

## Property Management Plan

for Major Use Permit  
& Early Activation Use Permit

5/5/2020

Applicant: Jose Franco  
dba Blue Lakes Organics

Site Address:

10717 Schuette Rd  
Upper Lake, CA 95485  
APN 003-002-11; RL: 36 Acres

and

10680 Schuette Rd  
Upper Lake, CA 95485  
APN 003-001-21; RL: 10 Acres

Commercial Cannabis Cultivation Property Management Plan

### Background

Property 1 located at 10717 Schuette Rd in Upper Lake, CA; APN 003-002-11 is owned by Jose Franco (applicant) and his mother Alma Franco. It is a 36 Acre parcel zoned RL; it is not part of the exclusionary zone. There is one existing single-family residence (non cannabis) on the parcel that is currently occupied by family member, Ruben Franco. . There is one existing prefabricated storage shed (8x24x8'=192). Proposed cultivation will take place at Site 2.

A 2<sup>nd</sup> property, located at 10680 Schuette Rd in Upper Lake, CA; APN 003-001-21 is owned by the applicant's sister, Yesenia Franco, but is in the process of changing ownership to Jose's mother, Alma Franco. It is a 10 Acre parcel zoned RL and is not part of the exclusionary zone. It is also directly across the street from Jose's property, 10717 Schuette Rd. With permission from oncoming owner, Alma Franco, Jose would like to cultivate at Site 3 located on this property.

The total proposed acreage across the 2 properties is a combined total of 46 Acres. Across both parcels, proposed farm operations for Phase 1 is 20,000 sf outdoor; to expand to proposed cultivation for Phase 2 to 40,000 sf outdoor. All cultivation sites will be developed and operated within fenced enclosures as depicted on the site plans.

Diagram XAS1.1 Shows current conditions of the site.

Cultivation sites are accessible by 12' wide base gravel road. Parking /ADA parking will be located on Site 1.

### Proposed Cultivation Plan

**Phase 1:** The applicant would like to begin outdoor cultivation activities immediately at 10717 Schuette Rd and 10680 Schuette Rd under the Early Activation Use Permit until the Major Use Application is fully approved. The project proposed is A-Type 3 outdoor farming operation for Phase 1. Diagram AS1.1 shows proposed site plan property diagram.

Site 1, Phase 1 (diagram A1.1) located at 10717 Schuette Rd proposes the required surveillance storage shed (8x8x10=64sf; diagram A2.2), 2 drying sheds (8x24x10'=192 sf each; diagram A2.1), and an ADA restroom (8x8x11= 64 sf; diagram A2.4). The structures will be purchased as prefabricated buildings and placed on the property. The only current existing structure on Site 1 is the residence (non cannabis).

Site 2, Phase 1 (diagram A1.2) also located at 10717 Schuette Rd proposes outdoor cultivation in 45 gallon fabric pots totaling 10,000 sf canopy of 20 rows, each row 5'x 100' to accomplish 10,000 sf canopy. There is one existing prefabricated storage shed (8x24x8'=192 sf; diagram A2.1) on Site 2. Site 2 set backs from cultivation area is as follows; distance to nearest road 240', distance to nearest property line is 150ft, distance to well is 600 ft, distance from existing storage shed is 100', distance to nearest seasonal stream is 100', distance to nearest neighbor is 800'.

Site 3, Phase 1 (diagram A1.3) located at 10680 Schuette Rd proposes outdoor cultivation in 45 gallon fabric pots totaling 10,000 sf canopy. There will be 10 rows, each 10 x 100' . In addition, there is a proposed prefabricated secured ag storage shed (8x12x10= 96 sf; diagram A2.3) for Site 3. Site 3 set backs from cultivation area are as follows; distance to nearest road is 200', distance to nearest property line is 150', distance to well is 500', distance to nearest seasonal stream is 350', and distance from proposed storage/fertilizer shed is 350', distance to nearest neighbor is 200'.

Phase 2: 1-2 years after Phase 1 is complete and fully operational, the applicant would like to dedicate resources to expand outdoor farm operations in Sites 2 from 10,000 sf to 20000 sf & Site 3 from 10,000 sf to 20,000 sf canopy; totaling 40,000 sf of total canopy across both parcels. A proposed site plan for Phase 2 can be found on diagram AS1.2.

