RIVERIDGE FARMS, LLC
APNS: 033-271-021
CULTIVATION AND OPERATIONS MANUAL
HUMBOLDT COUNTY, CA

COMMERCIAL CANNABIS
CULTIVATION FACILITIES

PREPARED FOR:

Revised September 2024
April 2023

Commercial Cannabis Cultivation Facilities
APN: 033-271-021

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1. PROJECT SUMMARY

1.1. Project Objective

RiveRidge Farms, LLC is proposing to permit new cannabis cultivation activities in accordance with the county of Humboldt's (County) Commercial Cannabis Land Use Ordinance (CCLUO AKA 2.0). The existing operation includes 8,855 sq. ft. of mixed light cultivation that has been approved under PLN-10993. The proposed project includes a Special Permit for new mixed light cultivation for 34,705 sq. ft., a cannabis support facility for on and off site processing, distribution, a non-flammable extraction and Conditional Use Permit a farm based retail sales.

Water for proposed cultivation is to be sourced from a proposed 950,000-gallon rainwater collection pond and will be supplemented by the existing permitted well on-site. Electrical is provided by a combination of proposed solar and the existing PG&E.

1.2. Site Description

The Project is located at 701 Milky Way in the Piercy area (APN: 033-271-021). The southern portion of the property runs parallel to State Hwy 271, the north and east property line is approximately 250-300 feet from US Hwy 101.

1.3. Land Use

The subject property has a General Plan designation of Rural Agriculture (RA) as identified by the Humboldt County General Plan and is zoned Unclassified. Land uses surrounding the parcel are comprised of Rural Agriculture. The surrounding parcels are zoned Unclassified (U).

1.4. State and Local Compliance

1.4.1. Department of Cannabis Control – CalCannabis

RiveRidge, LLC currently holds a small mixed light state license and will continue to comply with California Department of Cannabis Control (DCC) cannabis laws, licensing, and regulations.

1.4.2. State Water Resources Control Board – Water Rights

Water for irrigation purposes will be primarily sourced from a proposed rain catchment pond. The site is enrolled with the State Water Resources Control Board (WDID:1_12CC416515) for coverage as a Tier 1 Low Risk Site for Order WQ 2017-0023-DWQ. A Site Management Plan (SMP) has been developed by Timberland Resources Consulting.

1.4.3. State Water Resources Control Board and North Coast Regional Water Quality Control Board – Water Quality

The applicant is enrolled for coverage as a Tier 1, Low Risk under the SWRCB General Order WQ 2019-0001-DWQ *General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Dischargers of Waste Associated with Cannabis Cultivation Activities* Order"). The purpose of the SWRCB Order is to implement the requirements for waste discharges associated with cannabis cultivation as described in SWRCB's *Cannabis Cultivation Policy – Principles and Guidelines for Cannabis Cultivation* ("Policy"). Prior to the commencement of cultivation operations, a Site Management Plan will be developed for the property to describe how the discharger is complying with the applicable Best Practicable Treatment or Control (BPTC) Measures listed in Attachment A of the Order/Policy.

The Tier 1, Low Risk discharger status reflects current operations that disturb less than one acre. The applicant's proposal will keep all cultivation activities out of riparian setbacks to maintain Low Risk status with SWRCB.

1.4.4. Humboldt County Building Department

Upon project approval, all necessary building permits will be obtained from the Humboldt County Building Department for all existing/proposed structures and supporting infrastructure.

1.4.5. Cal Fire

No conversion of timberland or tree removal is proposed as a part of this project. The subject property is located within a State Responsibility Area (SRA) for fire protection. Proposed improvements include management of trees and vegetation around existing structures to maintain the required 100-foot defensible space. All structures on the property meet the 30-foot SRA setback requirement from property lines. The project proposes a designated fire turn-around and pull-out area for emergency vehicles and one (1) 2,500-gallon and one (1) 5,000-gallon water tank dedicated to SRA emergency response with risers to SRA specifications will be installed for firefighting purposes.

1.4.6. California Department of Fish and Wildlife

A Lake and Streambed Alteration Agreement has been executed (Notification # 1600-2019-0707-R1) for one point of diversion. Water is only diverted as part of the riparian right for domestic purposes only. No water diversion is proposed for the proposed cultivation for this parcel's application.

1.4.7. Cultural Resources

If buried archaeological or historical resources are encountered during construction or cultivation activities, the applicant or contractor shall call all work in the immediate area to halt temporarily, and a qualified archaeologist is to be contacted to evaluate the materials. Prehistoric materials may include obsidian or chert flakes, tools, locally darkened midden soils, ground stone artifacts, dietary bone, and human burials. If human burial is found during construction, state law requires that the County Coroner be contacted immediately. If the remains are found to be those of a Native American, the California Native American Heritage Commission will then be contacted by the coroner to determine appropriate treatment of the remains. The applicant is ultimately responsible for ensuring compliance with this condition.

2. CANNABIS CULTIVATION AND ACTIVITIES

2.1.1. Propagation and Initial Transplant

The applicants propose to propagate juvenile plants on-site from mother plants within the proposed ancillary nursery. The 35'x100' (3,500 sq. ft.) nursery will only be used for on-site function that allows RiveRidge Farms to start and boost a variety of strains to account for changes in market demand. Mother plants will remain in the vegetative stage solely for propagation. Cuttings will be sampled from the mother plants and rooted into a growing medium (e.g., oasis cubes) to produce clones. The clones will then be transferred to the vegetative nursery area, and after 2-3 weeks will be transplanted into one-gallon pots, or similar. The juvenile plants will be irrigated using hand watering methods, and after three weeks they will be transferred and transplanted into their final location where they will continue their vegetative cycle and eventually flower. Any use of lights will be powered by the proposed solar. Low wattage lighting will be used to keep plants in a vegetative state. Nursery greenhouses will be equipped with blackout systems. Blackout systems shield greenhouses to prevent the escape of light and are designed to prevent visibility from neighboring properties between sunset and sunrise. Artificial light(s) used to enhance plant growth will be set on timers that activate ½-hour

before sunset, daily. Prior to sunset each day, black out tarps are automatedly or manually pulled over the mixed light greenhouses and nursery to prevent all light from escaping. The blackout tarps are constructed out of 2-ply 10-millimeter plastic with internal threading for shear strength.

2.1.2. Mixed light cultivation Plan

The project proposes the expansion of the 8,855 sq. ft. of existing mixed light cultivation to a total of 43,560 sq. ft. of mixed light cultivation. Cultivation is proposed to occur in a variety of sized greenhouses that are ideal mixed light cultivation use and light deprivation techniques. When air flow is required, the sides of the greenhouses will be rolled up allowing for a natural breeze. When additional airflow is required exhaust fans will be used to enhance the airflow in the summer months. Greenhouses will be equipped with blackout systems. Blackout systems shield greenhouses to prevent the escape of light and are designed to prevent visibility from neighboring properties between sunset and sunrise. Artificial light(s) used to enhance plant growth will be set on timers that activate ½-hour before sunset, daily. Prior to sunset each day, black out tarps are automatedly or manually pulled over the mixed light greenhouses and nursery to prevent all light from escaping. The blackout tarps are constructed out of 2-ply 10-millimeter plastic with internal threading for shear strength.

2.1.3. Irrigation Plan and Schedule

Irrigation and fertigation of plants will occur using drip irrigation. While most irrigation will be applied via an automatic drip system, some irrigation and fertigation may be more efficiently managed via hand watering, which allows for daily inspection of each plant by the cultivator. Daily inspection of each plant allows the cultivator to tailor irrigation and nutrient application based on the needs of each individual plant. The monthly Cultivation Schedule in Appendix B details the irrigation activities associated with all cultivation.

2.1.4. Processing (Harvesting, Drying and Trimming)

Plants that are ready for harvest will have their flowering branches removed and placed in either the existing 1,200 sq. ft. ag exempt structure or the proposed drying and curing area or in the proposed 50'x100' two-story drying building (Appendix A), where they will be suspended and left to dry for approximately one to three weeks. The dried flowers will be bucked into manageable buds and transported to the processing facility.

RiveRidge will also operate as a commercial processor of bulk cannabis in the proposed 50'x100' commercial building. Deliveries of bulk cannabis from off-site, client farms will be received, logged, and tracked through all stages of the drying and trimming process in conformance with chain of custody requirements established by the client farm, State of California, and the County of Humboldt. The finished product is stored in the processed materials room before being transported to a licensed distribution facility. The waste product, or 'trim', is collected and placed into bins to be weighed, labeled, and sealed. Trim taken to the licensed manufacturing facility or composted on site at the designated location.

2.2. Distribution

2.2.1 DISTRIBUTION SUMMARY

RiveRidge distribution will receive cannabis product (cannabis flower, biomass, trim, post-processed material) at prescheduled times from licensed distributors. Product will enter the site and be unloaded in the secure delivery bay and be taken to the distribution office to begin the evaluation process with the responsible party present.

2.2.2 DISTRIBUTION FACILITY

The facility will generally operate as:

1. Product Evaluation, Tracking and Sorting
2. Vault for Quarantine
3. Packaging, Processing, and Quality Control
4. Vault for Finish Product
5. Secure exchange and transport

2.2.3 PRODUCT EVALUATION, TRACKING AND SORTING

RiveRidge distribution office will receive and evaluate the incoming product. The product will be received by a Distribution Associate and will be logged into RiveRidge's inventory and tracking system. The distribution associate will sort the product for quarantine based on the expected final produced product. