# ANCIENT LAKE FARMS PROPERTY MANAGEMENT PLAN

## **Project Location**

20395, 23203, 23155, 23107 Jerusalem Grade Road Middletown, CA 95461

# **Project Parcels**

Lake County APNs 013-015-44, 46, 47 & 48

# **Project Managers:**

Robert Nothnagle & Kimberly Kent

January 28, 2019

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## **Official Authorization**

Ancient Lake Farms authorizes the County of Lake to seek verification of the information contained within the Use Permit Application package for the proposed cannabis cultivation operation at 23095 Jerusalem Grade Road, Middletown, CA. All information contained in this Use Permit Application package is currently available for viewing and will remain viewable in a physical and digital format given to the County of Lake and kept at the project site.

#### **Project Description**

Ancient Lake Farms (ALF) is seeking a major use permit to obtain one A-Type 3 "Outdoor" License and an a Type 13 Self-Transport Distribution License from the County of Lake Community Development Department to allow a total of 43,560 ft<sup>2</sup> of commercial cannabis canopy area, with a total of 49,160 ft<sup>2</sup> of cultivation area at 23095 Jerusalem Grade Road, Middletown, CA on Lake County APN 013-015-44. This project is being proposed with a total of 4 contiguous properties (APNS: 013-015-44, 46, 47 and 48) in order to allow collocation/clustering of permits, however as currently proposed the entire project will only take place on APN 013-015-44. Any mention of the project parcel or project property beyond this point will only describe APN 013-015-44 unless specifically noted. The proposed cultivation method is via an above grade organic soil mixture in hardware cloth planting beds with drip irrigation systems. The proposed cultivation area is surrounded by a 6-foot tall chain link fence with privacy mesh coverings. Proposed ancillary facilities include three 200 s.f. storage sheds, four 2,500-gallon water tanks (one being steel/fiberglass for fire suppression) and a 5,000 s.f. Processing Facility in Phase 2 (see Site Plans). Agricultural chemicals associated with cannabis cultivation (fertilizers, pesticides, and petroleum products) will be stored within the secure proposed 200 ft<sup>2</sup> storage area, until the processing facility is built in the future. The proposed processing building will contain cannabis processing activities such as drying, trimming, curing, and packaging. The project properties do currently contain an existing permitted home on APN 013-015-47 which is southwest of the cultivation site. There are no off-site residences within 200 feet of the cultivation site.

The current owners of the property are Robert Nothnagle and Kimberly Kent who are also the applicants and project managers who will operate the entity Ancient Lake Farms. The total acreage of the all the parcel is 20 acres (4.90 + 4.72 + 5.59 + 4.79). The project parcel is zoned RL; Rural Lands. The parcel is located roughly 10 miles to the East of the intersection of Highway 29 and Spruce Grove Rd in Hidden Valley. The parcel lies within the 8-digit HU (Sub basin): Upper Putah Creek, Soda Creek Watershed (HUC10). Just South of the parcels is Gunther Creek, an Intermittent Class II watercourse indicated on the NHD map layer utilized by California resource agencies via CNDDB and the Federal NWI map layer, which flows along the southern boundary before entering Soda Creek. The Biological Assessment did further outline 2 seasonal Class III watercourses that flow from North to South between the 4 parcels. The cannabis cultivation area will be setback a minimum of 100 feet from the top of the bank of any bodies of water. There are no other surface water bodies on the Project property. There will be no surface water diversions with this project.

Ancient Lake Farms plans to be fully organic with their supplements of both dry and liquid fertilizers. The proposed dry fertilizers include dry worm castings as well as Chicken and Bat Guano. As for liquid fertilizers most of it will be coming from MaxSea and organic compost. The pesticides that will be used for this cultivation project include citric acid oil and Sulphur, both at limited quantities during the growing months and only used when necessary. All of the fertilizers, nutrients, and pesticides will only be purchased and delivered to the property as needed. They will be stored separately in the secure storage shed, in their original containers and used as directed by the manufacturer. All pesticides/fertilizers will be mixed/prepared on

an impermeable surface with secondary containment, at least 100 feet from surface water bodies. Empty containers will be disposed of by placing them in a separate seal tight bin with a fitted lid and disposed of at the local solid waste facility within the county. At no time will fertilizers/nutrients be applied at a rate greater than 319 pounds of nitrogen per acre per year (requirement of the State Water Resource Control Board's Cannabis General Order). Water soluble fertilizers/nutrients will be delivered via the drip and micro-spray irrigation system(s) of the proposed cultivation operation to promote optimal plant growth and flower formation while using as little product as necessary. Petroleum products will be stored year-round in State of California-approved containers with secondary containment and separate from pesticides and fertilizers, within the storage area. When Jerusalem grade rd. meets SRA standards, the building permit for the processing facility will be submitted and all storage will be within the processing facility.

The proposed cultivation operation will utilize drip irrigation systems, to conserve water resources. The well near the northern parcel boundary will be pumped above ground to the water storage tanks directly next to the cultivation area. From the well to the storage tanks ALF will utilize aboveground water lines, which are a combination of PVC piping and black poly tubing. Water use is projected to be approximately 747,740 gallons per year (please see Water Use Section for methodology). The cultivation property is fairly sloped downhill, meaning rainwater runoff will need to be mitigated. Straw wattles are proposed around the entire southern border of the cultivation area to filter sediment from stormwater as it moves on to the property's seasonal drainages. The natural existing vegetated buffer will be maintained as needed between all project areas and waterways on the property.

A Biological Assessment for the property was completed on January 23, 2020, prepared by Pinecrest Environmental Consulting, 105 Morris Street Suite 184, Sebastopol, California 95472. The results of the Biological Assessment are described below, however for the complete results please see the attached report.

- No special status plant species were observed, and no impacts are expected to occur to any.
- No special status animal species were observed, and no impacts are expected to occur to any. Although Gunther creek is over 200 ft away and the nearest occurrence of Foothill yellow-legged frogs, migration within the area could occur. Care should be taken not to impact any amphibians if migration and should be allowed to leave work areas on there on, not harassed or harmed in anyway.
- No impacts are predicted for sediment discharge to watercourses or wetlands. The two small class III drainages that are onsite are further than 50 feet way from cultivation areas.
- No mitigation measures were recommended; however, it was recommended that BMPs and general erosion control measures be implemented.

A Cultural Resource Evaluation for the parcel was completed on January 13, 2020 prepared by Dr. John Parker, RPA. No historic or prehistoric cultural materials were discovered, and no

"significant" historic sites or features were found. Based on the field evaluation by Dr. Parker, it was recommended that the proposed project be approved as planned. Please see attached study for full results and recommendations. ALF is aware that if any archaeological, paleontological, or cultural materials be discovered during site development, all activity shall be halted in the vicinity of the find(s), the local overseeing tribe shall be notified and a qualified archeologists retained to evaluate the find(s) and recommend mitigation procedures, if necessary, subject to the approval of the Community Development Director. The applicant shall halt all work and immediately contact the Lake County Sheriff's Department and the Community Development Department if any human remains are encountered. All human remains will be treated in accordance with Public Resources Code Section 5097.98.

ALF's site will not require a high amount of electricity as they will be cultivating 1 acre outdoor using all-natural sunlight. All electricity needed for the project at this time will be supplied from existing solar panels and backup generator for the security system. The proposed project does have a backup generator; however, it is not expected to be needed since PG&E is not the primary power source. The project does not propose the storage or use of any hazardous materials. All organic waste will be placed in the designated composting area within the cultivation area. All solid waste will be stored in bins with secure fitting lids until being disposed of at a Lake County Integrated Waste Management facility, at least once a week during the cultivation season. The closest Lake County Integrated Waste Management facility to the proposed cultivation operation is the Eastlake Landfill.

At this time Ancient Lake Farms is currently being operated and managed Robert Nothnagle and Kimberly Kent, who are also the applicants. All of ALF future employees, should they choose to add any, will undergo a background check by the Lake County Sheriff's Department before starting employment and be a United States citizen or eligible for employment within the US. The projects core business hours of operation will take place between 8am-6pm with deliveries and pickups restricted to 9am-7pm Monday through Saturday and Sunday from 12pm-5pm. The Community Liaison/Emergency Contact, Mr. Nothnagle and Ms. Kent, will be available to contact 24 hours a day, seven days a week, including holidays.

The Project Property is accessed by private/shared dirt access driveways connecting to Jerusalem Grade Road. The shared access driveway begins at Jerusalem Grade road and leads to property parcel where the existing home is. There is a proposed separate access driveway that breaks off the road to the west towards the cultivation area. This newly proposed cultivation access roadway will be approximately 275' in length to the entrance of the cultivation site, with an approximate slope of 0-1%. At minimum the driveway will be 20 ft wide with 14 ft of unobstructed horizontal clearance and 15 feet of unobstructed vertical clearance. The access driveway will have 6-inch gravel added to the entire length of it and have 4 parking stalls (One ADA), as well as hammerhead turnaround at the cultivation site 20' wide and 60' in length. Turnouts are not proposed due to the access driveway being proposed at 20' wide, however if needed, turnouts will be at minimum 12 feet wide and 30 ft long, with a minimum 25 ft tapper on each end, roughly every 400 ft. The access driveway to the parcel currently has a security gate at the entrance of the parcel. The gate entrance will be at least 2 feet wider than

the width of the traffic lane with a minimum of 14 feet unobstructed horizontal clearance and 15 feet on unobstructed vertical clearance. The access gate will be located at least 30 feet from the main shared access road and property line. The gate will be locked outside of core operating/business hours (8am to 6pm) and whenever ALF personnel are not present. The gate will be secured with a heavy-duty chain, commercial grade padlock and a Knox Box to allow 24/7 access for emergency services. Only approved ALF managerial staff and emergency service providers are able to unlock the gates on the Project Property. The fencing for this project will include a perimeter fence around the entire outdoor cultivation area. The cultivation area fence will be a 6 ft tall chain link fence with a privacy mesh screen and mounted with security cameras.

As Ancient Lake Farms is applying for a Type-13 Self-Transport Distribution license, there will be a dedicated loading zone in the parking lot. ALF will utilize unmarked transport vans to transport product off premises and will be in compliance with all California Cannabis Track and Trace requirements throughout the distribution process.

## **Supplemental Data for Initial Study**

\*Please Note- a CEQA Initial Study in the Lake County template will be provided with the project in a Microsoft Word Document through FileTransfer and can be emailed directly to the project planner.

## Description of project and its operational characteristics

Type of Business: Commercial Cannabis Cultivation

**Product or service provided:** *Cannabis* 

**Hours of Operation:** 8am to 6pm

Number of shifts: 2 shifts, 3 shifts at peak. Employees are needed only at certain

times of the cultivation season.

**Number of employees per shift:** 2 employees, max of 4 at peak Employees are

needed only at certain times of the cultivation season.

Number of deliveries per day: Max 1

Number of pick-ups per day: Max 1

Lot Size: 20 acres in total

Number and type of company vehicles: 1, likely a pickup truck

**Type of loading facilities:** There will be a designated open loading zone in the

front entrance of the cultivation site

Floor area of existing structures: Existing Residence

Proposed building floor area: three 200 s.f. storage shed, and a 5,000 s.f.

Processing facility for phase 2, Total Proposed = 5,600 s.f.

**Number of parking spaces:** 4 (1 ADA) parking spots proposed

Number of floors: 1

**Additional Relevant Information:** Applying for early activation, will not build any structures until full approval and SRA standards are met. ALF would like to cultivate upon approval.

## Description of Site Prep/Construction Activities

• When do you anticipate starting construction?

April 2020, or earlier upon approval, weather permitting.

• How long will construction take?

Approximately 5-7 weeks.

• What days/times will construction occur?

9am to 6pm, Monday through Saturday.

What type of construction equipment will be used?

Truck, hand tools, general construction equipment.

• What many truck vehicle trips will be necessary for construction?

Approximately 130 to 160.

• Will equipment be idling during construction?

All equipment will be shut off when not in use.

• Where will construction equipment be staged/stored?

On existing driveway/parking lot, in existing garage or work areas

• Will any trees or vegetation be removed? If yes, please provide type and amounts.

No vegetation is proposed to be removed.

How much grading is anticipated to occur and where?

Amounts consistent with a building permit for the processing center. Approximately 57 cubic yards for the roadway and cultivation area.

 Will soil be imported or exported to/from the site? If so where and what amount?

Approximately 1,000 cubic yards of soil will be imported from a source yet to be determined. It will be used to supplement the soil mix currently on the property after each growing season.

 Is trenching required? If yes, please provide location, dimensions and cubic yards.

Additional trenching for this project will not be required for irrigation lines.

How much water will be used for construction, operation and maintenance?
 What is the water source?

5,000 gallons per day during construction and 1,000 gallons per day for operation and maintenance; well water.

## Other questions and information needed for the Initial Study

• Describe how scenic views or vistas are impacted by the cultivation site.

Views will not be impacted at all, due to the topography of the site, surrounding vegetation, and its distance from common public roadways, the site is unlikely to be seen off property.

• What lighting is proposed for the project? Will areas be lit at night?

Lighting is proposed along the front access gate, parking area, front of the future processing facility, and surrounding the cultivation area. All lighting will be fully shielded, downward casting and will not spill over onto other properties or the night sky.

• Are there existing agricultural uses on-site besides cannabis? Will they be removed?

There are no existing agricultural uses, therefore none will be removed to accommodate this project.

• Will the project result in the loss of forest land? If so, describe how many acres and what type of trees.

Tree removal is not proposed.

 How will dust, ash, smoke, fumes, or odors generated by the cultivation site be managed?

Dust: watering or placing seed/mulch/gravel on bare soil.

Odor: carbon filters, ventilation system, planting native flowering vegetation surrounding the cultivation area.

 Are there any water features (drainages, streams, creeks, lakes, rivers, vernal pools, wetlands, etc.) on-site or immediately adjacent to the project? If yes, will any work take place in them or near them?

There are 2 Class III Intermittent Watercourse (Unnamed) that flow through the parcel approximately from the north portion, to the south portion. A minimum of 100-foot setbacks will be maintained from all waterways.

 Will there be a loss of any wetland or streamside vegetation? If yes, describe where, total area, and type of vegetation lost.

No vegetation will need to be removed, project is a minimum of 100 feet from waterways and protects riparian areas.

 Describe any site or buildings that have archaeological or historical significance.

There are no known sites of archaeological or historical significance. Please see attached cultural report for any further details.

• What are the slopes of the cultivation site?

The cultivation area is fairly flat, with most being 0-10%

• Describe the soils found at the site and their potential for landslides, erosion, lateral spreading, subsidence, liquefaction, or collapse.

The soils on this property are well-drained soil with low permeability and medium runoff classification.

• Describe methods to be taken to reduce greenhouse gases.

Using limited amount of equipment that produce any emissions. Offset any limited emissions by planting native vegetation surrounding cultivation area.

• Will solid waste be produced? If yes, how will it be disposed of?

Some solid waste will be produced, and will be disposed of at the Lake County Integrated Waste Management facility closest to the proposed project (Eastlake Landfill)

• Will hazardous waste be produced? If yes, how will it be disposed of?

No hazardous waste will be produced from this project.

• How will vegetative waste be managed?

Vegetative waste will be composted within the designated composting area.

• How will growth medium waste be managed?

Will be mixed within the composting area to be recycled and further used in the following grow.

• Will any material be taken to a landfill? If yes, which one and how much material is anticipated?

Solid waste materials consistent with regular business waste will be taken to the Eastlake Landfill

• Describe the existing drainage patterns on the site and how they may be alternated and to what degree as a result of this project.

Existing drainage is from the north end of the property to the south via seasonal drainages. There will be no alterations specifically proposed and due to the low slope of the land, the proposed project will not significantly change any existing drainage patterns.

 What Best Management Practices (BMPs) or measures will be implemented in order to prevent erosion and impacts to water quality?

Native vegetation being maintained within the 100 ft setbacks from all watercourses that front the watercourses. Straw wattles will also be implemented around the entire cultivation area, to provide an additional buffer between the creeks and the grow site.

• Is wastewater treatment required for the project? If yes, what is the source?

Wastewater treatment is through an existing septic system; however, bathrooms are proposed in the future processing facility. Prior to Phase 2, portable ADA compliant Blue rooms will be on the property for future employees.

 Describe how this project is consistent with the County's General Plan and Zoning Ordinance.

The general plan and zoning ordinance sections pertaining to cannabis cultivation were referenced in the making

• Describe the level and frequency of noise or vibration that will be generated from this project.

Short-term increases in ambient noise levels to uncomfortable levels could be expected during the construction of the processing facility as well as deliveries. The hours of construction and deliveries will be limited to standard business hours.

 Describe what measures have been taken to maintain or improve the level of service for the appropriate fire district and CalFire.

Maintaining the land surrounding the cultivation area can help reduce the fuel load for fires. The driveway is being improved up to County standards.

• How is this site accessed?

The parcel is accessed from private access roads that connect to Jerusalem Grade road. The proposed access to the cultivation will be 20ft wide and follow all SRA.

• Describe the amount of traffic the project will generate?

Daily employee trips are anticipated to be between 4 and 16 trips, about the equivalent of a new single-family dwelling (which averages 9.55 average daily trips according to International Transportation Engineer's manual, 9th edition).

 Are there any road improvements that would be required? If yes, please provide specs (type of materials and dimensions)

ALF will be improving the private dirt access, by applying a 6-inch layer of crushed rock/gravel and making it 20 feet wide.

• Describe if this project will result in increased traffic hazards to motor vehicles, bicyclists, or pedestrians?

This project will not result in traffic hazards as it is a private road off of a county-maintained road with daily traffic patterns that will be similar to that of an average household.

 Are greenhouses or other accessory structures proposed? If yes, what are the dimensions of the structures and materials/colors they will be constructed out of?

A 50' x 100' processing building made of metal, and three 200 s.f. storage sheds for fertilizer and pesticide storage.

## What sources of energy will be used?

ALF will not require a lot of energy as it is 1 acre outdoor, the project will be using existing solar panels and a backup generator.

# **Planting Schedule**

#### <u>Purpose</u>

The Planting Schedule is intended to portray the time of year and how much mature cannabis cultivation will occur at a single given moment in the project's life. Due to the nature of the cannabis licensing processing time being highly variable all the timings estimated below are fully contingent on the processing time of the project. The timing and planting schedules listed below are estimated to the best of the applicant's ability, however, can be changed at the discretion of the Lake County Planning Departments request. Seeing as the timing can change these should be used as a rough time frame.

#### A. Early Activation AND Phase 1 Cultivation

Ancient Lake Farms would like to begin cultivation for Early Activation as soon as the project is deemed completed from the CDD and the Early Activation Conditions are approved. For EA, ALF would like to cultivate 1 acre of outdoor mature cannabis in above ground potting beds with full sunlight and no additional lighting. The area proposed to be cultivated on during EA, will be the same area as post permit approval. Please see Sheet 1 of the site plans for area to be cultivated. Assuming the project is deemed complete prior to the end of March, ALF would begin early activation cultivation on the 1 acre starting in April of 2020.

#### B. Post Permit Approval Cultivation Phase

Once the Permit is fully approved, Ancient Lake Farms will continue with the same 1-acre outdoor planting schedule yearly depending on the weather (begin early April and end in September). As Jerusalem Grade is not up to SRA 4290 standards, the processing facilities building permit will not be submitted until the road is upgraded to meet minimum standards. Due to the large costs and involvement needed to upgrade Jerusalem Grade road, the improvements will not occur immediately. Until the building permit for the processing center can be built, the 3 storage sheds will be used in place of the center. Once the road is upgraded and building permits have been completed, the 5,000 s.f. processing center will then be built. The project as proposed for phase 1 (Sheet 1), can fully function if phase 2 is not reached. All growing methods are proposed above ground in hardware cloth smart pots. Please See the attached site plans for details of the areas of cultivation.

# Air Quality Management Plan

#### Purpose

The Air Quality Management Plan is intended to maintain the high-quality air in Lake County by managing the emissions of activities associated with commercial cannabis as well as manage the off-site drift of odors. Information in this section will be pertinent to meeting the standards of Finding 1 in Section 51.4 (a) of the Lake County Zoning Ordinance, which protects the health, safety, and welfare of the county and its residents. This Air Quality Management Plan will detail the mitigation techniques used to lessen or remove the negative externalities, in relation to odor and air quality, that stem from this commercial cannabis cultivation project. Additionally, sources of emissions and odors will be described, and the agent to contact for any air quality or odor problems will be provided at the conclusion of this section.

#### C. Project Contact and Community Liaison

The Community Liaison/Emergency Contact for Ancient Lake Farms cultivation operation are Mr. Robert Nothnagle and Ms. Kimberly Kent. Mr. Nothnagle's cell phone number is (530-613-2103) and his email is bobbsnoth@gmail.com, and Ms. Kent's cell phone number is (530-368-9535) and her email address is kkent222@gmail.com. Any residences within 1,000 feet of the property boundaries, all of which will receive this contact information directly prior to project implementation. The Community Liaison/Emergency Contacts will be responsible for responding to or employing someone to respond to all odor complaints 24 hours a day, seven days a week, including holidays. It is highly encouraged that neighboring residents contact the above Community Liaison/Emergency Contacts to resolve any operating problems before reaching out to any County Officials/Staff.

When an odor complaint is received, the Community Liaison/Emergency Contacts will immediately take action to eliminate the odor as soon as possible. The first step will be to determine the source of the odor from which the complaint was received (cultivation area, processing facility, or other). Then the best mitigation method will be implemented dependent on the source. Some of the mitigation methods include windscreens, upgrading odor control filtration systems/ventilation system, or even installing additional odor control equipment.

#### D. <u>Emission Sources</u>

The following sources are anticipated to be the most significant emitters of odor, air pollutants, and particles from the proposed cultivation operation. However, no single source or combined sources are anticipated to be harmful or detrimental to neighboring residences or the community of Lake County.

Gasoline Powered Generator: ALF's proposed cannabis cultivation operation will be connected to the electricity through existing solar. ALF has an existing generator on the property to be used for backup. However, with solar as the power source, it is not anticipated to be needed.

Gasoline and Diesel-Powered Equipment: The proposed cultivation operation will generate small amounts of carbon dioxide from the operation of small gasoline engines (tillers, weed eaters, lawnmowers, etc.), and from vehicular traffic associated with staff commuting. The generation of carbon dioxide is partially offset by the cultivation of plants, which remove carbon dioxide in the air for photosynthesis.

Fugitive Dust: The proposed cultivation operation may generate fugitive dust emissions through ground-disturbing activities, uncovered soil or compost piles, and vehicle or truck trips on unpaved roads. Fugitive dust will be controlled by wetting soils with a mobile water tank and hose, or by delaying ground disturbing activities until site conditions are not windy, and by eliminating soil stockpiles. Fugitive dust may also be generated temporarily during the construction period.

Odors: Cannabis cultivation can generate objectionable odors, particularly when the plants are mature/flowering. Additionally, the ventilation system of the proposed Processing Facility, in which the processing of raw cannabis plant material from the proposed cultivation area occurs, are equipped with carbon filters/air scrubbers to mitigate odors emanating from the building.

Erosion Control Measures during grading and construction:

Fugitive dust will be controlled by wetting soils with a mobile water tank and hose, or by delaying ground disturbing activities until site conditions are not windy, and by eliminating soil stockpiles. Also, the existing dirt access road will be layered with 6" gravel/crushed rock prior to any construction to mitigate any air quality impacts from dust/debris.

#### Hazardous spills:

All purchased products including; chemicals, fertilizers/nutrients, pesticides, petroleum products and sanitation products will all be kept in their manufactures original containers/packaging. All fertilizers/nutrients and pesticides, when not in use, are stored in their manufacturer's original containers/packaging and undercover inside the secure 200 ft² storage areas. Petroleum products are stored under cover and in State of California-approved containers with secondary containment and will be stored within the storage sheds. Sanitation products are stored in their manufacturer's original containers/packaging within a secure cabinet inside the existing residence. Spill containment and cleanup equipment will be maintained within the home as well. All employees will be trained to properly use all equipment according to the manufacturer's procedures. All pouring activities of any products will take place on gravel and within a secondary containment to reduce chances of spill. Once the processing facility can be built, it will store all of the above equipment in separate storage areas.

Wildfire prevention will be achieved by maintaining the project grounds. The entire vegetative area surrounding the cultivation area will be well trimmed in order to reduce fire

fuel load. All gasoline and diesel-powered equipment will only be used by trained personnel and will be turned off and stored indoors when not in use. Any equipment that has the potential to cause a fire will be used when only 2 or more individuals are actively present to prevent any accidents.

Noise during grading and construction will be inevitable however, all grading and construction will only take place during regular business hours: Monday through Saturday: 9:00 a.m. - 7:00 p.m. and Sunday: 12:00 p.m. - 5:00 p.m. Also, no idling will occur, and all equipment will be turned off when not in use.

#### C. Mitigation Measures, Monitoring, and Maintenance

To help reduce odor impacts from this project, native vegetation will be maintained on the property to try masking off-site odor drift. The future processing facility, which will be holding flowered cannabis plants, will have fans and carbon filters/air scrubbers installed to prevent odors from leaving the premises during all processing phases.

All air filtration and odor mitigation equipment will be inspected every other month by a Ancient Lake Farms supervisor to ensure each one is running as efficiently as possible. All carbon filters/air scrubbers will be replaced each quarter. ALF supervisory staff will log and maintain accurate records of the replacement/ repairs to any odor mitigation system and retain records for at least three years. Annually ALF's managerial staff will review all documentation pertaining to the performance of the equipment to determine if there are anyways to further improve odor mitigations. All data and information will be made available to Lake County and/or Lake County Air Quality Management District officials upon request.

At this time there is no proposed demolition or renovations of any building, however if proposed a Certified Asbestos Consultant will be contacted for inspections.

## Grounds

#### **Purpose**

The Grounds section is intended to ensure that the project property is well maintained in order to prevent the buildup of pests and bacteria, eliminating the chance that potential problems could arise and create health problems or contaminate the environment. Information in this section will be pertinent to meeting the standards of Finding 1 in Section 51.4 (a) of the Lake County Zoning Ordinance, which protects the health, safety, and welfare of the county and its residents. The Grounds section will outline the proper storage and maintenance procedures implemented in conjunction with this project, keeping the premises clean and preventing any potential contamination that could stem from the equipment or substances used.

#### A. Storage Procedures

All chemicals and substances that are potentially hazardous or could create problems with contamination will be stored a minimum of 100 feet from all designated surface water areas, including Class III drainage ditches running through the southern property. Additionally, all chemicals and hazardous substances will be stored properly. All fertilizers/nutrients and pesticides, when not in use, are stored in their manufacturer's original containers/packaging and undercover inside the secure storage sheds. Petroleum products are stored under cover and in State of California-approved containers with secondary containment and will be stored within the storage sheds. Sanitation products are stored in their manufacturer's original containers/packaging within a secure cabinet inside the existing residence. Spill containment and cleanup equipment will also be maintained within the existing residence. No effluent is expected to be produced by the proposed cultivation operation. Once the processing facility can be built, it will store all of the above equipment in separate storage areas.

#### **B. Site Maintenance**

Trash and recycling receptacles will be provided for anyone on-site to properly dispose of waste. The designated grounds manager will visually sweep the parcel and collect any waste that was not properly disposed of at the end of each day. During this daily property check, the culvert will be inspected to ensure proper functionality, all areas of vegetation will be inspected to ensure they are not overgrown, and all access roads and parking areas will be inspected to ensure they are in good order. The necessary equipment to maintain the property to the county ordinance standards will be on hand, stored in the existing home until the processing facility can be built. Bathrooms will be provided through ADA compliant portable toilets. Once the processing facility can be built, a building permit will be submitted proposing ADA compliant restrooms.

#### A. Calfire 4290 and 4291 SRA requirements

All requirements below are proposed to be met with this project and will be confirmed with the required Community Development- Building Division inspection prior to the project being deemed complete.

- Property line setbacks for structures shall be a minimum of 30 feet.
- Per NFPA 1142 water storage tanks for commercial use will be steel or fiberglass (not plastic). At this time the applicant is getting quotes on which material will be cheaper but will only purchase either steel or fiberglass water tanks.
- Roadway for this commercial use shall consist of 20 ft. wide gravel roadway with 30' long by 12' wide turnouts approximately every 400 ft. (Please see updated site plans)
- All weather roadway surfaces engineered for 75,000 lb. vehicles is the minimum (including bridges). All weather roadway surfaces do not have standing or flowing water that vehicles must travel through.
- The maximum roadway slope for any road is 16%.
- Gate width is 14 foot minimum and Gate setbacks are a minimum of 30 feet from a road.
- Parking allows for a turnaround/hammerhead T, or similar.
- Minimum fuel reduction of 100 feet of defensible space. Additionally, 300 feet of defensible space will be used for any structure that stores hazardous, flammable or dangerous items.

#### B. Jerusalem Grade Road Compliance

Currently Jerusalem Grade Road, including the bridge, does not meet SRA 4290/4291 standards. Due to the massive cost and amount of time it will take to coordinate the upgrades for the roadway this project would like to propose a timeline for when all of the required upgrades are due by. This project in coordination with other projects along Jerusalem Grade road would like a 5-year timeframe to complete all of the necessary upgrades. This would allow the CDD to implement conditions of approval for the project to be required to upgrade the roadway in order to meet SRA standards within 5 years and failure to meet the condition of would nullify the Use Permit. The project would be able to continue with phase 1 (no proposed buildings) with yearly check-ins with the CDD to see improvements.

# **Grading and Erosion Control BMP's**

#### <u>Purpose</u>

The Purpose of this Grading and Erosion Control BMP's are to highlight all the practices that will take place pre and post construction for this project. Then goal of this section is to outline all environmental areas that could be impacted, and how each will be mitigated. The section is broken down into preconstruction, during construction, and post construction that will take place for life of the project. All of the BMP's below are taken from the California Stormwater Quality Association BMP Handbook, The California State Water Quality Control Board BMP's, and the Lake County Water Resources Construction & Development BMPs.

#### A. Grading

ALF proposes to grade roughly 47 cubic yards to lightly smooth elevation for a small area of cultivation and to grade along the new access roadway in order to comply with the 4290 and 4921 SRA standards. When the processing facility can be built, it will require minor grading consistent within the allowance of a building permit. The removed soil will be kept on the property and not exported. The imported material will be crushed rock/gravel at a depth of 6 inches.

#### **B. Pre-Construction**

The activities listed below will be implemented prior to any form of the project beginning. Once the project is deemed complete and no further changes/clarifications are needed by the CDD, the applicant will begin to prepare these erosion control measures around the outlined cultivation areas, beginning with the upgrades to the roadway.

- Fugitive dust will be controlled by wetting soils with a mobile water tank and hose, or by
  delaying ground disturbing activities until site conditions are not windy. Prior to any
  vehicular traffic related to the cultivation, 6" gravel/crushed rock will be freshly layered onto
  the roadway to mitigate any air quality impacts from dust/debris.
- Wildfire prevention will be achieved by maintaining the project grounds. The entire
  vegetative area surrounding the cultivation area will be well trimmed in order to reduce fire
  fuel load. All gasoline and diesel-powered equipment will only be used by trained personnel
  and will be turned off and stored indoors when not in use. Any equipment that has the
  potential to cause a fire will be used when only 2 or more individuals are actively present to
  prevent any accidents.
- Straw wattles will be placed around the entire cultivation area in order to prevent sediment runoff and erosion into natural drainages.

#### C. During Construction

The BMP's listed below will be implemented by the management team overseeing the construction. As construction/groundwork will occur twice, once setting up EA and another after the processing facility is allowed, these BMP's will remain in effect until the entire project's setup is completed.

- Vehicles will not be left staging/idling
- Vehicles will only be parked on the existing roadway/driveway or on areas that will be further developed as part of the project.
- Petroleum products will be stored under cover and in State of California-approved containers within a secondary containment inside of the storage area in order to prevent any spills.
- A native grass seed mixture and certified weed-free straw mulch will be applied to all areas that are exposed due to the construction.
- All solid waste generated from construction will be stored in bins with secure fitting lids until being disposed of at a Lake County Integrated Waste Management facility.

#### D. Post Construction (maintained for life of project)

All BMP's listed here will be implemented yearly prior to the November 15th (or the beginning of the raining season).

- In order to protect against hazardous spills:
  - All purchased products including; chemicals, fertilizers/nutrients, pesticides, petroleum products and sanitation products will all be kept in their manufactures original containers/packaging. All fertilizers/nutrients and pesticides, when not in use, are stored in their manufacturer's original containers/packaging and undercover inside the secure sheds. Petroleum products are stored under cover and in State of California-approved containers with secondary containment and will be stored within the storage sheds. Sanitation products are stored in their manufacturer's original containers/packaging within a secure cabinet inside the existing residence. Spill containment and cleanup equipment will be maintained within the secure residence as well. All employees will be trained to properly use all equipment according to the manufacturer's procedures. All pouring activities of any products will take place on gravel and within a secondary containment to reduce chances of spill.
- Straw wattles will remain around the entire cultivation area and maintained/exchanged as needed each year in order to prevent maximum sediment runoff.
- Large stockpiles of soils imported for the planting beds will be covered with tarp, held down by rocks in order to reduce sediment runoff. The soil will only be purchased and used as necessary, not stored on the property throughout the grow season.
- Native vegetation around the proposed cultivation operation will be maintained as a
  permanent erosion and sediment control measures. A native grass seed mixture and
  certified weed-free straw mulch will be applied to all areas of exposed soil.
- All solid waste that cannot be composted, will be stored in bins with secure fitting lids until
  being disposed of at a Lake County Integrated Waste Management facility, at least once a
  week during the cultivation season.

# **Security Management Plan**

#### **Purpose**

The purpose of this Security Management Plan (SMP) is to minimize criminal activity, provide for safe and secure working environments, protect private property and prevent damage to the environment. This SMP includes a description of the security measures that will be implemented at the proposed cultivation operation to provide adequate security on the premises as approved by the Lake County Sheriff. The three main goals of the security plan are to prevent access to the cultivation site by unauthorized personnel, protect the physical safety of employees, and prevent theft/loss of cannabis products. This SMP is also created to be compliant with emergency regulations for CDFA's CalCannabis Licensing program and the California Department of Public Health for cannabis businesses.

#### A. Secured Entry and Access

The Project Property is accessed by private/shared dirt access driveways connecting to Jerusalem Grade Road. The shared access driveway begins at Jerusalem Grade road and leads to property parcel where the existing home is. There is a proposed separate access driveway that breaks off the road to the west towards the cultivation area. This newly proposed cultivation access roadway will be approximately 275' in length to the entrance of the cultivation site, with an approximate slope of 0-1%. At minimum the driveway will be 20 ft wide with 14 ft of unobstructed horizontal clearance and 15 feet of unobstructed vertical clearance. The access driveway will have 6-inch gravel added to the entire length of it and have 4 parking stalls (One ADA), as well as hammerhead turnaround at the cultivation site 20' wide and 60' in length. Turnouts are not proposed due to the access driveway being proposed at 20' wide, however if needed, turnouts will be at minimum 12 feet wide and 30 ft long, with a minimum 25 ft tapper on each end, roughly every 400 ft. The access driveway to the parcel currently has a security gate at the entrance of the parcel. The gate entrance will be at least 2 feet wider than the width of the traffic lane with a minimum of 14 feet unobstructed horizontal clearance and 15 feet on unobstructed vertical clearance. The access gate will be located at least 30 feet from the main shared access road and property line. The gate will be locked outside of core operating/business hours (8am to 6pm) and whenever ALF personnel are not present. The gate will be secured with a heavy-duty chain, commercial grade padlock and a Knox Box to allow 24/7 access for emergency services. Only approved ALF managerial staff and emergency service providers are able to unlock the gates on the Project Property. The fencing for this project will include a perimeter fence around the entire outdoor cultivation area. The cultivation area will be installed with a 6-foot woven galvanized wire fences around the proposed outdoor cultivation area with a Privacy Screen mesh on the fences to screen the cultivation area from public view, although the site should not be visible from any public roads due to topography and surrounding vegetation. The fence will be mounted with security cameras and posts will be

set into the ground at not more than 10-foot intervals, and terminal posts set into concrete footings.

A 100-foot defensible space of vegetation will be established around the proposed cultivation operation for fire protection and to provide for clear visibility for security monitoring. A Motion-sensing alarm will be installed at the main gate entrance to alert staff when someone/something has entered onto the premises. Motion-sensing security lights will be installed on all external corners of the proposed cultivation area(s), and at the main entrance to the Project Parcel. All lighting will be fully shielded, downward casting and will not spill over onto other properties or the night sky.

Staff are instructed to notify the ALF supervisor on duty immediately if/when suspicious activity is detected. The ALF supervisor will investigate the suspicious activity for potential threats, issues, or concerns and will contact the Lake County Sheriff's Office immediately if/when a threat is detected. If the active supervisor on duty is not a manager, the ALF managerial staff will be contacted immediately following the contact of the Lake County Sheriff's Office.

If a visitor arrives at the proposed cultivation operation via the main entrance during core operating hours, they will be greeted by a member of ALF staff. The staff member will verify the visitor's identification and escort the visitor to the appropriate area for their visit. No visitors will ever be left unattended.

#### **B.** Theft Prevention

All ALF staff are required to undergo a criminal background check. Visitors and staff are required to sign-in and sign-out each day and note the areas/tasks in which they worked that day. ALOF will adhere to the inventory tracking and recording requirements of the California Cannabis Track-and-Trace (CCTT) system. All staff members will be trained in the procedures of the CCTT system, and any cannabis movement will be reported through the CCTT system. At least two members of ALF's managerial staff will be designated to supervise all tasks with high potential for diversion/theft and will document which staff member took part in each of the roles. In the event of any diversion/theft, law enforcement and the appropriate licensing authority will be notified within 24 hours of discovery.

#### C. Community Liaison and Emergency Contact

The Community Liaison/Emergency Contact for Ancient Lake Farms cultivation operation are Mr. Robert Nothnagle and Ms. Kimberly Kent. Mr. Nothnagle's cell phone number is (530-613-2103) and his email is bobbsnoth@gmail.com, and Ms. Kent's cell phone number is (530-368-9535) and her email address is kkent222@gmail.com. The Community Liaison/Emergency Contact will be made available to everyone through multiple sources including; this Use Permit, Lake County Officials/Staff and the Lake County Sheriff's Office. ALF will encourage neighboring residents to contact the Community Liaison/Emergency Contact to resolve any problems before contacting County Officials. When a complaint is received, the Community Liaison/Emergency Contact will document the complainant, their contact information and the reason for the complaint. The Community Liaison will then take action to resolve the issue as quickly and efficiently as possible and follow up with the complainant to update them on the actions being

taken to resolve the issue brought up. A summary of complaints/issues will be provided in ALF's Annual Performance Review Report.

## D. Video Surveillance

Ancient Lake Farms uses a closed-circuit television (CCTV) system with a minimum camera resolution of 1080p at a minimum of 30 frames per second to record activity in designated areas. All cameras will include motion sensors are color capable with all exterior cameras being rated I-66 waterproof and all interior cameras being moisture proof. Cameras monitoring the cultivation area will be equipped with thermal technology. The CCTV system feeds into a monitoring and recording station in the existing residence, in a secured office, where video from the CCTV system is digitally recorded. Once the processing facility can be built, it will hold the monitoring and recording station for all the recorded video. ALF will obtain a video management software that will integrate the cameras of the CCTV system to door alarms and will be equipped with a failure notification system that immediately notifies staff of any interruptions or failures. All cameras of the CCTV system operate continuously 24 hours a day, 7 days a week, recording current date and time on the feed. All recordings are kept a minimum of 90 days, and 7 years for any corresponding reported incidents caught on tape.

Proposed camera placements can be found on the accompanying Security Site Plan. Areas that will be covered by the CCTV system include:

- Entryways to the property, cultivation areas, and Processing facility (once built),
- Perimeter of the cultivation/canopy areas
- The monitoring, recording station and security room (within the existing home),
- Interior of the Processing Facility (once built).

# Stormwater Management Plan

#### **Purpose**

The Stormwater Management Plan is intended to ensure that commercial cannabis projects do not have any negative impacts on the environment through stormwater runoff and any water the project may discharge. Particularly this section mandates necessary stormwater mitigation measures to help reduce the transportation of sediment, prevent erosion problems, and maintain the quality of nearby surface water. This Stormwater Management Plan will detail the mitigation measures proposed to be implemented as well as the monitoring and reporting procedures that will ensure the stormwater mitigation measures are well maintained throughout the life of the project. This section works in accordance with the Erosion and Sediment Control site plan (Sheet 2).

#### A. Stormwater Management, Erosion and Sediment Control Measures

Ancient Lake Farms plans to add three 200 s.f. storage sheds and a 5,000 s.f. Processing facility in phase 2, for a total proposed 5,600 s.f. of impervious footprint. This total impervious footprint is roughly .006% of the area of the project parcels. The 1-acre outdoor canopy area itself will not increase the impervious surface area of the Project Parcels as it is proposed as outdoor, and therefore should not increase the volume of runoff from the Project Site. As mandated by the development standards in Article 27, Section (at), all development, cultivation, pesticides, and fertilizers will be located a minimum of 100 feet from all surface water, which includes the unnamed seasonal creeks identified on the property. As depicted on the Topographic Map site plan (Sheet 7), the slope of the cultivation area is relatively level, with small gradual slopes. Water on the properties mostly flow from the north to the south, as there is a gradual slope into Gunther Creek just south of the properties (See Sheet 2). Displayed is a minimum of 100 feet of naturally existing vegetated buffer area between project areas and watercourses, which will naturally filter any runoff, removing sediment, nutrients, and pesticides that become mobilized and allow it to infiltrate into the soil/groundwater basin. There are proposed straw wattles completely surrounding the outdoor cultivation to prevent sediment movement from the cultivation site to natural surface water. At the county's request or if site characteristics change over the course of time, the applicant will extend straw wattles to further mitigate for sediment movement.

#### **B. Erosion and Sediment Control Measures**

ALF will maintain the existing natural vegetated buffer around the proposed cultivation operation as needed. Native vegetation around the proposed cultivation operation will be maintained as a permanent erosion and sediment control measures. A native grass seed mixture and certified weed-free straw mulch will be applied to all areas of the exposed soil.

Straw wattles will be installed around the entire cultivation area and maintained throughout the proposed cultivation operation. If areas of concentrated stormwater runoff begin to develop, additional erosion and sediment control measures will be implemented to protect those areas and their outfalls. ALF Site Managers will conduct monthly monitoring inspections to confirm that this operation is in compliance with California Water Code.

- A visual monitoring inspection program will be implemented to check the following, at a minimum frequency of before each rain event.
  - All water conveyance areas and storm water drainage areas to identify any spills, leaks, or uncontrolled pollutant sources.
  - O All BMPs to identify whether they have been properly implemented and remain in adequate condition.
  - Any storm water storage or containment areas and ensure the maintenance of adequate freeboard.
- Apply straw mulch to the cultivation area after the conclusion of the growing season to prevent erosion.
- All BPTC Measures will be completed by November 15th.
- If areas of concentrated stormwater runoff begin to develop, additional erosion and sediment control measures will be implemented to protect those areas and their outfalls.

During Construction these BMP's will be implemented and maintained throughout the life of the project:

Straw wattles will be installed and maintained throughout the entire life of the proposed cultivation operation along the western borders of the outdoor cultivation.

Piled topsoil that is exposed will be covered with a tarp while not in use to maintain sediment control and reduce dust impacts.

Gravel will be placed along all access roads to reduce exposed dirt.

#### C. Regulatory Compliance (Stormwater)

Ancient Lake Farms proposed cannabis cultivation operation is enrolled for coverage under the State Water Resources Control Board's Cannabis General Order (Order No. WQ 2019-0001-DWQ) as a Tier 1 Low Risk Discharger (WDID: 5S17CC421876). A Site Management Plan was developed for the proposed commercial cannabis cultivation operation and has been reviewed and approved by the Central Valley Water Board's Cannabis Cultivation Waste Discharge Regulatory Program.

Stormwater runoff from the proposed cultivation operation will not discharge into any Lake County maintained drainage system. The access to the cultivation site does not contain any

bridges or culverts, however the access to the existing residence (on a separate APN from the Cultivation property) does contain culverts. The BMP's along with the erosion and sediment control measures, the proposed project will not increase the volume of stormwater discharges from the Project Property onto adjacent properties or flood elevations downstream.

#### D. Monitoring and Reporting Program

The following are the Monitoring and Reporting Requirements for ALF's proposed cannabis cultivation operation from the Cannabis General Order:

- Winterization Measures Implementation
- Tier Status Confirmation
- Third Party Identification (if applicable)
- Nitrogen Application (Monthly and Total Annual)

An Annual Report shall be submitted to the State Water Quality Control Board by March 1<sup>st</sup> of each year. The Annual Report shall include the following:

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

A letter transmitting the annual report shall accompany each report. The letter shall summarize the number and severity of violations found during the reporting period, and actions taken or planned to correct the violations and prevent future violations. Ancient Lake Farms will adhere to all monitoring requirements to maintain compliance with the Cannabis General Order, and upon request submit a copy of the Annual Monitoring Report to the County.

#### E. Cannabis Vegetative Material Waste / Growing Medium Management

Based on the methods of growing done by ALF, it is estimated that 1,000 lbs. of vegetative waste will be generated. However, in order to reduce waste and recycle nutrients, all vegetative waste will either be buried in the composting area found within the cultivation area or chipped and stored to be used when soil cover is needed. All solid waste will be stored in bins with secure fitting lids until being disposed of at a Lake County Integrated Waste Management facility, at least once a week during the cultivation season. The closest Lake County Integrated Waste Management facility to the proposed cultivation operation is the Eastlake Landfill.

ALF proposes to plant above ground, where additional growing medium will be purchased from Nor-Cal Soil Builders as needed between seasons. Fertilizers as well as recycled vegetative waste that has been composted on site will be used to supplement the existing soil on site.

# Water Use Management Plan

#### **Purpose**

This Water Use Management Plan is designed to conserve Lake County's water resources and to ensure that the proposed cultivation operation's water use practices are in compliance with applicable County, State, and Federal regulations at all times. This Water Use Management Plan focuses on designing a water efficient delivery system and irrigation practices, and the appropriate and accurate monitoring and reporting of water use practices. The Water Use Plan aims to provide details for all the sources of water on the property, how it will be used and its amount of use.

#### A. Water Sources and Irrigation

Water is provided to ALF's proposed cultivation operation from a groundwater well, located at Latitude 38.808661 and Longitude -122.488317 (via google maps imagery). The well will pump water to the four 2,500-gallon water tanks (one being steel/fiber glass) through aboveground irrigation lines. Water will then go to the plants using highly efficient drip irrigation. Water lines are a combination of PVC piping, black poly tubing, and drip lines. The water storage tanks will be equipped with float valves to prevent overflow and runoff of irrigation water when full. Additionally, safety valves will be equipped to supply lines in case the flow of water needs to be stopped in an emergency situation. A meter compliant with Title 23, Division 3, Chapter 2.7 of the California Code of Regulations will be attached to the water system and all data will be recorded and maintained for a 5-year duration minimum. All records will be made available to all interested state and county departments upon request.

#### **B.** Projected Water Use

Due to the federally illegal status of cannabis, the industry is far behind other crops in water use studies. While few exist, it is probable that the resulting water use numbers from these studies are only accurate to a certain degree, particularly as water use is extremely dependent upon the natural conditions of the location where cultivation is taking place. According to Bauer et al. (2015), a study of water use in Northern California determined cannabis plants used approximately 22.7 liters per day, which translates to roughly 5.99 gallons per day. It has also been documented through CalCannabis's Final Programmatic Environmental Impact Report that outdoor cannabis uses between 25-35 inches per year, based on Hammon et al. (2015). The PEIR also stated that it is comparable to other crops such as corn, tomatoes, alfalfa, and hops. However, projecting cannabis water use in line with that of tomatoes (20 inches per year) would likely be the absolute minimum as the few water use studies published have been more in line with 25-35 inches per year.

It is almost a certainty that water use will differ between projects, based on soil type, irrigation method, and growing method, among other factors, however, through well monitoring these estimates can be replaced with much more robust numbers in the future. For the purposes of this Water Use Management Plan, the following table below will display water use estimates based on range of probable outcomes starting at 20 inches (a probable best case scenario) up to 35 inches (a probable worst case scenario) of water per year and a total canopy area of 43,560 ft<sup>2</sup>. The average (27.5 inches) being the projected water use total for this project until further data is captured.

Total Project Water Use Estimates*								
Inches	Gallons	Acre Feet						
20-25 (best case scenario)	543,084 678,855	1.67 2.08						
25-30 (likely scenario)	678,855 814,626	2.08 2.5						
30-35 (worst case scenario)	814,626 950,397	2.5 2.92						
Estimated Water Use Total for Project*								
27.5 (average)	746,740*	2.29						

Monthly Water Use Estimates								
April	May	June	July	Aug	Sept	Oct	Nov	
46,498	89,621	108,449	123,949	123,949	123,949	89,621	30,999	
.14	.29	.33	.38	.38	.38	.29	.08	

<sup>\*</sup>Estimates based on data from available published studies and are unlikely to reflect the true water use of this project. Actual water use could be lower or higher depending on conditions and methods of irrigation. By utilizing micro drip irrigation, water use is more likely to be lower than the estimated water use total.

#### Methodology:

Approximately 27,154 gallons of water equals one inch of water per year for one acre (USGS). To achieve the total amount of gallons, the gallons per inch per acre was multiplied by the number of inches. A foot being 12 inches, therefore, one-acre foot of water would be approximately 325,850 gallons of water, with 27.5 inches yielding a value of 746,740 gallons per acre for outdoor.

#### C. Water Conservation

In accordance with the State Water Quality Control Board Cannabis General Order, ALF will implement the following BMPs and mitigation techniques to help conserve water over the duration of the project.

- A visual monitoring inspection program will be implemented to check the following, at a minimum frequency of before each rain event.
  - O All water conveyance areas and storm water drainage areas to identify any spills, leaks, or uncontrolled pollutant sources.
- ALF will use drip lines for water delivery to the plants in order to efficiently and effectively irrigate.
- The areas inside the cultivation area without ground cover will be applied with mulch to conserve soil moisture within the grow area.
- An inline water meter will be installed on the dripline supply line as well as the water storage tanks in order to accurately determine where and how much water is being used. Staff will record and log all data in order to be reviewed annually to see the projects water use.