With cultivation expansion, the applicant would like to move forward with the Development Department to build an additional prefabricated shed for increased dry and harvest space at Site 1. The proposed building is a 30x60x16' metal building, diagram A2.2B.

#### Air Quality

There are no activities currently or proposed taking place on site that requires a LCAWQMD permit. There will be no burning of cannabis waste. The applicant was issued a burn permit by LCAWQMD that expired May 1st, 2020 for the burning of non cannabis yard waste and will renew next year for 2021 burn season.

No significant odor impacts are anticipated from the cultivation operation due to the limited population in the area, the small size of the cultivation operations, and setbacks of 200' or more to the nearest residences.

#### Odor Response Plan

The applicant is responsible for responding to complaints 24/7. Plan is as follows:

Odor Response for 10717 & 10680 Schuette Rd			
Name	Title	Cell Phone	Email Address
Jose Franco	Property Co-Owner/ applicant	707-272-8286	Josefranco911@gmail.com
Ruben Franco	Resident at 10717 Schuette Rd	707-272-5766	Rubens.2511@gmail.com
Alma Franco	Property Co-Owner for 10717 Schuette Rd and full owner of 10680 Schuette Rd.	707-835-7497	afranco1161@gmail.com

Shall there ever be a complaint, it will be documented to record description of complaint, by whom, when, and actions taken. This data will be tallied and reported to the County during the annual Performance Review Report.

### Cultural Resources

All cannabis permittees shall protect the cultural, historical, archeological, and paleontological resources. The Department shall consult with the appropriate Tribe regarding the potential of such resources being located on the lot. Permittee has retained an evaluation by archeologist Jon Parker, of Wolf Creek Archeology has been conducted. Jon Parker's analysis and report is attached as item 1 in the Appendix.

### Energy Usage

Permittee shall minimize energy usage when possible. Expected energy use for Phase 1 is estimated to be 1-9 kw daily during months of May- Oct and for Phase 2, 2-16 kw daily May- Oct. No generators will be used on site or for cultivation activities. Current power source is PG&E to the residence. The water/well pumps are PG&E powered. Security system will require PG&E as power source.

All cultivation activities taking place will be full sun outdoor with no artificial lighting needed. Watering system are gravity feed from water storage tanks to cultivation site. Electricity use is kept to a minimum and very little energy is required for cultivation activities. No cultivation will be taking place indoors.

### Fertilizer Usage

There is a designated 8x12x10' shed with a locked door used to store pest remedies, fertilizers and amendments. Permittee plans on using all naturally derived and organic fertilizers in compliance with label. Dry fertilizers (bat guano, blood meal, bone meal, kelp, alfalfa meal, oyster shell) and amendments (humic acid) are added to the top soil and top dressed as needed. Liquid fertilizers (Age Old Organics) will also be used by mixing into a water tank and watering in 1x a week. Compost teas are also mixed and used 1x weekly. Not applying any fertilizers or heavy metals to any surface or groundwater. Garden sites are 100ft from nearest seasonal stream and 500ft from well. There will be no spraying of fertilizers or nutrients.

Plants will be monitored during vegetative and flowering periods, including fertilizers rates and products applied for different phases of growth. Soil testing will be performed to monitor nutrients and soil health. Feedings will be logged noting which product was used, how much used, and date applied. Water quality and monitoring and discharge reports will be submitted annually to the water board. Fertilizer log attached in Appendix, item 2.

### Fish & Wildlife Protection

Minimizing adverse impact to fish and wildlife is a mutual concern of both county and cultivator. The permittee has conducted a Species of Special Concern Search using

CDFW's Bios Mapping CNDDDB database . The results of that search, including maps, are provided as a separate attachment as item 3 in the Appendix. Only two species of concern were found in the CNDDDB for this lot of record: Foothill Yellow-legged Frog and Western Bumble Bee. No trees are proposed to be cut or trimmed for the proposed project. The typical avoidance and setbacks for the RBN are setbacks to streams and riparian habitat, which a 100-foot setback is established. There are no conservation easements or wildlife corridors proposed. The proposed project is approximately 8 miles northwest of Upper Lake, CA, located within Section 2, Township 15N, Range 11W, Mount Diablo Base and Meridian, in the Cow Mountain USGS 7.5minute quadrangle. The parcel is located within the Middle Scotts Creek (HUC-12 180201160103) and Cold Creek (HUC-12 180101100103) watershed, located at a range of 1500 feet (457 meters) to 2000 feet (609 meters) elevation. Topographic map attached in Appendix, item 4. A watershed map attached in Appendix, item 5.

