Attachment 4

Canna Factory LLC

APN: 049-290-01

Property Management Plan

Lake County, CA

Proposed Commercial Cannabis Cultivation Facilities

PREPARED FOR:



MAY 2022 UPDATED JUNE 2023

Property Management Plan For Canna Factory

APN: 049-290-01

Proposed Commercial Cannabis Cultivation Facilities

Lead Agency:

Lake County Community Development Department

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In Consultation with:

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May 2022 Updated June 2023

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1.0 INTRODUCTION

This Property Management Plan has been prepared to fulfill the requirements of *Ordinance No.* 3084, an Ordinance Amending Chapter 21, Article 27 of the Lake County Code Pertaining to Cannabis Cultivation (referred to herein as "Ordinance").

"The intent of said plan is to identify and locate all existing cannabis and non-cannabis related uses on the property, Identify and locate all proposed cannabis and non-cannabis related uses on the property, and describe how all cannabis and non-cannabis related uses will be managed in the future. The property management plan shall demonstrate how the operation of the commercial cannabis cultivation site will not harm the public health, safety, and welfare or the natural environment of Lake County."

The Plan shall consist of the following sections: Air Quality, Grounds, Security, Stormwater Management, Cannabis Vegetative Materials Waste Management, Growing Medium Management, and Water Use. This Plan also includes project compliance monitoring and reporting.

This Property Management Plan is intended to be a "living" document, updated as necessary, such that when operational activities or processes are modified or replaced, the applicable subplans are revised to reflect these changes. Relevant sub-plans should also be amended whenever the goals of the Plan are not met, whenever a significant pollution event occurs, or whenever a violation notice is issued.

2.0 PROPERTY LOCATION AND PROJECT DESCRIPTION

Canna Factory LLC is seeking discretionary approval from Lake County for a Major Use Permit (UP) for commercial cannabis operations at 17900 Cantwell Ranch Road (APN: 049-290-01). The total property area is 56.36 acres, as per the Lake County Parcel Viewer web application. The project property is accessed by a private driveway off Cantwell Ranch Rd and is designated as 'SPLIT' 'Agricultural' and 'Rural Lands' zoning with a General Plan land use designated the same. There are multiple existing buildings on the project property. The topography of the subject property is comprised of rolling hills/montane in the northern portion of the property and relatively low-gradient grassland in the southern portion of the property, with elevations ranging from 1,440 to 1,510 feet. There are three principal ecological communities on the subject property, classified as Douglas Fir Forest Alliance, disturbed grassland, and riparian woodland (Rhyzl Biological Report for the project dated March 2021). The Douglas Fir Forest Alliance primarily occurs in the undeveloped northern portion of the property, whereas the southern half of the property is disturbed grassland with some building development and riparian woodland corresponds with an ephemeral, Class III watercourse (HUC12-180201160601), which flows into Copsey Creek, tributary to the Cache Creek watershed.

The proposed project is to permit commercial cannabis cultivation in accordance with the Lake County Zoning Ordinance (Article 27). The proposal is for one (1) A-Type 3 outdoor license for 40,500 sq. ft. of canopy area within a cultivation area of 85,000 sq. ft. (1.96 acres) and for a Type 13 distribution license. Lighting is not proposed; only light-deprivation techniques will be used. Harvest storage is proposed to occur in an existing 5,032 sq. ft. barn. The proposal includes the development of facilities appurtenant to cultivation, including facilities for storage sheds, water

storage tanks, and the appropriate irrigation infrastructure. The remainder of the property would continue to operate as it has operated in the past, as undeveloped land.

The site is accessed by private road off Cantwell Ranch Road. From Lower Lake, CA, head south on CA-29S for 1.5 miles. Turn left onto Spruce Grove Road and continue for approximately 1.5 miles and take Cantwell Ranch Road. The private driveway will be on the left in approximately 0.2 miles.

Irrigation water for the cultivation system will be provided by an onsite, permitted groundwater well. Water will be pumped to ten (10) 5,000-gallon water storage tanks located adjacent to the cultivation area, from which the irrigation system will distribute water to cultivated cannabis.

2.1. Hours and Dates of Operation

These cultivation operations are closed to the public. Visitation is only allowed when specific permission is granted.

The cultivation hours of operation are approximately:

Monday through Sunday, from 6:00 a.m. to 8:00 p.m.

The Ordinance restricts deliveries and pickups to 9 a.m. – 7 p.m. on Monday through Saturday and 12 p.m. – 5 p.m. on Sunday.

Hours of construction shall be restricted to Monday through Friday from 7 a.m. to 6 p.m. and Saturday and Sunday from 9 a.m. to 5 p.m. The Lake County Zoning Ordinance restricts deliveries and pickups for cannabis cultivation operations from 9 a.m. to 7 p.m. Monday through Saturday and Sunday from 12 p.m. to 5 p.m.

3.0 AIR QUALITY

3.1. Requirements / Goals

According to the Ordinance, the Property Management Plan must have a section on Air Quality:

- (a) Intent: All cannabis permittees shall not degrade the County's air quality as determined by the Lake County Air Quality Management District (LCAQMD).
- (b) In this section permittees shall identify any equipment or activity that which may cause, potentially cause the issuance of air contaminants including odor, and shall identify measures to be taken to reduce, control or eliminate the issuance of air contaminants, including odors.
- (c) All cannabis permittees shall obtain an Authority to Construct permit pursuant to LCAQMD Rules and Regulations, prior to the construction of the facility described in the Property Management Plan.
- (d) All cannabis permittees shall obtain Authority to Construct Permit pursuant to LCAQMD Rules and Regulations, if applicable, to operate any article, machine, equipment or other contrivance which causes or may cause the issuance of an air contaminant.
- (e) All permittees shall maintain an Authority to Construct or Permit to Operate for the life of the project, until the operation is closed and equipment is removed.
- (f) The applicant shall prepare an odor response program that includes (but is not limited to):
 - a. Designating an individual(s) who is/are responsible for responding to odor complaints 24 hours per day/seven (7) days a week, including holidays.
 - b. Providing property owners and residents of property within a 1,000-foot radius of the cannabis facility, with the contact information of the individual responsible for responding to odor complaints.

- c. Policies and procedures describing the actions to be taken when an odor complaint is received, including the training provided to the responsible party on how to respond to an odor complaint.
- d. The description of potential mitigation methods to be implemented for reducing odors, including add-on air pollution control equipment.
- e. Contingency measures to mitigate/curtail odor and other emissions in the event the methods described above are inadequate to fully prevent offsite nuisance conditions.

3.2. Air Quality Setting and Potential Pollutant Sources

The project is in the Lake County Air Basin. The Lake County Air Quality Management District (LCAQMD) regulates air quality in Lake County. The U.S. Environmental Protection Agency (EPA) sets acceptable levels for seven air pollutants, and then determines — with the help of states and local air districts — where those standards are or are not met. Lake County is currently in attainment for all federal and state ambient air quality standards.

Short-term construction emissions could include fugitive dust and other particulate matter, as well as exhaust emissions generated by earthmoving activities from operation of tractors, tillers, etc., during site preparation. No grading is proposed. Operation emissions could include fugitive dust, other particulate matter, and exhaust emissions from daily traffic as well as odor from cultivation activities.

Construction emissions could be caused by onsite or offsite activities. Onsite emissions principally consist of exhaust emissions (NOX, CO, ROG, PM10, and PM2.5) from construction equipment, motor vehicle operation, and fugitive dust (mainly PM10) from disturbed soil. Offsite emissions are caused by motor vehicle exhaust from delivery vehicles as well as worker commuter traffic, but they also include road dust (PM10).

Three (3) full-time persons will be needed to maintain growing plants, resulting in up to 6 trips daily. Up to five (5) persons will be needed during planting and harvesting, resulting in up to 10 trips per day during peak season. Approximately two (2) distribution-related truck trips are expected per week, and up to one (1) delivery trip per week. Box trucks will be used to ship cured cannabis off-site. The proposed project will generate approximately 550 pounds of dried cannabis. Box trucks will have a capacity of 3.5 tons. Thus, one truck trip would be required per year. Therefore, the project would not generate significant vehicle emissions.

Operational emission sources consist of mobile emissions and area source emissions. Mobile source emissions estimates are derived from motor vehicle traffic from staff commuting. Area source emissions estimates are derived from the consumption of propane, electricity, and consumer products, as well as emissions resulting from landscape maintenance. Power would be through solar power and on-grid PG&E. Cultivation operations may generate fugitive dust emissions through ground-disturbing activities such as ground tilling, uncovered soil or compost piles, and vehicle or truck trips on unpaved roads, but the quantity of these need to be determined.

Operation of the proposed cultivation and processing operation would generate small amounts of carbon dioxide from vehicular traffic associated with staff commuting. The generation of carbon dioxide would be partially offset by the cultivation of fast-growing plants, which remove carbon dioxide in the air for photosynthesis.

CDFA (2017) concluded that cannabis cultivation activities under the CalCannabis Licensing Program would not generate a substantial number of vehicle trips and would not require intensive use of heavy equipment, and as such, would not degrade air quality or produce significant amounts of greenhouse gasses. CDFA (2017) summarizes the impacts from small cannabis cultivation operations as follows:

"Despite the potential air quality emission-generating sources described above that are associated with cannabis cultivation activities, it is not anticipated that the Proposed Program would conflict with or obstruct implementation of air quality plans for the numerous reasons outlined below. First, the cannabis cultivation activities under the Proposed Program would not be anticipated to generate a substantial number of vehicle trips (see Section 4. 12, Transportation and Traffic) that would affect air quality. In addition, outdoor and mixed-light cultivation activities would generally occur on such small acreages that these activities would often not require intensive use of heavy equipment." (Page 4. 3-30)

3.3. Permits

No LCAQMD permits are anticipated to construct or operate the project as currently designed. In the event that an Authority to Construct permit is deemed necessary, one will be obtained pursuant to LCAQMD Rules and Regulations. If needed, the Authority to Construct or Permit to Operate will be maintained for the life of the project and listed in this Plan.

3.4. Dust Management

Cultivation operations may generate fugitive dust emissions through ground-disturbing activities such as ground tilling, uncovered soil or compost piles, and vehicle or truck trips on unpaved roads. The following measures are proposed to minimize fugitive dust emissions through ground-disturbing activities such as ground tilling, uncovered soil or compost piles, and vehicle or truck trips on unpaved roads.

- Inform staff of speed limits and dust pollution. All new hires shall be trained to limit
 emissions and to communicate activities and results to manager(s). Key topics are types
 and sources of emissions and impacts on human and environmental health; management
 plans, strategies, practices, and technologies; and pertinent regulations.
- Clearly mark roadways for limited speed to control dust. Post signs on unpaved roads restricting speeds to 15 mph or less, and ensure employees avoid excess travel.
- Armor road segments with gravel, road base, or asphalt, as appropriate.
- Implement a road maintenance program.
- On tilled earth and stockpiles, control fugitive dust by wetting the soil with a mobile water tank and hose, or by delaying ground disturbing activities until site conditions are not windy. Water applications may be concentrated during the late summer and early fall months, when soils have the lowest moisture content or when winds are severe.
- BMP Fact Sheets WE-1: Wind Erosion Control and NS-1: Water Conservation Practices
 will be implemented to provide dust control and prevent discharges from dust control
 activities and water supply equipment. Water application rates will be minimized as
 necessary to prevent runoff and ponding and water equipment leaks will be repaired
 immediately.

- During windy conditions (forecast or actual wind conditions of 25 miles per hour or greater), dust control may be applied to disturbed areas, including haul roads, to adequately control wind erosion.
- BMP Factsheet WM-3: Stockpile Management will be implemented using silt fences and plastic covers to prevent wind dispersal of sediment from stockpiles.
- The minimum amount of water should be used: refer to BMP Factsheet NS-1: Water Conservation Practices.

3.5. Odor Response Program

The following individual(s) are responsible for responding to odor complaints:

Vaz Manjikian, Property Manager, (213) 332-3245, americannfarms@gmail.com

These individual(s) are responsible for responding to odor complaints 24 hours per day/seven (7) days a week, including holidays.

Property owners and residents of property within a 1,000-foot radius of the Cannabis facility should be provided with the contact information of the individual(s) responsible for responding to odor complaints. This facility will develop policies and procedures describing the actions to be taken when an odor complaint is received, including the training provided to the responsible party on how to respond to an odor complaint. When an odor complaint is received, it will be forwarded to the manager responsible for odor control. The complaint will be logged, including time and type of complaint, the location of the odor reception, and contact info of the person making the complaint. The incident will be investigated, and the problem identified. The manager will visit the site or facility in question and determine any deficiencies in the odor control system (where applicable) and identify remedies. These remedies should be implemented immediately. The manager will prepare a written response and send it by certified mail to the person who made the complaint. The correspondence should acknowledge the complaint, describe the incident, and identify what remedial actions were taken. Each odor complaint will be logged in a master odor complaint logbook.

3.6. Odor Monitoring Program

If necessary, an odor monitoring program will be developed and implemented. The monitoring program will include the location of monitoring station(s). Odor measurements will be recorded at each monitoring station. Odor data can be taken at the property boundary, the nearest road, or the nearest house. Measurements can be taken upwind and downwind of the odor source in order to characterize the odor plume line. Using a field olfactometer (e.g., Nasal Ranger Field Olfactometer, St. Croix Sensory), the odor strength will be measured as Dilution to Threshold (D/T) ratios, a dimensionless measure of odor concentration. Other odor parameters will be recorded, including descriptions of the odor's character, intensity, and offensiveness, and weather conditions.

3.7. Odor Mitigation

Cannabis cultivation, especially during the flowering phase, generates volatile compounds (terpenes) that some people find objectionable. No significant odor impacts are anticipated from this cultivation operation, due to the limited population in the area, the setbacks from roads and property lines, and wind dilution/dispersal effects.

If odors become problematic, odor mitigation must be implemented. The cultivation operation should be analyzed to determine the source of odor emission and any concentrating effects. Mitigation can include some combination of the following administrative controls and engineering controls.

3.7.1. Administrative Controls

When the facility is constructed and operational, this section will be updated to describe activities such as cultivation management responsibilities. This section will describe the organizational responsibilities and the roles of the staff members who will be trained about odor control; the specific administrative and operational activities that the training will encompass; and the frequency, duration, and format of the training (e.g., 60 minute in-person training of X staff, i). This section will include a description of the records that will be maintained (e.g., records of purchases of replacement carbon, performed maintenance tracking, documentation and notification of malfunctions, scheduled and performed training sessions, and monitoring of administrative and engineering controls). Examples of facility recordkeeping forms will be included as appendices to this plan.

3.7.2. Engineering Controls

If odors become problematic, engineering controls may need to be implemented. The cultivation operation should be analyzed to determine the source of odor emission and any concentrating effects. Mitigation can include some combination of the following:

- Windscreens could be erected that could partially contain odors within the cultivation compound.
- Powerful fans could be installed to guide air flow in the opposite direction.
- A high-pressure atomizing system could be installed on the perimeter. This system generates a water vapor (aerosol) that binds with the volatile compounds from Cannabis (terpenes) and makes them heavier, and then they drop out of the air.
- Masking and counteractive agents: use of chemical odor control technologies that are misted at the cultivation facility's exhaust. The use of these agents may be subject to air quality regulations.

4.0 GROUNDS

4.1. Requirements / Goals

According to the Ordinance, the Property Management Plan must have a section about grounds keeping:

(a) The permittee shall establish and implement written procedures to ensure that the grounds of the premises controlled by the permittee are kept in a condition that prevents the contamination of components and cannabis products. The methods for adequate maintenance of the grounds shall include at minimum:

- a. The proper storage of equipment, removal of litter and waste, and cutting of weeds or grass so that the premises shall not constitute an attractant, breeding place, or harborage for pests.
- b. The proper maintenance of roads, yards, and parking lots so that these areas shall not constitute a source of contamination in areas where cannabis products are handled or transported.
- c. The provision of adequate draining areas in order to prevent contamination by seepage, foot-borne filth, or the breeding of pests due to unsanitary conditions.

d. The provision and maintenance of waste treatment systems so as to prevent contamination in areas where cannabis products may be exposed to such a system's waste or waste by-products.

(b) If the lot of record is bordered by grounds outside the applicant's control that are not maintained in the manner described in subsections (i) through (iv) of this section, inspection, extermination, and other reasonable care shall be exercised within the lot of record in order to eliminate any pests, dirt, and/or filth that pose a source of cannabis product contamination.

(c)Any other information as may be requested by the Director and/or by the Planning Commission.

4.2. Storage

Excess compost will be stored within the green waste and compost storage area specified and will be covered and surrounded by straw wattles to minimize loss of material. Fertilizers will be stored within the nutrient storage sheds and other designated storage location.

Pesticides will be used according to the instructions on the label or the material safety data sheets (MSDS). County regulations also apply to listed pesticides. Pesticides will be stored in proposed buildings so that stormwater is not contaminated. Chemicals will be properly labeled, and open containers sealed when stored.

