent residences are anticipated based on the current plans, but bunkhouses are proposed for employee use if necessary. This would have a less than significant impact.

Mitigation Measures: None required.

Documentation:

Cultivation and Operations Plan Maple Creek Ranch Corporation. Unpublished. Date Unknown.

3.1.16 Recreation

	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project 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?				\boxtimes
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				×

Setting: The cultivation site is on the southern edge of town. There are no local parks within 200 feet of the cultivation site, and there are no recreational parks on site.

Discussion:

- a) No Impact. There are no parks or recreation sites within 200 feet. The project would have no impact upon the increase in 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) **No Impact.** The project does not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Mitigation Measures: None required.

Documentation:

Cultivation and Operations Plan Maple Creek Ranch Corporation. Unpublished. Date Unknown.

3.1.17 Transportation

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with a Program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				⊠
b) Would the project conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?				
c) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				×
d) Result in inadequate emergency access?				\boxtimes

Setting: MCR is on the southernmost edge of Maple Creek. A ranch road maintained by the owners runs through the parcel and a County-maintained road is present on the northwestern end of the property.

Discussion:

- a) No Impact. The proposed project does 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 nonmotorized 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. No impact would occur.
- b) Less than Significant. CEQA Guidelines section 15064.3 dictate criteria for analyzing transportation impacts for land use and transportation projects. Projects that reduce or do not have any impact on vehicle miles traveled are considered to have a less than significant transportation impact. However, this does not necessarily mean that projects that increase total vehicle miles traveled are assumed to have a significant impact.

The Humboldt County Association of Governments (HCAOG) is the regional transportation planning agency for Humboldt County. Under its authority as the Regional Transportation Planning Agency for Humboldt County, HCAOG adopts and submits an updated Regional Transportation Plan to the California Transportation Commission and the California Department of Transportation every five years. The Regional Transportation Plan is a long-range (20-year) transportation planning document for Humboldt County. The most recent five-year update, adopted in December 2017, does not currently establish vehicular level of service criteria for County roadways in the Maple Creek area. HCAOG has also not adopted any significance standards applying vehicle miles traveled ("VMT") pursuant to CEQA Guidelines section 15064.3, subdivision (b)(1.) Thus, there is no threshold of significance from an applicable transportation plan that can be applied to the project.

The proposed project would result in a short-term increase in construction traffic and an ongoing increase in vehicle trips for project employees. Without and understanding of the construction equipment required, it is difficult to quantify the increase in vehicle miles. However, this is not required. (See CEQA Guidelines, § 15064.3, subd. (b)(3)("For many projects, a qualitative analysis of construction traffic may be appropriate").) The increase in VMT resulting from construction would be short-term and any additional traffic would cease after each phase of construction for the project.

State CEQA Guidelines Section 15064.3 requires that transportation impacts be analyzed based on vehicle miles traveled (VMT). For a land use project, VMT exceeding an applicable threshold of significance may indicate a significant impact. Humboldt County has not formally adopted any significance thresholds for VMT. However, according to the California Office of Planning and Research Technical Advisory on Evaluating Transportation Impacts in CEQA, published December 2018, absent substantial evidence of a project related significant level of VMT, projects that generate less than 110 trips per day may generally be assumed to cause a less than significant transportation impact. Here, the project would employ 4 full time employees and up to ten part-time workers as needed during specific periods of cultivation. Including deliveries there would be at most 30 average daily vehicle trips to the site which would fall below the 110 trips threshold set by OPR.

- c) **No Impact.** The project would not substantially increase hazards. It is located off a county maintained road and is utilizing existing ranch roads for access.
- d) **No Impact.** The project would have a less than significant impact upon inadequate emergency access. The project site is located on a road that is developed to the proper standards for emergency access.

Mitigation Measures: None required.

Documentation:

Final Environmental Impact Report: Amendments to the Humboldt County Code Regulating Commercial Cannabis Activities. Ascent Environmental. January 2018.