An LSA Standard Agreement application was submitted on 4/13/20; EPIMS-05635 and fees paid to California Department of Fish and Wildlife. The application is currently being processed by CDFW. A site visit from CDFW has been scheduled for late June 2020.

The permittee in addition has retained and consulted a licensed biologist, Jacobszoon and Associates Inc., who has visited the site and provided an analysis. The Biological Assessment Letter Report (Biological Resources Assessment) is attached in the Appendix as item 6.

#### Operations Manual

- (1) Permittee authorizes the county and its agents, and its employees to seek verification of information contained within the operations manual and the operating standards.

An SOP manual is being created based on expected tasks and processes. The SOP manual is a work in progress and will change and become updated as the facility establishes itself. The SOP manual will be stored on site and available for inspection. Attached in the Appendix is the SOP template, item 7.

- (2) Description of staff screening processes

There is no staff screening processes at this time because there are no employees. The cultivation site will be a family run farm, the only workers being Jose Franco and his immediate family as needed on a temporary basis. Employment and screening processes will be established once the sites are up and running and outside labor needed; employees are not a need at this time. When ready to hire, employees will require background screenings, a screening for violent felonies, must be over the age of 21, and have right to work documents (ID and social security card).

(3) Hours and days of week facility will be open

Farming hours will be from 8am -7pm, Monday - Sunday

Delivery and pick up hours will be restricted to Monday - Saturday 9am-7pm & Sunday 12pm-5pm

(4) Description of measures taken to minimize or offset carbon footprint

- Cannabis is sun grown outdoors and therefore does not require high inputs of energy for cultivation.
- The purchase of garden products are kept to a minimum or purchased in bulk with less packaging and less frequency. Products used are all organic and ethically sourced.
- Cultivation takes place in fabric pots (not plastic pots/containers); soil is reused.
- Green waste is composted. Plastic, metal, glass, paper products are recycled leaving less material to enter the landfill.
- Water use is kept to a minimum to avoid over watering and wasted run off. Watering will take place in the early morning or evening to avoid evaporation.

(5) Description of chemicals stored

While all growing taking place will be organic and chemical free, there is still a designated storage area for any ag related chemicals/products. The anticipated storage of the following products are expected: dry and liquid fertilizers, soil amendments, sulfur powder, neem oil, Plant Therapy and green clean.

Grounds

Permittee shall establish and implement written procedures to ensure the grounds of the premises are kept in good condition and prevent the contamination of components and cannabis products.

Permittee plans to store ag chemicals and equipment in the designated storage shed. Secured waste receptacles will consist of a 30'x50' area fenced in for compost and a 10'x10' area for litter. All green and yard waste will be composted; recycled and landfill items will be stored in 44 gallon trash cans with lids, and removed weekly to the local refuse station.

The roads on the property are dirt, rocked, and maintained with personal equipment. There will be some grading required to repair some areas of the road. Roadside areas, yard areas around facility, and access areas will be manicured and maintained.

Adequate draining and water conservation should prevent runoff or seepage . There should be no standing pools of water on site to harbor pests or unsanitary conditions.

There are two septic systems on the site related to the residence. Attached is a copy of the septic permit. Appendix, item 8.

There are no known nearby grounds outside the applicant's control that pose a source of cannabis product contamination.