4.3. Groundskeeping

Good housekeeping measures will be implemented. The grounds will be inspected at least once per day and any litter picked up. Trash containers will be emptied when full. Roads will be maintained so that they are function well and so that significant erosion does not occur. This may include wetting dusty roads, armoring unpaved sections with gravel, roadbase, or asphalt, patching holes, and maintaining drainage features such as water bars, culverts and side ditches, as applicable. Weeds and grasses will be controlled by mulching or by cutting with a lawnmower or line trimmer. Drainage ditches and swales will be regularly mowed and cleaned, including the removal of litter, debris, and sediment. Containers, sediment traps and basins, and ditches will be drained so that mosquitos do not breed. Areas inside cultivation compounds can be graveled or paved to prevent foot-borne filth. Live traps may be deployed to remove rodents from operational areas; these must be checked regularly to prevent animal suffering. Disposable coveralls (e. g. Tyvek) can be used to increase sanitation levels and reduce vectoring of mites and other pests. A clothing changing station / mudroom can be provided for employees so that street clothing is separated from cultivation clothing.

Property maintenance will follow Best Management Practices. The following CASQA Industrial and Commercial Handbook BMP Fact Sheets are applicable:

- BG-40 Landscape Maintenance
- SC-41 Building & Grounds Maintenance
- SC-40: Contaminated or Erodible Areas
- SC-43 Parking Area Maintenance
- SC-44 Drainage System Maintenance

Wastes will be managed as specified in the Waste Management subsection.

4.4. Monitoring Program

The monitoring program consists of regular inspections of chemical storage areas, the immediate cleanup of spilled products, recordkeeping of quantities and types of fertilizers used, employee training in proper use and handling, and use of personal protective equipment.

5.0 SECURITY

Redacted

According to the Ordinance, the Property Management Plan must have a section on Security:

6.0 STORMWATER MANAGEMENT

6.1. Requirements / Goals

According to the Ordinance, the Property Management Plan must have a section on Stormwater Management:

- (a) Intent: To protect the water quality of the surface water and the stormwater management systems managed by Lake County and to evaluate the impact on downstream property owners.
- (b) All permittees shall manage stormwater runoff to protect downstream receiving water bodies from water quality degradation.
- (c) All cultivation activities shall comply with the California State Water Board, the Central Valley Regional Water Quality Control Board, and the North Coast Region Water Quality Control Board orders, regulations, and procedures as appropriate.
- (d) Outdoor cultivation, including any topsoil, pest management, or fertilizer used for the cultivation cannabis shall not be located within 100 feet of any spring, top of bank of any creek or seasonal stream, edge of lake, delineated wetland or vernal pool. For purposes of determining the edge of Clear Lake, the setback shall be measured from the full lake level of 7.79 feet on the Rumsey Gauge.
- (e) The illicit discharge of irrigation or stormwater from the premises, as defined in Title 40 of the Code of Federal Regulations, Section 122.26, which could result in degradation of water quality of any water body is prohibited.
- (f) All permittees shall prepare a Stormwater Management Plan based on the requirements of the California Regional Water Quality Control Board Central Valley Region or the California Regional Water Quality Control Board North Coast Region to be approved by the Lake County Water Resources Department. In addition to those requirements, the plan shall include:
 - a. Identification of any Lake County maintained drainage or conveyance system that the stormwater is discharged into and documentation that the stormwater discharge is in compliance with the design parameters of those structures.
 - b. Identification of any public roads and bridges that are downstream of the discharge point and documentation that the stormwater discharge is in compliance with the design parameters of any such bridges.
 - c. Documentation that the discharge of stormwater from the site will not increase the volume of water that historically has flow onto adjacent properties.

- d. Documentation that the discharge of stormwater will not increase flood elevations downstream of the discharge point.
- e. Documentation that the discharge of stormwater will not degrade water quality of any water body.
- f. Documentation of compliance with the requirements of Chapter 29, Stormwater Management Ordinance of the Lake County Ordinance Code.
- g. Describe the proposed grading of the property.
- h. Describe the stormwater management system.
- i. Describe the best management practices (BMPs) that will be used during construction and those that will be used post-construction. Post-construction BMPs shall be maintained through the life of the permit.
- j. Describe what parameters will be monitored and the methodology of the monitoring program.

For Cannabis licensing, Lake County also requires Erosion and Sediment Control Plans in accordance with Chapter 29 and 30 of the Lake County Code.

The State Water Resources Control Board regulates construction activities as follows:

If the total area of ground disturbance during construction of a project is 1 or more acres, the project proponent must enroll under the State Water Resources Control Board's Construction General Permit prior to the initiation of construction. In conjunction with enrollment under this Permit, a Stormwater Pollution Prevention Plan, Erosion Control Plan, and a Hazardous Materials Management/Spill Response Plan must be created and implemented during construction to avoid or minimize the potential for erosion, sedimentation, or accidental release of hazardous materials.

6.2. List of Stormwater Manager(s) and Contact Information

The Stormwater Manager(s) currently assigned to the cultivation operations are:

Vaz Manjikian, Property Manager, (213) 332-3245, americannfarms@gmail.com

The stormwater manager shall have primary responsibility and significant authority for the implementation, maintenance, inspection, and amendments to the Stormwater Management Plan. Duties of the stormwater manager include but are not limited to:

- Ensuring full compliance with the Plan and the Chapter 29, Stormwater Management Ordinance of the Lake County Ordinance Code;
- Implementing all elements of the Plan, including but not limited to implementation of prompt and effective erosion and sediment control measures, and implementing all non-stormwater management, and materials and waste management activities (such as monitoring discharges (dewatering, diversion devices); general site clean-up; vehicle and equipment cleaning, fueling and maintenance; spill control; ensuring that no materials other than stormwater are discharged in quantities which will have an adverse effect on receiving waters or storm drain systems; etc.);
- Inspections (pre-storm, during storm, and post-storm) or designating qualified personnel to do so;
- Routine inspections as specified in the cultivation operation's specifications or described in the Plan;
- Preparing any annual compliance certification;
- Ensuring elimination of all unauthorized discharges;
- The stormwater manager shall be assigned authority to mobilize crews to make immediate repairs to the control measures;

• Coordinate with the landowner or cultivator to assure all the necessary corrections/repairs are made immediately, and that the project complies with the Plan and relevant permits.

6.3. Compliance

6.3.1. Setbacks and Buffers

The Ordinance requires that all cultivation operations be located at least 100 feet away from waterbodies (i. e. spring, top of bank of any creek or seasonal stream [interpreted to be Class II], edge of lake, wetland or vernal pool). The Water Board requires various setbacks depending upon the class of the watercourse. Project setback distances comply with these requirements. Vegetated buffers should be maintained or created so that stormwater runoff can be detained and filtered by vegetation. This may include vegetated swales or bioswales.

6.3.2. Water Board Permitting

Canna Factory LLC is enrolled with the State Water Resources Control Board (SWRCB) for Tier 2, Low Risk coverage under Order No. WQ 2019-001-DWQ (Cannabis Cultivation General Order). The Cannabis Cultivation General Order implements Cannabis Policy requirements with the purpose of ensuring that the diversion of water and discharge of waste associated with cannabis cultivation does not have a negative impact on water quality, aquatic habitat, riparian habitat, wetlands, or springs. The site was assigned WDID No. 5S17CC429387. The Cannabis Cultivation General Order requires the preparation of a Site Management Plan (SMP), a Nitrogen Management Plan (NMP), and the submittal of annual technical and monitoring reports demonstrating compliance. The purpose of the SMP is to identify Best Practicable Treatment or Control (BPTC) measures that the site intends to follow for erosion control purposes and to prevent stormwater pollution. The purpose of the NMP is to identify how nitrogen is stored, used, and applied to crops in a way that is protective to water quality. The SMP and NMP are required prior to commencing cultivation activities and were submitted with the application materials.

6.3.3. Grading, Discharge Flows, and Downstream Effects

The cultivation operations will not alter the hydrology of the parcels. Establishment of these cultivation operations requires some minor scraping and post hole digging but no grading. There are no onsite flooding hazards.

6.4. Stormwater Management

6.4.1. Water Pollution Control Schedule

BMPs should be deployed in a sequence to follow the progress of site preparation / tilling / cultivation. As the locations of soil disturbance change, erosion and sedimentation controls should be adjusted accordingly to control stormwater runoff at the downgrade perimeter and drain inlets. BMPs should be mobilized as follows:

- Year-round:
 - The site manager or stormwater manager should monitor weather using National Weather Service reports (https://www. weather. gov/) to track conditions and alert crews to the onset of rainfall events.

- Disturbed soil areas should be stabilized with temporary erosion control or with permanent erosion control as soon as possible after greenhouse construction is complete.
- During the rainy season:
 - Disturbed areas should be stabilized with temporary or permanent erosion control before rain events.
 - Disturbed areas that are substantially complete should be stabilized with permanent erosion control (soil stabilization) and vegetation (if within seeding window for seed establishment).
 - Prior to forecast storm events, temporary erosion control BMPs should be deployed and inspected.
- During the non-rainy season:
 - The project schedule should sequence earth-moving activities with the installation of both erosion control and sediment control measures. The schedule should be arranged as much as practicable to leave existing vegetation undisturbed.