California Office of Planning and Research Technical Advisory on Evaluating Transportation Impacts in CEQA, published December 2018

 $\frac{https://humboldtgov.org/DocumentCenter/View/62689/Humboldt-County-Cannabis-Program-Final-EIR-60mb-PDF.$

3.1.18 Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or			⊠	
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				

Setting: The project area is located within the ethnographic territory of the Mad River Whilkut tribe (Golla 2011; Wallace 1978). The Mad River Whilkut are a part of a larger Athabaskan-speaking ethnic group, which includes the North Fork [Mad River] Whilkut, the Redwood Creek Whilkut, the Chilula and the Hupa. (Roscoe and Associates 2017)

(Golla 2011:77; Kroeber 1925:137). The name Whilkut, however, is slightly inaccurate as it was taken from a Hupa word for the Redwood Creek canyon, which is the next large watershed to the north of Mad River (Golla 2011:77). The aboriginal territory of the Mad River Whilkut included the middle Mad River, Grouse Creek and the laqua Buttes area, and was bounded by the Nongatl (another Athabaskan-speaking people who occupied the Van Duzen and upper Mad River watersheds) to the south; the Wiyot (an Algic-speaking group centered on the Trinity River) to the west, and the Redwood Creek Whilkut and Hupa-Chilula to the north and east. (Roscoe and Associates 2017)

Correspondence was conducted with Bear River Band of Rohnerville Rancheria Tribal Historic Preservation Officer (THPO) Erika Cooper by telephone on January 18, 2017. Ms. Cooper was present during the archaeological field investigation as a Native American representative on January 27, 2017 and helped to formulate recommendations regarding protection of cultural resources during the proposed project. (Roscoe and Associates 2017) Subsequent to the site visit and correspondence the Bear River Band of Rohnerville Rancheria did not accept the AB 52 consultation request.

Discussion:

- a) Less than Significant Impact. The Maple Creek Barn and Lithic Scatter qualifies to be considered as an historical resource per CEQA guidelines section 15064.5(a) however cultivation and construction activities do not occur in the boundaries of the archaeological site. The Cultural Resources Study discussed above was sent to the Tribal Historic Preservation Officers (THPOs) of the Bear River Band, the Wiyot Tribe, and the Blue Lake Rancheria. After reviewing the Survey as well as Site Maps for the project, the THPOs recommended that no ground disturbance or cultivation activities will occur within the lithic scatter site boundaries, as shown in the revised Plot Plans as "buffer area".
- b) Less than Significant with Mitigation Incorporated There are no resources determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. Mitigation Measures CU-1 and CU-2 will ensure that there is no possibility of a significant adverse impact from

Mitigation Measures: See CU-1 and CU-2

Documentation:

A Cultural Resource Investigation Report for the Maple Creek Ranch Commercial Cultivation Permit (APN 313-145-006 and 313-146-004). Roscoe and Associates. Eureka CA. May 2017 and 2019 amendment.

3.1.19 Utilities and Service Systems

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				\boxtimes
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
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?				\boxtimes

Setting: The project, as proposed, includes 250,000 gallons of water storage capacity between a proposed 200,000-gallon rain catchment water storage tank near the proposed nursery and drying/processing facilities and a cluster of ten 5,000-gallon hard tanks to utilize water provided by a proposed new well and to be installed near the cultivation area. Water will be conveyed to the cannabis plants via a drip irrigation system with in-line commercial water meters to accurately monitor usage for monitoring and recording purposes. Portable toilets will be used to accommodate worker needs, and solid waste will be stored in wildlife-proof wooden containment, will be regularly emptied, and will be disposed of off-site at a licensed waste disposal facility.

Discussion:

a) **No Impact.** The project will not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

- b) **No Impact.** The project will not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. No impact will occur.
- c) **No Impact.** The project will not 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. No impact will occur.
- d) Less than Significant Impact. The proposed project will have sufficient water supplies available to serve the project from approved entitlements and resources.. Water storage tanks are proposed for the project. This will be sourced from the ground well, water capture, and outsourced water. Additional proposed water containment is sufficient to serve the project, provided that the proposal reflects the nature of the project.
- e) **No Impact.** Proper protocols will be followed and issues with wastewater management and containment are not foreseen. Additionally, the proposed project consists of adding portable toilets for workers that will be used and maintained.
- f) **Less than Significant.** The solid waste produced by the project appears to be self-exported off the property to a disposal area. Any solid waste will have an impact upon the environment so steps that can be implemented to minimize waste is recommended. If well maintained and upkept, the solid waste will be less than significant.
- g) **No Impact.** The project will comply with federal, state, and local statutes and regulations related to solid waste.

Mitigation Measures: None required.