#### Pest Management

The following section shall describe the permittees application and storage protocols of pesticides in compliance with California Department of Food and Ag and the California Department of Pesticide Regulations. Only FIFRA 25 (b) exempt products not requiring EPA registration of chemicals/pesticides will be used. All plant remedies are OMRI products and consist of naturally derived ingredients and solutions like Plant Therapy (soy oil and essential oils). Biological remedies such as ladybugs, predator mites, and nematodes may also be applied. These products are "worker friendly" and require minimal Personal Protective Equipment (PPE). Permittee will comply with all label directions for application and use. Permittee will store all agriculture chemicals and garden products in designated locked shed; the nearest seasonal stream is over 100' from ag storage. Permittee will apply the minimum amount of product as directed by label. An Integrated Pest Management (IPM) plan is in process to address cultural methods and other preventative measures to be taken to reduce dependency on pest treatments. Spills will be contained, cleaned up, and disposed of at hazardous waste facilities. Offsite drift will be prevented by not spraying on windy days, limiting pesticide use, and water runoff. Permittee will not spray directly into surface water. Pest Management plan and Pest log are attached in Appendix, item 10.

#### Security

The primary entrance to the property is secured with a locked gate that only the permittee, owner, and resident have access to. Perimeter fencing around site 1 consist of treated timber terminal post and metal post in between at 8' intervals. Terminal post are set in concrete and anchored to prevent leaning. A 16' locked gate for entrance to site 2 cultivation grounds.

Perimeter fencing around site 2 is made up of treated timber terminal post and timber post in between at 8' intervals with wood 2x4" rails connecting all fence. Terminal post are set in concrete and anchored to prevent leaning. A 12' locked gate for entrance to cultivation grounds.

Perimeter fencing around site 3 is made up of treated timber terminal post and timber post in between at 8' intervals with wood 2x4" rails connecting all fence. Terminal posts are set in concrete and anchored to prevent leaning. A 12' locked gate for entrance to cultivation grounds.

The main entrance, all cannabis cultivation areas, and dry and harvest storage will be monitored by video surveillance. The permittee is planning to install motion activated security system monitored by cell phone and can be accessed remotely. A security system specification sheet has been attached in the Appendix , item 11. The security plan, placement of cameras, range of motion are detailed on all premises of site plan diagrams provided.

All suppliers and visitors will be granted entry by the permittee and shall be required to sign in. The sign in log will include visitors name, time, date, and reason for visit. Attached in Appendix, item 12.

Since the parcels are large and rurally located with dense chaparral, premise visibility and monitoring will be limited to entrance gate, cultivation sites, drying and harvest storage areas, and security storage areas only.

The procedure for investigating suspicious activity is as follows:

- 1) Review camera footage and talk to witnesses, if any. Make a log of suspicious activity to include date, time, and description of incident.
- 2) Do a physical check of the suspicious area and document findings. Look for repairs. Evaluate if security can be reinforced in the area to further prevent suspicious activity, and do so.
- 3) In the event of theft or criminal activity, notify local and state authorities.

To prevent loss and theft of cannabis products, protocols are as follows:

Plants will be harvested and hung to dry in a locked shed. Permittee will be the only person who will have access. Video surveillance cameras and motion alert sensors will be installed in drying and harvest storage areas. Currently there are no other personnel.

In the event of an emergency the applicant, Jose Franco, is the first point of contact followed by resident, Ruben Franco, who is Jose's brother. It is understood they are on call 24/7. If for some reason either of them are unavailable, another point of contact will be designated as needed and posted at the site. There are no other residences or facilities within 200'.

Emergency contact Information is as followed:

Emergency Contact for 10717 & 10680 Schuette Rd			
Name	Title	Cell Phone	Email Address
Jose Franco	Property Co-Owner/ applicant	707-272-8286	Josefranco911@gmail.com



Ruben Franco	Resident at 10717 Schuette Rd	707-272-5766	Rubens.2511@gmail.com
Alma Franco	Property Co-Owner for 10717 Schuette Rd and full owner of 10680 Schuette Rd	707-835-7497	afranco1161@gmail.com

Shall there ever be a complaint, it will be documented to record description of complaint, by whom, when, and actions taken. This data will be tallied and reported to the County during the annual Performance Review Report.