Sufficient quantities of temporary sediment control materials should be maintained on-site throughout the duration of the project, to allow implementation of temporary sediment controls in the event of predicted rain, and for rapid response to failures or emergencies. This includes implementation requirements for active areas and non-active areas before the onset of rain. The following table summarizes the general schedule of implementation of site BMPs.

Water Pollution Control Schedule

Phase, Activity, or Milestone	Date
File any needed permit registration documents	immediately
Implementation of rainy season BMPs	October 1st of every year
Rainy season beings	October 15
Implementation of dry season BMPs	April 1st of every year
Dry season begins	April 15
Repair / replacement of erosion control devices	see BMP section of this Plan
Site inspections	see Inspection section of this Plan
Submit Annual Report	annually, as required
Expansion / modification of cultivation operational area	modify this Plan within 30 days

Since the project would disturb more than one acre in preparing the cultivation areas, constructing the parking area, and preparing the water tank flat, the project may be subject to the requirements State Water Resources Control Board (SWRCB) Construction General Permit (CGP, 2009-009-DWQ). The SWRCB CGP would require the preparation of a Stormwater Pollution Prevention Plan (SWPPP) and Erosion Control Plan which documents the stormwater dynamics at the site, the Best Management Practices (BMPs), and water quality protection measures that are used, and the frequency of inspections. BMPs are activities or measures determined to be practicable, acceptable to the public, and cost effective in preventing water pollution or reducing the amount of pollution generated by non-point sources. Obtainment of a CGP is also a BPTC Measure for compliance with the SWRCB General Order. The Construction

General Permit does not cover disturbances of land surfaces solely related to agricultural operations such as disking, harrowing, terracing and leveling, and soil preparation.

6.4.2. Pollutant Source Identification

Inventory of Materials and Activities that May Pollute Stormwater

Construction or cultivation activities that have the potential to contribute sediment to stormwater discharges include:

- Tilling, scraping, and excavation operations;
- Soil import/export operations;
- Structure installation process; and
- Paving operations.

The following table provides a list of materials that may be used and activities that may be performed that will have the potential to contribute pollutants, other than sediment, to stormwater runoff.

Summary of Potential Project Pollutant Other Than Sediment

Activity/Material Type	Potential Pollutant
Vehicle lubricants and fuels, including oil, grease, diesel and gasoline, and coolants	Petroleum hydrocarbons, volatile organic compounds (VOCs)
Asphaltic emulsions associated with asphalt-concrete paving operations	Petroleum hydrocarbons, VOCs
Portland cement, masonry, and concrete products,	Materials with a low or high pH, materials with high
muriatic acid, etc. Road base and subbase material	alkalinity, metals Materials with high alkalinity or high pH, metals
Gardening materials and wastes	Pesticides, nutrient pollution (nitrates, phosphates, biological oxygen demand, etc.), metals
Treated lumber (materials and waste)	Arsenic, copper, other metals, creosote
Material packaging and site personnel	General litter (municipal solid waste, universal waste)
Portable toilets	Septic waste (fecal coliform, biological oxygen demand), sanitizers

6.4.3. Existing (pre-construction) Control Measures

The following are existing (pre-construction) control measures within the project site:

- vegetated drainage swales
- armoring of driveways and roads with gravel, roadbase, or asphalt
- side ditches and pipe culverts and bridges under roads
- rolling dips or water bars on steep road sections
- preservation of existing vegetation

6.4.4. Best Management Practices

The following resources can be consulted for BMP selection and implementation:

- California Stormwater Quality Association. 2011. California Stormwater Best Management Practice Handbook – Construction. California Stormwater Quality Association, Menlo Park, California 886 pp.
- California Stormwater Quality Association. 2014. Stormwater Best Management Practice Handbook Portal: Industrial and Commercial. California Stormwater Quality Association, Menlo Park, California. 474 pp.
- California Department of Transportation's Construction Site BMPs Handbook, available electronically at https://dot.ca.gov/programs/construction/storm-water-and-water-pollution-control/manuals-and-handbooks
- California Department of Transportation's Construction Site BMP Fact Sheets, available electronically at https://dot.ca.gov/programs/construction/storm-water-and-water-pollution-control/construction-site-bmp-fact-sheets
- USEPA NPDES Stormwater Program's National Menu of BMPs website at https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#edu

The following subsections discuss BMPs that have been selected for implementation in this project. Implementation and location of BMPs are shown in the Maps section. The Appendix includes a list of the fact sheets of the BMPs selected for this project.

Erosion Control

Erosion control, also referred to as soil stabilization, consists of source control measures that are designed to prevent soil particles from detaching and becoming transported in stormwater runoff. Erosion control BMPs protect the soil surface by covering and/or binding soil particles. This project will implement the following practices for effective temporary and final erosion control during construction:

- Preserve existing vegetation where required and when feasible;
- Apply temporary erosion control to exposed areas. Reapply as necessary to maintain effectiveness:
- Implement temporary erosion control measures at regular intervals throughout the defined rainy season to achieve and maintain stability. Implement erosion control prior to the defined rainy season;
- Control erosion in concentrated flow paths by applying erosion control devices.
- Divert run-on and stormwater generated from within the facility away from all erodible materials; and
- If sediment traps or basins are installed, ensure that they are working properly and emptied
 of accumulated sediment and litter.

Specific erosion control BMPs that can be implemented are listed here and the Construction and Industrial BMP fact sheets are included in the Appendix:

- EC-2: Preservation of Existing Vegetation
- EC-3: Hydraulic Mulch
- EC-4: Hydroseeding
- EC-5: Soil Binders
- EC-6: Straw Mulch
- EC-7: Geotextiles & Mats
- EC-8: Wood Mulching

- EC-9: Earth Dikes & Drainage Swales
- SC-33: Outdoor Storage of Raw Materials
- SC-40: Contaminated or Erodible Surfaces
- TC-30: Vegetated Swale
- TC-31: Vegetated Buffer Strip

Sediment Control

Sediment controls are structural measures that are intended to complement and enhance the selected erosion control measures and reduce sediment discharges from active construction areas. Sediment controls are designed to intercept and settle out soil particles that have been detached and transported by the force of water. This project will incorporate sediment control measures as needed.

Specific sediment control BMPs that can be implemented are listed here and the Construction BMP Fact Sheets are included in the Appendix:

- SE-1: Silt Fence
- SE-2: Sediment Basin
- SE-3: Sediment Trap
- SE-5: Fiber Rolls
- SE-6: Gravel Bag Berm
- SE-8: Sand Bag Barrier
- SE-9: Straw Bale Barrier
- TC-32: Bioretention

Road Maintenance

Note that the Cannabis General Order states: "Site development and/or road building and maintenance activities associated with cannabis cultivation are subject to this General Order."

The Property contains the following roads (see exhibits):

ranch road network, a system of 1 and 2-lane private roads, dirt or gravel

The driveways and access roads are typically armored with gravel or roadbase and follow ridgelines and gentle contours. Driveways and roads will be maintained so that significant erosion does not occur. This may include wetting dusty roads, armoring with gravel, roadbase, or asphalt, patching holes, and maintaining drainage features such as rolling dips, water bars, culverts, and side ditches.

The following guidebook should be referenced for road maintenance:

Handbook for Forest, Ranch, & Rural Roads: A Guide for Planning, Designing,
 Constructing, Reconstructing, Upgrading, Maintaining, and Closing Wildland Roads.
 [available at: http://www.pacificwatershed.com/sites/default/files/RoadsEnglishBOOKapril2015b.pdf]

Monitoring / BMP Inspection and Maintenance

Sufficient quantities of temporary sediment control materials should be maintained on-site throughout the rainy season, to allow implementation of temporary erosion and sediment controls in the event of predicted rain, and for rapid response to failures or emergencies.

A visual monitoring (inspection) program should be implemented, and an inspection would ideally be performed prior to each qualifying rain event and contain the following focal areas:

- All stormwater drainage areas to identify any spills, leaks, or uncontrolled pollutant sources
- All BMPs to identify whether they have been properly implemented
- Any stormwater storage and containment areas to detect leaks and ensure maintenance of adequate freeboard

Note that stormwater sampling procedures are discussed in the Water Use subsection.

Training

A copy of the Plan should be made available to the site personnel or contractor representatives engaged in the maintenance or installation of BMPs. Site inspectors observing pollution caused by ineffective construction or cultivation practices should inform site personnel of appropriate and proper erosion and sedimentation control practices, along with special follow-up inspection for further training. The Stormwater Manager or general contractor should organize orientation sessions with all installation, inspection, and maintenance personnel upon initiation of a specific project activity or change in key personnel. These sessions should be setup to ensure that all contractor and sub-contractor operations are implemented in accordance with this Plan. Training sessions should be included as part of regular safety meetings to familiarize works with the requirements of the Plan.

7.0 CANNABIS VEGETATIVE MATERIAL WASTE MANAGEMENT

7.1. Requirements / Goals

According to the Ordinance, the Property Management Plan must have a section on Cannabis Vegetative Material Waste Management:

The cannabis vegetative material waste management section shall include:

- (1) Provide an estimate of the type and amount of cannabis vegetative waste that will be generated on an annual basis.
- (2) Describe how the permittee will minimize cannabis vegetative waste generation.
- (3) Describe how solid waste will be disposed.
- (4) Describe the methodology on how the amount of cannabis vegetative waste that is generated on the site, the amount that is recycled, and the amount and where cannabis vegetative waste is disposed of is measured.

7.2. Cannabis Vegetative Material Waste Management

7.2.1. Types and Volumes of Green Waste

Sources of cannabis vegetative material waste on this cultivation operation may consist of leaves, stems, and root balls that remain after flower harvest, trimming and grooming during cultivation, and whole dead plants. Cannabis vegetative waste will be minimized by processing

the waste by chipping or grinding, drying, and composting. This will reduce the volume and water content of the waste.

Volume of green waste generated by per acre is estimated to be ten (10) cubic yards per canopy acre per year.

Cannabis green waste will be weighed daily, weekly, or as needed, and data shall be recorded in Metrc (track and trace) for reporting requirements. Cannabis waste should be shredded and mixed with at least an equal quantity of compostable materials such as food waste, yard waste, or growing medium (to render the cannabis unconsumable). Cannabis waste must be kept inside the locked fence or other locked compound at all times.

If cannabis waste is to be disposed offsite, it should first be shredded and blended with an equal part of non-consumable material, such as cardboard. Cannabis waste must be kept inside the locked garden area or other locked compound until ready for transport. It would then be transported as solid waste to the proper disposal facility.

Non-cannabis green waste will be shredded in a wood-chipper, as necessary. Vegetative waste will be mixed with soil and inoculated with humus and composted. If vegetative waste is composted, compost heaps should be at least one cubic yard in size to generate and sustain necessary heat for composting (to sustain aerobic digestion). Compost heaps should be segregated into batches as they age, with humus being the resulting product after several weeks of composting. Compost heaps should be turned often to encourage aeration and aerobic digestion and supplemental water added to keep the heaps moist, but not wet (to discourage anaerobic digestion).

Sources of non-Cannabis green waste on this cultivation operation consist of the following:

- spent soil, mulch, humus, etc.
- landscape maintenance: lawn and weed trimmings, fallen leaves and twigs, treated lumber, wood fencing, etc.

The volume of non-Cannabis green waste that is generated on the property is estimated to be: 1 cubic yard per month per acre, or 12 cubic yards per acre per year

7.2.2. Handling and Disposal of Cannabis Vegetative Waste

There will be a dedicated area in each cultivation compound where Cannabis waste is handled. This area will be surveilled by video camera, and Cannabis waste will be weighed at regular intervals as part of the Track and Trace Program. Cannabis waste will be handled with appropriate PPE, including long-sleeved shirts, pants, boots, dust mask, eye protection, and gloves. Cannabis waste will be composted onsite.

California Department of Food and Agriculture's CalCannabis Cultivation Licensing Program dictates specific Cannabis waste management practices, that will be adopted, as applicable, by this cultivation operation. The following draft regulations from the CalCannabis Cultivation Licensing Program are quoted as follows, and incorporated by reference:

§ 8305. Cannabis Waste Management

- (a) For the purposes of this Chapter, "cannabis waste" is waste that is not hazardous waste as defined in Section 40141 of Public Resources Code, and is solid waste, as defined in Section 40191 of Public Resources Code, that contains cannabis and that has been made unusable and unrecognizable in the manner prescribed in subsection (e). A licensee may not sell cannabis waste.
- (b) A licensee shall manage all waste that is hazardous waste, as defined in Section 40141 of Public Resources Code, in compliance with all applicable hazardous-waste statutes and regulations.
- (c) A licensee shall dispose of cannabis waste as identified in the licensee's Cultivation Plan approved by the Department. A licensee shall not dispose of cannabis waste in an unsecured waste receptacle, whether in the control of the licensee or not.
- (d) Cannabis that a licensee intends to render into cannabis waste shall be held in the designated holding area for a minimum of 72 hours. A licensee shall affix to each batch one or more documents with batch information and weight. At no time during the 72-hour hold period may the cannabis be handled, moved, or rendered into cannabis waste. The cannabis the licensee intends to render into cannabis waste is subject to inspection by the Department.
- (e) A licensee shall make cannabis into cannabis waste by rendering the cannabis unusable and unrecognizable. The licensee shall render the cannabis into cannabis waste before removing the cannabis waste from the licensed premises. A licensee shall render the cannabis into cannabis waste by grinding and incorporating the cannabis with other ground material so that the resulting mixture is at least 50 percent noncannabis material by volume. A licensee shall render cannabis into cannabis waste and track that waste by batch.
- (f) Cannabis that a licensee wishes to deposit at a compostable materials handling facility or at an in-vessel digestion facility may be rendered cannabis waste by incorporating any nonhazardous compostable material, as defined in Title 14 of the California Code of Regulations at Section 17852 (a)(11), that a compostable materials handling facility or in-vessel digestion facility may lawfully accept.
- (g) Unless a licensee will compost onsite, after a licensee renders the cannabis into cannabis waste, a licensee shall do one of the following with the cannabis waste:
 - (1) Dispose of the cannabis waste at a manned and fully permitted solid waste landfill;
 - (2) Deposit the cannabis waste at a manned solid waste operation or a manned fully permitted compostable materials handling facility; or
 - (3) Deposit the cannabis waste at a manned solid waste operation or a manned fully permitted in-vessel digestion facility.
- (h) In addition to all other tracking requirements set forth in Sections 8404 and 8405 of this Chapter, a licensee shall use the track-and-trace system and onsite documents to ensure the cannabis waste materials are identified, weighed, and tracked while on the licensed premises and when disposed of or deposited in accordance with subsection (g).
- (i) A licensee shall enter the date and time that the cannabis was rendered cannabis waste and the weight of the resulting cannabis waste into the track-and-trace database.
- (j) A licensee shall maintain accurate and comprehensive records regarding cannabis waste material that account for, reconcile, and evidence all activity related to the generation and disposal or disposition of cannabis waste. A licensee shall obtain a record from the solid waste facility evidencing the acceptance of the cannabis waste material at the facility. The record shall contain the name and address of the facility, the date, and the volume or weight of the cannabis waste accepted. These documents are records subject to inspection by the Department and shall be kept in compliance with Section 8400 of this Chapter.
- (k) A licensee shall enter the date and time of the disposal or deposit of the cannabis waste at a solid waste facility, compostable materials handling facility, or an in-vessel digestion facility into the track-and-trace system.

8.0 GROWING MEDIUM MANAGEMENT

According to the Ordinance, the Property Management Plan must have a section on Growing Medium Management:

The growing medium management section shall include:

- (1) Provide an estimate of the type and amount of new growing medium that will be used and amount of growing medium will be disposed of on an annual basis.
- (2) Describe how the permittee will minimize growing medium waste generation.
- (3) Describe any non-organic content in the growing medium used (such as vermiculite, silica gel, or other non-organic additives.
- (4) Describe how growing medium waste will be disposed.
- (5) Describe the methodology on how the amount of growing medium waste that is generated on the site, the amount that is recycled, and the amount and where growing medium waste is disposed of, is measured.

The CDFA CalCannabis Program describes soils handling as follows:

"Soils used in cannabis cultivation may be treated, reused, stockpiled, and/or discarded. For reuse, soils are piled and covered with tarps for an extended period (months to a year) to allow heat from sunlight to destroy any potential soil pathogens or pests. Another practice for soil reuse is to run a compost tea through the soils between harvests to restore soil nutrients. Although it is not a direct component of the Proposed Program, another aspect of soil reuse can include laboratory testing of soil samples to identify nutrient deficiencies or other issues. Identifying such deficiencies allows the soil to be properly treated or amended with fertilizers or other soil amendments, thereby correcting these deficiencies, prior to being reused with a new cannabis crop." (CDFA 2017)

"Outdoor cultivation typically involves planting rooted cannabis cuttings or seeds in the early spring and harvesting the plants in the fall (mid-September through November), after the plants flower. Soils used in the pots or grow bags are typically amended to ensure that nutrients are available to the plants throughout the growing season. Compost teas, which are created by steeping compost material in water, may also be used to fulfill nutrient needs (Ingham 2014). Water and nutrient supplement needs for outdoor cultivation may vary depending on the type of growing container selected. For example, raised beds typically require more watering and additional liquid nutrient application compared to other growing container options." (CDFA 2017)

For the purposes of this Plan, growing medium consists of soil and non-organic amendments (vermiculite, perlite, silica gel, etc.). It does not include fertilizers or organic amendments such as mulch, humus, worm castings. etc.

