

**FROSTY OAKS**  
**PROPERTY MANAGEMENT PLAN**

**Project Location**

1027 Watertrough Rd. and  
21822 & 21496 Meriann Dr.  
Clearlake Oaks, CA 95423

**Project Parcels**

Lake County APN's  
628-080-04  
628-090-03  
628-100-10

**Project Manager's:**

Stuart Spivack

November 9, 2020

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## **Official Authorization**

Frosty Oaks 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 1027 Watertrough Road, Clearlake Oaks, 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.

## **Project Description**

Frosty Oaks is seeking a major use permit to obtain one A-Type 3 “Outdoor” License and a Type 13 Self-Transport Distribution License from the County of Lake Community Development Department to allow a total of 28,012 s.f. of commercial cannabis canopy area, with a total of 28,252 s.f. of cultivation area at 1027 Watertrough Road, Clearlake Oaks, CA on Lake County APN 628-100-10. This project is being proposed with 2 contiguous properties (APNS: 628-080-04 and 628-090-03) in order to allow collocation/cluster of permits, however as currently proposed the entire project will only take place on APN 628-100-10. Any mention of the project parcel or project property beyond this point will only describe APN 628-100-10 unless specifically noted. The proposed cultivation method is via an above grade organic soil mixture in hardware cloth planting beds with drip irrigation systems outdoors in full direct sunlight with no light deprivation. The total 28,012 s.f. of mature cannabis cultivation will take place within 5 designated areas inside of the fenced in area (Please see site plans). Proposed ancillary facilities include a 120 s.f. storage shed, a 120 s.f. security shed, four 5,000-gallon water storage tanks and two 2,500-gallon water storage tanks (one of which will be steel or fiberglass). Agricultural chemicals associated with cannabis cultivation (fertilizers, pesticides, and petroleum products) will be stored within the secure proposed 120 ft<sup>2</sup> storage area.

The property owner Mr. Stuart Spivack, is also the applicant and project manager for Frosty Oaks. The total acreage of all of three parcels combined is 68 acres. The project parcel is zoned RL-WW; Rural Land- Waterway. The parcel lies within the 8-digit HU (Sub basin): North Fork Cache Creek, and Grizzly Creek-North Fork Cache Creek Watershed (HUC10). There are a few unnamed intermittent Class III watercourses indicated on the NHD map layer utilized by California resource agencies via CNDDDB and the Federal NWI map layer, which flow from the north end of the project parcel to the south end of the parcel into Indian Creek. A portion of Indian Creek flows from the East end of the project parcel, towards the southwest end just along the edge of the southern property boundary (See site plans). The cannabis cultivation area will be setback a minimum of 100 feet from the top of the bank of any bodies of water. There will be no surface water diversions with this project.

Frosty Oaks 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 at a limited quantity 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 120 s.f. storage area.

The proposed cultivation operation will utilize drip irrigation systems, to conserve water resources. The well near the Northeast parcel boundary will be pumped underground to the water storage tanks proposed near the cultivation site in the eastern portion of the property. From the well to the storage tanks Frosty Oaks will utilize underground water lines, which are a combination of PVC piping and black poly tubing. Water use is projected to be approximately 600,247 gallons per year (please see Water Use Section for methodology). The property has a large ridge on the north end of the property, which tapers down to almost 0% slope on the southern end of the property. Due to the slope of the land and clear direction of water flow into Indian Creek Straw wattles are proposed around the entire southern portion of the cultivation area to filter sediment from stormwater as it flows off the property. 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 August 26, 2019, prepared by NCRM Inc. P.O Box 435 Calpella, CA 95418. The results of the Biological Assessment are included in the submitted application package.

A Cultural Resource Evaluation for the parcel was completed on April 23, 2019 prepared by Dr. John Parker, RPA. During the field inspection, one prehistoric site and several isolated artifacts were discovered and recorded. All proposed cannabis farming activities appear to be planned outside of the observed boundaries and it is recommended that the site be avoided with any further expansion. Please see attached study for full results and recommendations. Frosty Oaks 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.

Minimal electricity will be required as the project proposes only outdoor cultivation. The proposed project is proposing a backup generator to be used in emergency situations when electricity cannot be supplied by PG&E. 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 Frosty Oaks is currently being operated and managed by Dillon McEwin, who is the chief cultivator. All of Frosty Oaks future employees, 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 is Mr. Stuart Spivack, who will be available to contact 24 hours a day, seven days a week, including holidays.

The Project Property is currently accessed by the easement road Meriann Drive which enters the property from the southern property boundary. The project proposes to install an access driveway off of the easement road, roughly 100' in length further onto the property. This cultivation access driveway will be approximately 100' in length to the entrance of the cultivation site near the Processing Facility, with an approximate slope of 0%. At minimum the driveway will be 12 ft wide with 14 ft of unobstructed horizontal clearance and 15 feet of unobstructed vertical clearance, but if commercial standards must be enforced on this project the access driveway can be widened to 20' after the County Building Inspection. 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 if needed, however under a length of 300' driveways are not generally required to provide this. Turnouts are not proposed due to the access driveway being 100 feet in length, however if needed, turnouts will be at minimum 12 feet wide and 30 ft long, with a minimum 25 ft taper on each end, roughly every 400 ft (see Site plan for a visual). A gate will be installed with an entrance of 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 Frosty Oaks 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 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 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 Frosty Oaks is applying for a Type-13 Self-Transport Distribution license, there will be a dedicated loading zone in the front of the cultivation area. Frosty Oaks 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.

# 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.

## **A. Project Contact and Community Liaison**

The Community Liaison/Emergency Contact for Frosty Oaks cultivation operation is Mr. Dillon McEwin. Mr. McEwin's cell phone number is (714) 605-2291 and his email address is dillonmcewin@aol.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 Contact 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 Contact to resolve any operating problems before reaching out to any County Officials/Staff.

When an odor complaint is received, the Community Liaison/Emergency Contact 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. 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.

## **B. Emission Sources**

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: Frosty Oaks proposed cannabis cultivation operation will be connected to the electricity through PG&E. The proposed project is proposing a backup generator to be used in emergency situations when electricity cannot be supplied by PG&E.

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, 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 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 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 120 ft<sup>2</sup> storage area. Petroleum products are stored under cover and in State of California-approved containers with secondary containment and will be stored within the processing facility. Sanitation products are stored in their manufacturer's original containers/packaging within a secure cabinet inside the processing facility. Spill containment and cleanup equipment will be maintained within the secure Processing Facility 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.

- 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 around the property to try masking off-site odor drift. The 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 Frosty Oaks supervisor to ensure each one is running as efficiently as possible. All carbon filters/air scrubbers will be replaced each quarter. Frosty Oaks 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 the managerial staff will review all documentation pertaining to the performance of the equipment to determine if there are any ways 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 intermittent streams and season wetlands found on the property. All fertilizers/nutrients and pesticides, when not in use, are stored in their manufacturer's original containers/packaging and undercover inside the secure storage area. Petroleum products are stored under cover and in State of California-approved containers with secondary containment and will be stored within the Processing Facility. Sanitation products are stored in their manufacturer's original containers/packaging within a secure cabinet inside the Processing Facility. Spill containment and cleanup equipment will also be maintained within the Processing Facility. No effluent is expected to be produced by the proposed cultivation operation. All additional equipment will be stored within the processing facility.

## **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 processing facility. Isopropyl alcohol will be kept on-site in the processing facility to ensure proper sanitation after equipment use and to maintain cleanliness within the on-site facilities. The proposed processing facility will include ADA standard restrooms available for all employees.

### **C. 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 12 ft. wide gravel roadway with 30' long by 12' wide turnouts approximately every 400 ft. (Please see 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.

### **D. Planting Schedule**

Assuming the Major Use Permit is approved prior to March 2021, Outdoor cultivation of the proposed 28,012 s.f. of canopy area will begin cultivation in March/April and end in October/November. All growing methods at this time are proposed above ground in hardware cloth planting beds.

# 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 currently accessed by the easement road Meriann Drive which enters the property from the southern property boundary. The project proposes to install an access driveway off of the easement road, roughly 100' in length further onto the property. This cultivation access driveway will be approximately 100' in length to the entrance of the Processing Facility, with an approximate slope of 0%. At minimum the driveway will be 12 ft wide with 14 ft of unobstructed horizontal clearance and 15 feet of unobstructed vertical clearance, but due to commercial standards the access driveway can be widened to 20' after the County Building Inspection. 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 100 feet in length, however if needed, turnouts will be at minimum 12 feet wide and 30 ft long, with a minimum 25 ft taper on each end, roughly every 400 ft (see Site plan for a visual). A gate will be installed with an entrance of 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 Frosty Oaks 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 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 cultivation area. The cultivation area fence will be a 6-foot tall woven galvanized wire fence around the proposed outdoor cultivation area with a Privacy Screen mesh on the fences to screen the cultivation area from public view. 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 Frosty Oaks supervisor on duty immediately if/when suspicious activity is detected. The Frosty Oaks 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 Frosty Oaks 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 the projects 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 Frosty Oaks 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. Staff are required to store personal items in the onsite break room located in the Processing Facility. Frosty Oaks 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 the 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 Frosty Oaks cultivation operation is Mr. Dillon McEwin. Mr. McEwin's cell phone number is (714) 605-2291 and his email address is dillonmcewin@aol.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. Frosty Oaks 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 Frosty Oaks Annual Performance Review Report.

#### **D. Video Surveillance**

Frosty Oaks 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 Processing Facility, in a secured office, where video from the CCTV system is digitally recorded. Frosty Oaks 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,
- Perimeter of the cultivation/canopy areas
- The monitoring, recording station and security room (within the Processing Facility),
- Interior of the Processing Facility.

# 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**

Frosty Oaks plans to add a 120 s.f. storage shed, which will increase the impervious footprint by less than 0.004% of the area of the 68 acres between all of the project's parcels. 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 are the unnamed intermittent streams and Indian Creek identified on the property. As depicted on the Topographic Map site plan, the slope of the cultivation area is almost completely flat, with minimal slopes. Waterflow from runoff is to the south as there is a gradual slope in that direction with Indian Creek being the drainage point. 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 surrounding the southern portion of 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**

Frosty Oaks 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 on the southern side of the 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. Frosty Oaks 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.
  - 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 southern borders of the cultivation area.
- 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)**

Frosty Oaks 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 2 Low Risk Discharger. 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 project site does a few culverts along the easement Meriann Drive; however, it is past the proposed cultivation access area. 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 Frosty Oaks 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. Frosty Oaks 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 Frosty Oaks, it is estimated that 2,100 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.

Frosty Oaks 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 Frosty Oaks proposed cultivation operation from a groundwater well, located at Latitude 39.040544 and Longitude -122.499590 (via google maps imagery). The well will pump water to five 5,000-gallon and two 2,500-gallon steel/fiber glass water tanks through underground 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 28,012 ft<sup>2</sup>.

<b>Total Project Water Use Estimates*</b>		
Inches	Gallons	Acre Feet
20-25 (best case scenario)	480,197 - - - 600,247	1.67 - - - 2.08
25-30 (likely scenario)	600,247 - - - 720,296	2.08 - - - 2.5
30-35 (worst case scenario)	720,296 - - - 840,346	2.5 - - - 2.91
<b>Estimated Water Use Total for Project*</b>		
<b>25"</b>	<b>600,247*</b>	<b>2.08</b>

<b>Monthly Water Use Estimates</b>											
Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
50,021	50,021	50,021	50,021	50,021	50,021	50,021	50,021	50,021	50,021	50,021	50,021
.17	.17	.17	.17	.17	.17	.17	.17	.17	.17	.17	.17

\*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, Frosty Oaks 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.
  - All water conveyance areas and storm water drainage areas to identify any spills, leaks, or uncontrolled pollutant sources.
- 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.