#### Video Surveillance

Surveillance cameras are high definition with a camera resolution of 1080p and can record in any lighting conditions. Surveillance is a remote access monitoring alert and activation video camera system that can be accessed by permittee's phone and computer. Cameras will be placed up high to avoid tampering, obstruction, or disabling. A camera will be placed at the cannabis cultivation sites at entrances. A camera will also be placed at the designated dry and harvest storage area. There will also be a camera at the designated building for surveillance system storage devices. The system operates 24 hours a day at a minimum of 30 frames per second. The cameras are waterproof and color capable. System can integrate with camera and door alarms and records digitally. The system is capable of recording in thermal and infrared, is motion sensor activated and will alert. No additional illumination is required for surveillance cameras. System will store video footage up to 30 days and will display current date and time. Storage devices are stored on site in a designated climate regulated shed. 2 cameras are being placed at site 1. One camera recording main entrance and one 8x24' dry shed. The other camera will record the 8x8' security shed and one 8x24' dry shed. We will also install two exterior flood lights on site 1. Site 2 will have 1 security camera at each corner of the perimeter fencing totaling 4 security cameras at site2. We will also install 6 outdoor motion sensor lights along perimeter fencing. Site 3 will have 1 security camera at each corner of the perimeter fencing totaling 4 security cameras at site 3. 5 outdoor motion sensor lights will be installed at site 3 along perimeter fencing. Energy demand for security cameras is 15w, 22w(IR on). Motion Sensor Lights will be solar/battery operated.

#### Fences

Fences will be constructed with treated timber terminal posts and 6' horse wire fencing. Terminal posts will be anchored in concrete. Timber posts will be set at 8' intervals for sturdiness. No barbed wire or similar materials will be used at cultivation sites. A locked gate will grant access into the fenced areas. Cultivation sites are secured from view due to topographic barriers and where needed cloth fencing on top of wire fence for barrier will be placed.

### Storm Water Management

To manage storm water runoff fiber rolls will be placed to catch sediment on lower sides of cultivation site from getting into a seasonal creek 100' away. Rock will be placed where there is potential of erosion happening. On a Class 2 crossing fiber rolls will be kept where needed and rock in place to avoid any type of sediment/erosion. Natural vegetation will also help keeping ground in tact while storm water is present.

Permittee will comply with all orders, regulations, and procedures of the California State Water Board, Central Valley Regional Water Control Board. A Site Management Plan was submitted to the Central Valley Regional Water Control Board as required. Site Management Plan is attached.

All cultivation will be outdoors. All cultivation activities, top soil, fertilizers, pest management material will be located at least 100' away from any spring, top of bank, creek, seasonal stream, edge of lake, delineated wetland or vernal pool.

Storm water run off will be managed in the best way possible. The outdoor cultivation site maintains its natural flow of storm water drainage. Storm water flows naturally to the neighboring vegetation. Measures we take to prevent degradation of water quality consist of BPM measures. Ground covering with straw, erosion control seeding, preserving natural vegetation when possible and culvert outfall protection using rock and build up methods. There will be no generation of illicit discharge of irrigation or storm water from the sites as defined in Title 40 of the Code of federal Regulations, Section 122.26, which can cause degradation of water quality of any water body.

Surface water from cultivation sites will not discharge into Lake County maintained drainage or conveyance system.

There are no public roads or bridges down stream of cultivation sites or storm water natural flow pattern.

Terrain on this cultivation site is very rocky and absorbent. Most of the water if not all gets absorbed by ground and all of the natural vegetation around cultivation sites. Water rarely can be seen flowing on surface. Water that doesn't get absorbed if any ends up on a seasonal stream making water flow to its natural water shed path thus the discharge from cultivation site will not increase the volume of water that historically has flowed onto adjacent properties. Flood elevation downstream of the cultivation sites will not be affected by the cultivation project.

Permittee will implement best practices to control discharge of storm water and pollutants to the maximum extent possible. Permittee will practice all applicable regulations in conjunction with our Regional Water Quality Control Board Site Management Plan. It addresses all storm water run off and sediment control, materials and spill control. Permittee will practice regular site inspections, before run off starts, daily when stormwater is present and once when stormwater ends. Permittee will effectively prevent pollutant discharges to surface and ground waters.

There will be no grading for phase 1. There will be some moving of loose surface material, filling holes and creating a semi level surface.

For phase 2 there will be some grading to expand the cultivation area. Cultivation sites are in an area that have slight declines. There is very little vegetation where grading will take place. Mostly consist of brush and very thin fire hazard trees that are fuel for a fire.

Vegetation around cultivation site helps slow down the stormwater that is discharged from cultivation site and filter gradually into the soil. Cultivation site maintains the lands natural contour for drainage.

Permittee will monitor run off and winter storm water for any necessary attention to prevent degradation of any water body. The system will require weekly or if required daily site and perimeter inspections. Permittee will look for signs of erosion, small streams, ditch or any water being collected after an event of heavy rain. We will also look for any spills, leaks or pollutant materials. Permittee will properly implement safety protocol and inspect areas for current leaks.

Plenty of material will be kept on site for temporary erosion and sediment control throughout the wet season. Always prepared for a rapid response, emergency or predicted rain.

A copy of the Property Management Plan and Site Management Plan on site for use when practicing storm water maintenance or installation of anti sediment materials.

#### Waste Management

Commercial activities at a large scale are new to the site, below is our best guess given in range.

Paper waste - very minimal; as there is no office on site at this time.

Glass waste - very minimal; as there are no products purchased using glass

Metal waste - very minimal; as the only metal on site is related to fencing.

Electronic waste- minimal; as the only electronics being used will be video surveillance cameras, monitors, meters, and pumps,

Plastic waste - moderate; plastic items being used are water tanks, buckets, hoses for irrigation. All items are reusable until deteriorated. Recyclable items include bottles from pest and plant treatments (if label allows).

Organics - high; green waste will probably be the highest produced waste. Green waste/organic waste will be composted on site in a designated secured area. Once

applicant is on track and trace, a more accurate number can be given on pounds of green waste produced.

Inert - minimal; the only inert ingredients used is bat guano, worm castings, blood meal, bone meal, kelp meal, alfalfa meal, oyster shell and possible other organic materials which should get used and not thrown away. Should it need to be disposed of, it will be disposed of as a hazardous waste (if required).

Household Hazard Waste - minimal; some pest and plant treatments might be better disposed of at a hazardous waste facility. Light bulb, batteries, or other commercial cleaning products may also be disposed of as hazardous waste.

Special waste - none; no foreseeable special waste to be generated.

Mixed residue - none; no foreseeable mixed residue waste to be generated.

In efforts to minimize solid waste generation, the permittee plans to work with suppliers and vendors to minimize packaging by buying and selling in bulk as well as choosing products whose packaging is recyclable and ingredients zero to low impacting.

Solid waste will be stored in a fenced in and locked area. Green waste will be composted in this area. There will be two trash cans stored in this secured area as well; one for landfill and one for recyclables. Non-organic green waste will be self-hauled to Ukiah Solid Waste Systems Inc. Green waste will be rendered on site and further reused back into the soil at cultivation sites. Waste Management Plan is attached in Appendix, item 9.

#### Hazardous Waste Management

The applicant shall conduct a hazard analysis to identify or evaluate known or reasonably foreseeable hazards for each type of cannabis product produced at their facility in order to determine whether there exist any hazards requiring a preventative control. The hazard analysis shall include the identification of potential hazards, including 1) Biological hazards including microbiological hazards; 2) Chemical hazards, including radiological hazards, pesticide(s) contamination, solvent or other residue, natural toxins, decomposition, unapproved additives, or food allergens; and/or 3) Physical hazards, such as stone, glass, metal fragments, hair or insects. With reasonable controls, training, supervision and management, it is not anticipated that the cultivation activity will pose any unforeseeable hazards.

#### Cannabis Vegetative Material Waste

Based on plan production, it is estimated 5000 pounds of vegetative waste will be generated and composted during Phase 1, 10,000 pounds in Phase 2. Leaves naturally fall and periodical pruning takes place to keep the plants healthy. Stems, stalks and water leaves at the time of harvest will also produce vegetative waste. Track and trace requirements mandate that the waste from a plant must be weighed and

entered into the track and trace records which will allow monitoring of the amount of green waste generated and disposed of. Green waste is separate from solid waste and is composted, rendered, and redistributed back into garden sites.

#### Growing Medium Management

Permittee plans on initially purchasing 200 yards of organic bulk soil. Soil will then be amended and reused; there is no disposal of soil or medium waste. Non-organic additives such as vermiculite or silica will not be used.

#### Water Resources

By the 2006 Lake County Groundwater Management Plan ([www.lakecountycalifornia.gov](http://www.lakecountycalifornia.gov)), the Cultivation Site Property is in the Upper Lake Basin. The Upper Lake Basin is northwest of the northern end of Clear Lake.

Upper Lake Basin is composed of three valleys: Middle Creek Valley, Clover Valley, and Bachelor Valley. Middle Creek and Clover Valleys are in the Middle Creek Inventory Unit, and are bordered to the east and north by the Franciscan Formation, and to the west by Lower Cretaceous Marine rocks. Bachelor Valley is in the Scott's Creek Inventory Unit and is bounded primarily by the Franciscan Formation and by Middle Creek Valley to the east.

Quaternary Alluvium includes channel deposits, fan deposits, and gravel, sand and fine materials (ESA 1978). The channel alluvium occurs along Middle, Alley, and Clover Creeks. The mouths of several ravines and small canyons that enter into the valley contain fan and older alluvial deposits that consist of gravel, sand, and fine materials. These deposits reach a thickness of 40 to 50 feet and decrease downstream to only a few feet (ESA 1978). Quaternary alluvium is generally a good water producing unit.

The Pleistocene terrace deposits, consisting of poorly consolidated clay, silt, and sand with some gravel lenses, border the west and northwest of Middle Creek Valley. Because of the deposits' high clay content, they have a low permeability and are less significant as a groundwater source (ESA 1978).

Underlying the valley floors of Middle, Clover, and Alley creeks are fine-grained lacustrine sediments and coarser grained floodplain deposits. These deposits overlie bedrock and older unconsolidated sediments and generally range from 60 to 110 feet in thickness. Sediments in the Middle Creek Valley area form a confining layer for an underlying artesian aquifer system (ESA 1978). The floodplain deposits contain sand and gravel lenses from former stream channels. The fine-grained lake deposits have low permeability with specific yields from about 3 to 5 percent while wells screened in the sand and gravel lenses produce an average of 230 gpm (DWR 1957).

Groundwater recharges the Upper Lake Basin at the mouths of canyons and around the periphery of the basin. Recharge also occurs along Middle Creek, Clover Creek, and Alley Creek (ESA 1978). Groundwater recharge occurs from the stream channels

during the early part of the wet season, and the basin fully recharges and contributes to stream flow during most wet seasons. Lesser amounts of recharge occur to the groundwater basin through percolation of smaller streams and direct rainfall.

Groundwater levels in the Upper Lake Basin are shallow and have remained constant over the last 40 years. Figure 2-10 at the end of this section shows hydro graphs in the Upper Lake Basin that indicate groundwater levels and trends. Water levels in the basin are generally within 10 feet of the ground surface in the spring. Groundwater levels have stayed constant spring to spring. The general direction of groundwater flow in Upper Lake Basin is southward toward Clear Lake. In Clover Valley, groundwater moves to the northwest, towards Middle Creek.

Groundwater in the Upper Lake Basin fluctuates between 5 and 15 feet from spring to fall. Total storage in the Upper Lake Basin is approximately 9,000 acre-feet (ESA 1978). DWR estimated total storage to be 10,900 acre-feet and usable storage to be 5,000 acre-feet. Specific yield for the depth interval of 0 to 100 feet is approximately 8 percent (DWR 1957). Average-year agricultural groundwater demand in the Upper Lake basin is approximately 4,075 acre-feet per year.

Groundwater Quality/ Inelastic Land Surface Subsidence

DWR monitors a number of wells for water quality in the Upper Lake Groundwater Basin. Monitoring is not extensive enough to determine trends in groundwater quality or the overall character of groundwater in the basin. Information obtained from DHS indicates that iron and manganese have been detected above SWQLs in the Upper Lake Groundwater Basin. Current information regarding inelastic land surface subsidence is unavailable

There are 243 domestic wells and 99 irrigation wells in the Upper Lake Basin. Approximately 50 percent of domestic wells are shallower than 75 feet deep, and approximately 50 percent of irrigation wells are shallower than 125 feet deep.

The parcel and Study Area are approximately 8 miles northwest of Upper Lake, CA, located within Section 2, Township 15N, Range 11W, Mount Diablo Base and Meridian, in the Cow Mountain USGS 7.5minute quadrangle. The parcel is located within the Middle Scotts Creek (HUC-12 180201160103) and Cold Creek (HUC-12 180101100103) watershed, located at a range of 1500 feet (457 meters) to 2000 feet (609 meters) elevation.

There is no year-round water source at the 48"x20' crossing and only during rain season it is seen. Seasonal stream/rain drainage is at least 100 feet away from cultivation sites.

The parcels have no vernal pools or creeks. The nearest seasonal stream is unnamed and is seasonal tributaries to Cold Creek a mile from parcels.

Two ground water wells will be used for cultivation. No surface water will be used for cultivation activities. A well test was done on both wells.

This cultivation project is enrolled as a Tier 1/Low Risk cultivation operation in the State Water Resources Control Board's Order WQ 2019-0007-DWQ General Waste Discharge Requirements for Discharges of Waste Associated with Cannabis<sup>1</sup> Cultivation Activities (General Order). Compliance with this Order will ensure that cultivation operations will not significantly impact water resources by using a combination of buffer zones, sediment and erosion controls, inspections and reporting, and regulatory oversight.

The cultivation areas are mostly 12-16% sloped and located at least 100 feet away from water bodies as required by Lake County Cannabis Ordinance. Natural habitats will be left un touched along with the vegetative buffers between cultivation sites and waterbody.

Water resource protection were identified in the Stormwater Management and are attached .

A monitoring schedule will be developed to protect water quality. Permittee will demonstrate that the project is in compliance with all ordinance and permit, that there is no pollutant present at project sites, determine if corrective actions are needed at the time, and determine if any methods of protecting water quality are not working for us and address accordingly.

Inspections will be performed at different times. Before the rain, during the rain and after the rain to observe the quality of our to protect water quality. Every inspection should keep a log on what is observed or needed for records.

#### Water Use

The water source for cultivation and domestic use on site 1 and site 2 is a well located at 39°11'00.20"N, 123°02'21.14"W. The second well located at 39°11'05.98"N, 123°02'17.33W will be used for site 3 cultivation. A copy of well log and well permit have been included in the Appendix, item 13. Proposed water storage from well during Phase 1 is 1-5000 gallon water tank in Site 2; 2-2500 gallon water tanks in Site 3.

Proposed water storage from well during Phase 2 is 2-5000 gallon water tanks in Site 2; 3-2500 gallon water tanks in Site 3.

Permittee was enrolled in the Cannabis General Order with waterboard on Nov 29, 2018. A Notice of Applicability has been received and WDID#5S17CC405929 assigned. A Site Management Plan was submitted to water board and is included in the Appendix, items 15 & 16.

Permittee understands they are not allowed to engage in unlawful or unpermitted drawing or storing of water or utilization of other water sources such as public water supply or retail water facility. Permittee plans on installing water level monitors and meters to measure the amount of water used in cultivation activities. Applicant agrees to maintain a record of all data collected and shall provide a report to the County and water board annually. Permittee understands the conditions of needing water on an emergency basis and will notify the Department within 7 days of the emergency.

Permittee has contacted Will Peterson Well Drilling in Lake County and has had a water availability analysis prepared. The report is attached in the Appendix, item 14.

#### APPENDIX Items

---

1. Archaeological Report
2. Water and Fertilizer Log
3. CNDDDB database search and BIOS map
4. Topographic Map
5. Watershed Map
6. Biological Report
7. SOP Template
8. Septic Permit
9. Waste Management Plan CDFA Template
10. Pest Management Plan CDFA Template
11. Video Surveillance Specs
12. Visitor log
13. Well Log/Completion Report & Well Permit
14. Water Availability Test of Well
15. Notice of Applicability or Proof of Cannabis General Order Enrollment
16. Site Management Plan