8.1.3. Types and Volumes of Growing Medium

A growing medium or grow medium is the matrix that the Cannabis plant is cultivated in. The three main types of grow mediums for Cannabis plants are soil mixes, soil-less mixes, and hydroponics. The types differ in how nutrients, oxygen, and water are delivered to the plant, and how the roots are anchored.

Soil mixes combine soil with amendments, such as peat, humus (compost), worm castings, and perlite. Soil mixes naturally contain some nutrients, which means it will provide the nutrients

Cannabis plants need for at least the first few weeks of life; supplemental fertilizer may be needed. Soil-less growing medium is composed of inert (non-living soil) ingredients like coco coir, perlite, peat moss, rockwool, or vermiculite. Because there are no nutrients in these inert substances, all nutrients must be delivered by irrigation. Hydroponics growing mediums use containers to suspend the roots over a water bath. Nutrients are introduced into the bath.

This cannabis operation will grow in above-ground containers or beds. The growing medium for this cultivation operation is estimated, by canopy area, to import approximately 1,850 cubic yards of soil/medium that would be amended each year for combined mature plant and nursery cannabis cultivation purposes.

8.1.4. Growing Medium Handling, Disposal, and Waste Reduction

Growing media waste can be reduced or eliminated by composting and blending old soils with new soils and amendments. No significant amounts of growing media are expected to be disposed. Instead, media is reduced in volume yearly because it is absorbed by the plants and metabolized by soil organisms (bacteria, fungi, invertebrates). Soil staging areas and compost piles will be located near each cultivation site as shown on the project Site Plans. Cannabis green waste must be stored inside a secure area. BMPs will be employed to ensure that these piles do not contaminate stormwater or cause nuisance dust or odor issues.

9.0 WATER USE

9.1. Requirements / Goals

According to the Ordinance, the Property Management Plan must have a section on Water Use:

- (a) Intent: To conserve the County's water resources by minimizing the use of water.
- (b) All permitted activities shall have a legal water source on the premises, and have all local, state, and federal permits required to utilize the water source. If the permitted activity utilizes a shared source of water from another site, such source shall be a legal source, have all local, state, and federal permit required to utilize the water source, and have a written agreement between the owner of the site where the source is located and the permitted activity agreeing to the use of the water source and all terms and conditions of that use.
- (c) Permittee shall not engage in unlawful or unpermitted drawing of surface water.
- (d) The use of water provided by a public water supply, unlawful water diversions, transported by a water hauler, bottled water, a water-vending machine, or a retail water facility is prohibited.
- (e) Where a well is used, the well must be located on the premises or an adjacent parcel. The production well shall have a meter to measure the amount of water pumped. The production wells shall have continuous water level monitors. The methodology of the monitoring program shall be described. A monitoring well of equal depth within the cone of influence of the production well may be substituted for the water level monitoring of the production well. The monitoring wells shall be constructed and monitoring begun at least three months prior to the use of the supply well. An applicant shall maintain a record of all data collected and shall provide a report of the data collected to the County annually.
- (f) Water may be supplied by a licensed retail water supplier, as defined in Section 13575 of the Water Code, on an emergency basis. The application shall notify the Department within 7 days of the emergency and provide the following information:
 - a. A description of the emergency.
 - b. Identification of the retail water supplier including license number.
 - c. The volume of water supplied.
 - d. Actions taken to prevent the emergency in the future.
- (g) All permittees shall prepare a Water Use Management Plan to be approved by the Lake County Water Resources Department. Said plan shall:
 - a. Identify the source of water, including location, capacity, and documentation that it is a legal source.
 - b. Described the proposed irrigation system and methodology.
 - c. Describe the amount of water projected to be used on a monthly basis for irrigation and separately for all other uses of water and the amount of water to be withdrawn from each source of water on a monthly basis.

9.2. Water Availability Analysis

9.2.1. Water Source and Supply

There is one (1) existing well that will be used for irrigation (Lat/Long: 38.88231, -122.58029). The well was drilled on January 31st, 2022, to a depth of 214 ft below ground surface (bgs) and has an estimated yield of 7 gpm.

Project Water Demand

The CalCannabis Environmental Impact Report (CDFA, 2017) uses 6.0 gallons per day per plant as an estimated water demand for cannabis cultivation. This is 1.0 gallon (gpd) per plant more than reported by Bauer et. el. (2015), who reported up to 5.0 (gpd) per plant (18.9 Liters/day/plant). Using the more conservative estimate of 6.0 gpd (CDFA, 2017), the demand is 3,000 gpd (2.1 gallons per minute [gpm]) per acre of canopy; however, this is an average daily demand over the cultivation period which is lower during seedling/vegetative states and higher during the flowering period. The Property Management Plan for the project states a slightly higher demand (Section 12(b)) of 6,970 gpd (0.16 gallons per sq ft) per acre of canopy during

the flowering period and 4,180 gpd (0.096 gallons per sq ft) per acre of canopy during the vegetative period. Assuming 65% of the time the cultivation is in the vegetative state and 35% it is in the flowering state, the average daily demand per acre of canopy is 5,160 gpd per acre of canopy. The total estimated irrigation water demand, for 0.93 acres of cannabis canopy is as follows:

- Average Daily 4,800 gpd (3.3 gpm)
- Maximum Daily (Flowering Period) 6,500 (4.5 gpm)
- Yearly (cultivation will be a 300-day outdoor season):
 - o 4.4 acre-feet per year (AFY) or 1,438,700 gallons per year

The estimated irrigation water demand reported above is an average daily rate over the course of the growing season; however, seasonal water demand likely varies in response to temporal and environmental variables (e.g., temperature, relative humidity, wind, plant age and size, etc.).

9.2.2. Irrigation Methodology

Irrigation for the cultivation operation will use water supplied by the existing irrigation well. The irrigation water would be pumped from the wells via PVC piping to water storage tanks, including (10) 5,000-gallon water tanks adjacent to the cultivation area. From the tanks, the water would either gravity feed or be pumped through, new, above ground irrigation lines to each of the proposed garden areas. The drip lines will be sized to irrigate the cultivation areas at a rate slow enough to maximize absorption and prevent runoff. Drip irrigation systems, when implemented properly, conserve water compared to other irrigation techniques.

9.2.3. Water Conservation

Water conservation practices will be implemented, including some combination of the following strategies and actions:

- selection of plant varieties that are suitable for the climate of the region
- the use of driplines and drip emitters (instead of spray irrigation)
- mulching to reduce evaporation
- water application rates modified from data from soil moisture meters and weather monitoring
- rooftop water collection (where feasible and permitted)
- shutoff valves on hoses and water pipes
- daily visual inspections of irrigation systems
- immediate repair of leaking or malfunctioning equipment
- water metering and budgeting

CASQA Construction BMP Fact Sheet NS-1: Water Conservation Practices should be implemented to prevent discharges from water supply equipment. Water application rates should be minimized as necessary to prevent runoff and ponding and water equipment leaks should be repaired immediately. Implement Construction BMP Fact Sheet NS-7: Potable Water / Irrigation to manage the potential pollutants generate during discharges from irrigation lines and unplanned discharges from water sources.

10.0 MONITORING AND REPORTING FOR COUNTY LICENSING

10.1. Requirements / Goals

According to the Ordinance, the licensee must perform annual compliance monitoring and prepare annual reports as follows:

6. Compliance Monitoring

- i. A compliance monitoring inspection of the cultivation site shall be conducted annually during growing season.
- ii. The permittee shall pay a compliance monitoring fee established by resolution of the Board of Supervisors prior to the inspection.
- iii. If there are no violations of the permit or state license during the first five years, the inspection frequency may be reduced by the Director to not less than once every five years.

7. Annual Reports

- i. Performance Review
- (a) All cannabis permittees shall submit a "Performance Review Report" on an annual basis from their initial date of operation for review and approval by the Planning Commission. The Planning Commission may delegate review of the annual Performance Review Report to the Director at the time of the initial hearing or at any time thereafter. This annual "Performance Review Report" is intended to identify the effectiveness of the approved development permit, use permit, Operations Manual, Operating Standards, and conditions of approval, as well as the identification and implementation of additional procedures as deemed necessary. In the event the Planning Commission identifies problems with specific Performance Review Report that could potentially lead to revocation of the associated development or use permit, the Planning Commission may require the submittal of more frequent "Performance Review Reports."
- (b) Pursuant to sub-section 6. i. above, the premises shall be inspected by the Department on an annual basis, or less frequently if approved by the Director. A copy of the results from this inspection shall be given to the permittee for inclusion in their "Performance Review Report" to the Department.
- (c) Compliance monitoring fees pursuant to the County's adopted master fee schedule shall be paid by permittee and accompany the "Performance Review Report" for costs associated with the inspection and the review of the report by County staff.
- (d) Non-compliance by permittee in allowing the inspection by the Department, or refusal to pay the required fees, or noncompliance in submitting the annual "Performance Review Report" for review by the Planning Commission shall be deemed grounds for a revocation of the development permit or use permit and subject the holder of the permit(s) to the penalties outlined in this Code.