Documentation:

Cultivation and Operations Plan Maple Creek Ranch Corporation. Unpublished. Date Unknown.

Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effects in the North Coast Region. California Regional Water Quality Control Board. Order No. 2015-0023. August 2015.

https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2015/15_0 023 Cannabis Order.pdf.

Final Environmental Impact Report: Amendments to the Humboldt County Code Regulating Commercial Cannabis Activities. Ascent Environmental. January 2018.

https://humboldtgov.org/DocumentCenter/View/62689/Humboldt-County-Cannabis-Program-Final-EIR-60mb-PDF.

3.1.20 Wildfire

If I	ocated in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant	Potentially Significant Unless Mitigation	Less Than Significant Impact	No Impact
			Incorp.		
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?				
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			\boxtimes	
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			\boxtimes	

Setting: The proposed project is primarily located in a meadow area with surrounding trees and vegetation. The Maple Creek area is mapped as having a very high fire hazard severity and surrounding areas have had historic fires. The majority of the project is full sun cannabis cultivation planted in the ground and will not have any structures other than the small ancillary propagation facility and the processing building. While any wildfire has the potential to spread to nearby residential developments, the potential for a fire from this project site to spread to adjacent residential developments is small. There will be no structures within 30 feet of property lines and the applicant will maintain a stored water supply of a minimum of 2,500 gallons to be dedicated to fire suppression. The project has a less than significant impact on wildfire in urban areas.

The project, as proposed, includes 250,000 gallons of water storage capacity between a proposed 200,000-gallon rain catchment water storage tank near the proposed nursery and drying/processing facilities and a cluster of ten 5,000-gallon hard tanks to utilize water provided by a proposed new well and to be installed near the cultivation area. This water, as well as the existing well that provides 20 gallons per minute, are available for fire suppression purposes.

Discussion:

a) **No Impact.** The project will not impair an adopted emergency response or evacuation plan.

- b) **Less than Significant Impact** The project is located on substantially flat ground area and is in-ground cultivation with minimal structural development.
- c) Less than Significant Impact The project does not require the installation of substantial power lines or other utilities that may exacerbate the risk of fire. The only source of electrical power is solar power and a single generator that will be enclosed in a firerated structure.
- d) **Less than Significant Impact.** The project site is relatively flat and will be unlikely to contribute to post fire slides or erosion hazards.

Mitigation Measures: None required.

Documentation:

Cultivation and Operations Plan Maple Creek Ranch Corporation. Unpublished. Date Unknown.

County GIS (2020)

3.1.21 Mandatory Findings of Significance

	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	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, substantially 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?				\boxtimes

Findings:

- a) Less than Significant Impact. As evaluated in this IS/MND, the project would not substantially 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 an endangered, rare, or threatened species; or eliminate important examples of the major periods of California history or prehistory.
 - b) Less than Significant Impact. The only potentially significant impacts associated with this project are biological and cultural and are related only to resources that may occur on the site and the project's impacts would not add appreciably to any existing or foreseeable future significant cumulative impact, such as visual quality, cultural resources, biological, traffic impacts, or air quality degradation. Incremental impacts, if any, would be negligible and undetectable. Incremental impacts, if any, would be very

small, and the cumulative impact would be less than significant. The proposed project would not contribute to any significant cumulative impacts which may occur in the area in the future.

c) **No Impact.** The project has been planned and designed to avoid significant environmental impacts. As discussed in the analysis of this IS/MND, the project would not have environmental effects that would cause substantial adverse direct or indirect effects on human beings.

Documentation:

3.1.22 DISCUSSION OF MITIGATION MEASURES

The Department found that the project could result in potentially significant adverse impacts unless mitigation measures are required. A list of Mitigation that addresses and mitigates potentially significant adverse impacts to a level of non-significance follows.

Biological Resources

BIO-1: Preconstruction surveys for western pond turtle and special-status amphibian species shall be conducted throughout the proposed construction area and a 400-foot buffer around the proposed development area. Surveys shall consist of "walk and turn" surveys of areas beneath surface objects (e.g., rocks, leaf litter, moss mats, coarse woody debris) for newts and salamanders, and visual searches for frogs.

• If western pond turtle, red-bellied newt or southern torrent salamander or special status frogs are detected during the preconstruction survey, the proposed development shall not occur within 200 feet from the occurrence(s) measured as a horizontal line perpendicular to, and moving away from, the SMA until such time as surveys demonstrate that the species are not present.

BIO-2: No ground disturbing activities or vegetation removal shall occur between February 1 and August 31 unless a qualified biologist has conducted preconstruction surveys for nesting raptors that identifies that there are no active nests within 500 feet of the proposed development area.

BIO-3: No ground disturbing activities or vegetation removal shall occur between February 1 and August 31 unless a qualified biologist has conducted preconstruction surveys for nesting special status bird species that identifies that there are no active nests within 100 feet of the proposed development area.

BIO-4: The generator supplying power to the project shall be kept in an enclosed structure or otherwise muffled such that project-generated sound does not exceed 50 decibels at 100 feet from the generator or at the edge of forest habitat, whichever is closer.

BIO-5: No additional road work or rocking of the access road shall occur until a seasonally appropriate (March to Mid-April) survey for Howell's montia is performed. If any Howell's montia would be affected by the road work the applicant shall relocate and restoration the impacted area at a 2:1 ratio on -site. Successful relocation and restoration shall include the following:

- A mitigation plan that includes the details on the methods to be used, including collection, storage, propagation, receptor site preparation, installation, long-term protection, and management, monitoring and reporting requirements and success criteria.
- Success criteria for preserved and compensatory populations shall include:
 - The extent of occupied area and plant density (number of plants per unit area) in compensatory populations will be equal to or greater than the affected occupied habitat.
 - Compensatory and preserved populations shall be self-producing. Populations will be considered self- producing when:
 - Plants reestablish annually for a minimum of five years with no human intervention such as supplemental seeding; and
 - Reestablished and preserved habitats contain an occupied area and flower density comparable to existing occupied habitat areas in similar habitat types in the project vicinity.

BIO-6: Rodenticides are prohibited from use associated with the project.

Cultural Resources

CUL-1: If human remains are discovered during project construction, work will stop at the discovery location, within 20 meters (66 feet), and any nearby area reasonably suspected to overlie adjacent to human remains (Public Resources Code, Section 7050.5). The Humboldt 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 relating to the disposition of Native American burials, which fall within the jurisdiction of the NAHC (Public Resources Code, Section 5097). The coroner will contact the 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 the person responsible for the excavation work for means of treatment and disposition, with appropriate dignity, of the human remains and any associated grave goods, as provided in Public Resources Code, Section 5097.98.

CU-2: If cultural materials (chipped or ground stone, historic debris, building foundations, or bone) are discovered during ground-disturbance activities, work shall be stopped within 20 meters (66 feet) of the discovery, per the requirements of CEQA (January 1999 Revised Guidelines, Title 14 CCR 15064.5 (f)). Work near the archaeological finds shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the materials and offered recommendations for further action.

HUMBOLDT COUNTY PLANNING & BUILDING DEPARTMENT MITIGATION MONITORING REPORT

Maple Creek Ranch Conditional Use Permit and Zoning Clearance Certificate

Record Number: PLN-12154 and PLN -15197

Assessor Parcel Number: 313-145-006

Mitigation measures were incorporated into conditions of project approval for the above referenced project. The following is a list of these measures and a verification form that the conditions have been met. For conditions that require ongoing monitoring, attach the Monitoring Form for Continuing Requirements for subsequent verifications.

Mitigation Measures:

Biological Resources

- **BIO-1:** Preconstruction surveys for western pond turtle and special-status amphibian species shall be conducted throughout the proposed construction area and a 400-foot buffer around the proposed developmentarea. Surveys shall consist of "walk and turn" surveys of areas beneath surface objects (e.g., rocks, leaf litter, moss mats, coarse woody debris) for newts and salamanders, and visual searches for frogs.
 - If western pond turtle, red-bellied newtor southern torrent salamander or special status frogs are detected during the preconstruction survey, the proposed development shall not occur within 200 feet from the occurrence(s) measured as a horizontal line perpendicular to, and moving away from, the SMA until such time as surveys demonstrate that the species are not present.

Implementation Time	Monitoring	Date	To Be	Compliance	Comments /
Frame	Frequency	Verified	Verified By	Yes No	Action Taken
Prior to the start of construction	Once		HCP&BD*		

BIO-2: No ground disturbing activities or vegetation removal shall occur between February 1 and August 31 unless a qualified biologist has conducted preconstruction surveys for nesting raptors that identifies that there are no active nests within 500 feet of the proposed development area.

Implementation Time	Monitoring	Date Verified	To Be	Comp	liance	Comments /
Frame	Frequency		Verified By	Yes	No	Action Taken
Prior to the start of construction activities.	Once (prior to construction)		HCP&BD*			

BIO-3: No ground disturbing activities or vegetation removal shall occur between February 1 and August 31 unless a qualified biologist has conducted preconstruction surveys for nesting special status bird species that identifies that there are no active nests within 100 feet of the proposed development area.

Implementation Time	Monitoring	Date Verified	To Be	Comp	liance	Comments /
Frame	Frequency		Verified By	Yes	No	Action Taken
Prior to the start of construction activities.	Once (prior to construction)		HCP&BD*			

BIO-4: The generator supplying power to the project shall be kept in an enclosed structure or otherwise muffled such that project-generated sound does not exceed 50 decibels at 100 feet from the generator or at the edge of forest habitat, whichever is closer.

Implementation Time	Monitoring	Date Verified		Comp	liance	Comments /
Frame	Frequency		Verified By	Yes	No	Action Taken
Ongoing	Continuous and annually during		HCP&BD*			
	County inspection					

- **BIO-5:** No additional road work or rocking of the access road shall occur until a seasonally appropriate (March to Mid-April) survey for Howell's montia is performed. If any Howell's montia would be affected by the road work the applicant shall relocate and restoration the impacted area at a 2:1 ratio on -site. Successful relocation and restoration shall include the following:
 - A mitigation plan that includes the details on the methods to be used, including collection, storage, propagation, receptor site preparation, installation, long-term protection, and management, monitoring and reporting requirements and success criteria.
 - Success criteria for preserved and compensatory populations shall include:

- The extent of occupied area and plant density (number of plants per unit area) in compensatory populations will be equal to or greater than the affected occupied habitat.
- Compensatory and preserved populations shall be self-producing. Populations will be considered self- producing when:
 - Plants reestablish annually for a minimum of five years with no human intervention such as supplemental seeding; and
 - Reestablished and preserved habitats contain an occupied area and flower density comparable to existing occupied habitat areas in similar habitat types in the project vicinity.

Implementation Time	Monitoring	Date	To Be	Compliance	Comments /
Frame	Frequency	Verified	Verified By	Yes No	Action Taken
Prior to the start of construction or road maintenance	Once		HCP&BD*		

BIO-6: Rodenticides are prohibited from use associated with the project.

Implementation Time	Monitoring	Date	To Be	Compliance	Comments /
Frame	Frequency	Verified	Verified By	Yes No	Action Taken
Ongoing	Continuous and annually during county inspection		HCP&BD*		

Cultural Resources

CUL-1: If human remains are discovered during project construction, work will stop at the discovery location, within 20 meters (66 feet), and any nearby area reasonably suspected to overlie adjacent to human remains (Public Resources Code, Section 7050.5). The Humboldt 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 relating to the disposition of Native American burials, which fall within the jurisdiction of the NAHC (Public Resources Code, Section 5097). The coroner will contact the 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 the person responsible for the excavation work for means of treatment and disposition, with appropriate dignity, of the human remains and any associated grave goods, as provided in Public Resources Code, Section 5097.98.

Implementation Time	Monitoring	Date	To Be	Compliance	Comments /
Frame	Frequency	Verified	Verified By	Yes No	Action Taken
During all initial ground disturbing activities	During initial ground disturbing activities		HCP&BD*		

CUL-2: If cultural materials (chipped or ground stone, historic debris, building foundations, or bone) are discovered during ground-disturbance activities, work shall be stopped within 20 meters (66 feet) of the discovery, per the requirements of CEQA (January 1999 Revised Guidelines, Title 14 CCR 15064.5 (f)). Work near the archaeological finds shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the materials and offered recommendations for further action.

Implementation Time	Monitoring	Date	To Be	Compliance	Comments /
Frame	Frequency	Verified	Verified By	Yes No	Action Taken
During all initial ground disturbing activities	Continuous and annually during County inspection		HCP&BD*		

^{*} HCP&BD = Humboldt County Planning and Building Department

^{**} CDFW = California Department of Fish & Wildlife

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