The Cannabis General Order has annual monitoring and reporting requirements as follows:

A. Annual Report

Annual Reports shall be submitted to the Regional Water Board by March 1 following the year being monitored. For example, the monitoring report for activities conducted in the year 2018 is due on March 1, 2019. The Annual Report shall include the following:

- Facility Status, Site Maintenance Status, and Stormwater Runoff Monitoring.
- 2. The name and contact information for the person responsible for operation, maintenance, and monitoring.

A letter transmitting the annual report shall accompany each report. The letter shall summarize the numbers and severity of violations found during the reporting period, and actions taken or planned to correct the violations and prevent future violations. The transmittal letter shall contain the penalty of perjury statement and shall be signed by the Discharger or the Discharger's authorized agent.

11.0 FISH AND WILDLIFE PROTECTION

11.1. Summary

RHYZL prepared a Biological Resource Assessment with Botanical Survey and Delineation of Waters of the U.S. for 17900 Cantwell Ranch Road. This report will also act as a fish and wildlife protection plan designed to minimize any adverse impact on fish and wildlife and to ensure that the cultivation site and operations performed on site is in no way destructive to the local habitat. The biological resource assessment is designed to assess the potential for the presence of sensitive wildlife species and to determine whether habitat for sensitive plant species and plant communities may or may not be present. The purpose of this analysis is to assess the potential for cumulative impacts to biological resources that may occur as a result of the proposed project at 17900 Cantwell Ranch Rd, Lower Lake, CA 95457.

11.2. Biological Communities

Non-Sensitive Biological Communities:

Non-sensitive biological communities in the Study Areas include a mixture of native/non-native grassland (herbaceous habitat) and adjacent Douglas fir forest alliance stands. Sensitive biological communities located within the property and adjacent to the Study Areas include the watercourses flowing through the property and associated riparian habitat.

<u>Disturbed Grassland:</u> Mixed native/non-native annual grasslands occur on fine-textured soils, throughout cismontane California at elevations below 4,000 feet (Holland 1986). Non-native grasslands typically have dense to sparse cover of annual grasses and are often associated with native and non-native forbs. Plant species found to occur in these areas include: wild oat (Avena fatua), quaking rattlesnake grass (Briza major), soft chess (Bromus hordeaceus), velvet grass (Holcus lanatus), bull thistle (Cirsium vulgare), dogtail grass (Cynosurus echinatus), foxtail barley (Hordeum murinum), creeping rye grass (Elymus glaucus), big heron bill (Erodium botrys), subterranean clover (Trifolium subterraneum), shamrock clover (Trifolium dubium), cutleaf geranium (Geranium dissectum), buttercup (Ranunculus sp.), spring vetch (Vicia sativa), and other emerging grasses.

<u>Douglas Fir Forest Alliance:</u> Pseudotsuga menziesii is dominant or co-dominant with hardwoods in the tree canopy with Abies concolor, Acer macrophyllum, Alnus rhombifolia, Arbutus menziesii, Calocedrus decurrens, Chamaecyparis lawsoniana, Chrysolepis chrysophylla, Cornus nuttallii, Pinus contorta, Pinus jeffreyi, Pinus lambertiana, Quercus agrifolia, Quercus chrysolepis, Quercus garryana, Quercus kelloggii, and Sequoia sempervirens. Trees < 75 m; canopy is intermittent to continuous, and it may be two-tiered. Shrubs are infrequent or common. Herbaceous layer is sparse or abundant.

Habitat surrounding the Study Areas is consistent with clearings within the Douglas fir forested stands, primarily with emergent native/non-native grasses and shrub vegetation surrounding the perimeter.

Sensitive Biological Communities:

Riparian habitat adjacent to watercourses are considered potential sensitive habitat and may provide suitable habitat for some amphibian and macroinvertebrate species within the Study Areas. These watercourses are not impacted by existing projects on the property.

11.3. Watershed Description

Riparian habitat adjacent to watercourses are considered potential sensitive habitat and may provide suitable habitat for some amphibian and macroinvertebrate species within the Study Areas. These watercourses are not impacted by existing projects on the property.

11.4. Special-Status Species

Special-Status Plant Species:

Upon review of the resource databases listed in Section 4.2, 106 special-status plant species have been documented within the vicinity of the Study Areas. Please refer to Appendix A for a table of all special-status plant species which occur within a nine-quad search surrounding the Study Areas, as well as additional discussion of the potential for each species to occur within the Study Areas. Special-status species documented within the CNDDB five-mile survey radius are depicted in Figure 2 (Biological Assessment CNDDB Map). Of the 106 of the special-status plant species documented within the vicinity 47 are unlikely or have no potential to occur due to:

- Hydrologic conditions (e.g., vernal pools, riverine) necessary to support the specialstatus plant species are not present within the Study Areas;
- Edaphic conditions (soils, e.g., rocky outcrops, serpentinite) necessary to support the special-status plant species are not present within the Study Areas;
- Topographic conditions (e.g., montane) necessary to support the special-status plant species are not present within the Study Areas;
- Unique pH conditions (e.g., alkali scalds, acidic bogs) necessary to support the special-status plant species are not present within the Study Areas;
- Associated vegetation communities (e.g., interior chaparral, tidal marsh) necessary to support the special-status plant species are not present within the Study Areas;
- The Study Areas are geographically isolated (e.g., outside of required elevations, coastal environment) from the documented range of the special-status plant species;
- Ecological conditions (last recorded observations, human-made or natural disturbance) have encroached on species to a point to cause presumed extinction.

The 59 special-status plant species with potential to occur within the Study Areas are described in Section 5.2.1 of the Biological Resources Assessment.

Special-Status Animal Species:

A total of 37 special-status wildlife species have been documented within the vicinity of the Study Areas. Please refer to Appendix A of the Biological Resources Assessment for a table of all special-status wildlife species which occur within the vicinity of the Study Areas, and discussion of the potential for each species to occur within the Study Areas. Special-status species documented within the vicinity are depicted in Figure 2 (Biological Assessment CNDDB Map). Of the 37 special-status wildlife species recorded within the vicinity of the Study Areas only 16

special-status wildlife species recorded have a moderate potential to occur within the Study Areas. The remaining 21 special-status wildlife species documented within the vicinity of the Study Areas do not have the potential to occur due to one or more of the following reasons:

- Aquatic Habitats (e.g., streams, rivers, vernal pools) necessary to support specialstatus wildlife species are not present within the Study Areas;
- Vegetation Habitats (e.g., forested area, riparian, grassland) that provide nesting and/or foraging resources necessary to support special-status wildlife species are not present within the Study Areas;
- Physical Structures and Vegetation (e.g., caves, old-growth trees) that provide nesting, cover, and/or foraging habitat necessary to support special-status wildlife species are not present within the Study Areas;
- Host Plants (e.g., Cirsium sp.) that provide larval and nectar resources necessary to support special-status wildlife species are not present within the Study Areas;
- Historic and Contemporary Disturbance (e.g., cattle grazing, agriculture) deter the presence of the special-status wildlife species from occupying the Study Areas;
- The Study Areas are outside the documented nesting range of special-status wildlife species.

The 16 special-status wildlife species with potential to occur within the Study Areas are described below.

California giant salamander (Dicamptodon ensatus). CDFW: Species of Special Concern, IUCN: Near Threatened. D. ensatus are year-round residents of California, known from wet coastal forests near streams and seeps from Mendocino County south to Monterey County, and east to Napa County. This species is highly-reliant on suitable aquatic habitat for reproductive purposes. Aquatic larvae are found in cold, clear streams, occasionally in lakes and ponds. Adults are known from wet forests under rocks and logs near streams and lakes. D. ensatus habitat consists of aquatic, meadow and seep, north coast coniferous forest, and riparian forest.

Foothill yellow-legged frog (Rana boylii). CDFW Species of Special Concern, State Candidate Threatened. The foothill yellow-legged frog (FYLF) occupies a diverse range of ephemeral and permanent streams, rivers, and adjacent moist terrestrial habitats. Occupied streams are often partly shaded, low gradient, and dominated by coarse, unconsolidated rocky substrates. Adults breed and tadpoles develop in slow water velocity habitats.

Red-bellied newt (Taricha rivularis). CDFW: Species of Special Concern, IUCN: Least Concern. Inhabits coastal forests, typically in redwood (Sequoia sempervirens) forest habitat although also found in other forest types (hardwood etc.). Adults are terrestrial and fossorial. Transformed juveniles leave aquatic environments and go into hiding in underground shelters, often until ready to reproduce. Breeding occurs in streams often with relatively strong flows.

Cooper's hawk (Accipiter cooperii), CDFW: Watch List, IUCN: Least Concern. Habitat includes: Wooded habitats from deep forests to leafy subdivisions and backyards. Cooper's Hawks build nests in pines, oaks, Douglas-firs, beeches, spruces, and other tree species, often on flat ground rather than hillsides, and in dense woods. Cooper's

Hawks mainly eat birds, European Starlings, Mourning Doves, and Rock Pigeons as common targets along with American Robins, several kinds of jays, Northern Flicker, and quail, pheasants, grouse, and chickens but sometimes rob nests and also eat chipmunks, hares, mice, squirrels, and bats.

Bald eagle (Haliaeetus Leucocephlus). State Endangered, BLM: Sensitive, CDF: Sensitive, CDFW: Federally Protected IUCN: Least Concern USFS: Sensitive USFWS: Birds of Conservation Concern. Ocean shore, lake margins, and rivers for both nesting and wintering are required for H. leucocephalus and nests are often within 1 mile of water. This species often nests in large, dominant large trees such as Ponderosa pine (Pinus ponderosa) within old-growth or lower montane coniferous forest.

Great blue heron (Ardea herodias). CDF: Sensitive IUCN: Least Concern. A. herodias are commonly found in shallow estuaries and fresh and saline emergent wetlands. Foraging areas include river and creek banks, ponds, lakes, and watercourses in mountainous areas. Diet consists primarily of aquatic invertebrates, frogs, snakes and fish (Cogswell 1977). This species often nests in colonies within a rookery tree.

Burrowing owl (Athene cunicularia). BLM: Sensitive, CDFW: Species of Special Concern, IUCN: Least Concern, USFWS: Birds of Conservation Concern. Grinnell and Miller (1944) described the historic range of this owl as throughout most of California and most of its islands, except the coastal counties north of Marin and mountainous areas. The overriding characteristics of suitable habitat appear to be burrows for roosting and nesting and relatively short vegetation with only sparse shrubs and taller vegetation (Green and Anthony 1989, Haug et al. 1993).

<u>Western bumble bee</u> (Bombus occidentalis). CDFW Species of Special Concern, <u>Xerces Imperiled</u>. Formerly common throughout much of western North America, populations from southern British Columbia to central California have nearly disappeared (Xerces 2017). This species occurs in a wide variety of habitat types and are considered a generalist pollinator. This genus is most commonly encountered along stream banks, in meadows, recently-burned or logged areas, or on flowers by roadsides.

Pallid bat (Antrozous pallidus). BLM: Sensitive, CDFW: Species of Special Concern, IUCN: Least Concern, USFS: Sensitive, WBWG: High Priority. Found in deserts, grasslands, shrublands, woodlands, and forests. Most common in open, forages along river channels. Roosting sites include crevices in rocky outcrops and cliffs, caves, mines, trees and various human structures such as bridges, barns, and buildings (including occupied buildings). Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.

Townsend's big eared Bat (Corynorhinus townsendii). BLM: Sensitive, CDFW: Species of Special Concern, IUCN: Least Concern, USFS: Sensitive, WBWG: High Priority. C. townsendii is associated with a wide variety of habitats from deserts to midelevation mixed coniferous deciduous forest. Females form maternity colonies in buildings, caves and mines and males roost singly or in small groups. Foraging occurs in open forest habitats where they glean moths from vegetation.

Western red bat (Lasiurus blossevillii). CDFW Species of Special Concern, IUCN Least Concern, WBWG High Priority. L. blossevillii prefer habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.

Roosting sites are often in trees found from sea level through mixed conifer forests. This species is often associated with riparian habitats set within coniferous forests and meadows.

Hoary bat (Lasiurus cinereus). CDFW Species of Special Concern, IUCN Least Concern, WBWG Medium Priority. L. cinereus prefers open habitats or habitat mosaics with access to trees for cover and open areas or habitat edges for foraging. This species roosts in dense foliage of medium to large trees and feeds primarily on moths. Additionally, L. cinereus requires a water source for drinking.

Long-eared myotis (Myotis evotis). CDFW Species of Special Concern, BLM Sensitive, IUCN Least Concern, WBWG Medium Priority. M. evotis is found in all brush, woodland and forested habitats from sea level to approximately 9,000 feet in elevation. Foraging occurs along habitat edges, in open spaces and over water. This species prefers coniferous woodlands and forests, and roosts primarily in caves. Nursery colonies are often found within buildings, crevices, spaces under bark and snags.

Fringed myotis (Myotis thysanodes). BLM:Sensitive, IUCN:Least Concern USFS: Sensitive WBWG: High Priority. The most common habitat in which to find this species appears to be oak, pinion, and juniper woodlands or ponderosa pine forest at middle elevations (O'Farrell and Studier 1980, Cockrum et al. 1996, Wilson and Ruff 1999). They also seem to use deserts (Cockrum et al. 1996), grasslands, and other woodlands. Roost sites may be in caves, mines, and buildings, these colonies may number several hundreds. They will also use bridges and rock crevices (Miner et al. 1996) as solitary day and night roosts and may hibernate in crevices as well. There are periodic changes in roost sites within a maternity roost because of thermoregulatory requirements of the bats, for example, clusters of bats move in response to temperature changes in different parts of the roost. Fringed bats are known to migrate, but little is known about the magnitude of movements. Females prepare physiologically for hibernation during the post-lactation period of late summer and early autumn, prior to migration. Individuals may awake from hibernation periodically throughout winter. Diet includes beetles and moths. These bats forage close to the vegetative canopy, and have relatively slow and highly maneuverable flight.

Yuma myotis (Myotis yumanensis). Board of Forestry Sensitive. CDFW Species of Special Concern, IUCN Least Concern, BLM Sensitive, WBWG Low-Medium Priority. M. yumanensis occurs from British Columbia, across the western U.S., and south into Baja and southern Mexico. This bat will use a variety of lowland western habitats, from scrub to coniferous forest, however these locales will always be near slow moving or standing water habitats. They roost in caves, mines, buildings, under bridges, and in cliff and tree crevices. The Yuma myotis will emerge just after sunset to forage. It is a low flier which primarily consumes aquatic emergent insects. No roosts, or evidence of their presence, was observed within the project area orproject buffer during the site assessment. The habitat requirements for this species do not occur within the project area or the project buffer. The closest recorded occurrence of this species is over 5 miles from the project area. No significant adverse impacts to Yuma myotis are expected as no forested or riparian areas will be impacted.

11.5. Summary of Mitigation Strategies

75 special-status plant and wildlife species have the potential to occur within the Study Areas based on present habitat. Additionally, no sensitive biological community (watercourses) are present on-site. No tree removal or ground-breaking activities are proposed for the development or expansion of the cultivation areas and existing cultivation sites are not located within any sensitive biological habitats.

Biological Communities:

The Study Area is primarily comprised of mixed native/non-native grassland (herbaceous) and Douglas fir forest alliance stands. The Study Area provides potential riparian/mesic habitat for at least part of the year and offers potential additional habitat for amphibian and macroinvertebrate species. Additionally, the Study Area provides potential rocky, possibly non-serpentine habitat that some plant species may require, yet none were observed during the site inspection.

Special-Status Species:

59 special-status plant and 16 special-status wildlife species have the potential to occur within the Study Areas. As there is no work proposed to occur within the adjacent watercourses it is unlikely that any sensitive habitat will be impacted. If work is proposed that would impact these watercourses, it is recommended that pre-construction surveys be completed following CDFW protocols prior to excavation.

Special-Status Plant Species:

59 special-status plant species which have a moderate or high potential to occur within the Study Areas based on available habitat are listed in Section 6.2.1 of the Biological Resource Assessment. While these special-status species have the potential to occur within the Study Areas based on available habitat, none were observed within the Study Areas during the biological site assessment.

Special-Status Wildlife Species:

16 special-status wildlife species which have a moderate or high potential to occur within the Study Areas based on available habitat are listed in Section 6.2.2 of the Biological Resource Assessment.

Wildlife Corridors:

No change to foraging or wintering habitat for migratory birds is expected as a result of the Proposed Project activities. Additionally, no significant impacts to migratory corridors for amphibian, aquatic, avian, mammalian, or reptilian species is expected as a result of the Proposed Project activities.

Critical Habitat:

The Study Areas do not contain any critical habitat for federal or state-listed species.

12.0 LITERATURE CITED AND FURTHER READING

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USEPA NPDES Stormwater Program's National Menu of BMP's website at https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#edu

13.0 MAPS AND EXHIBITS

14.0 APPENDIX: CASQA INDUSTRIAL AND COMMERCIAL HANDBOOK BMP FACT SHEETS

15.0 APPENDIX: PEST MANAGEMENT GUIDELINES

16.0 APPENDIX: MATERIAL DATA SAFETY SHEETS

Insert here or bind separately

17.0 APPENDIX: EMPLOYEE MANUAL

Bound separately

18.0 APPENDIX: LOG OF INSPECTIONS, RECORDS, AND DATA COLLECTION

Insert here or bind separately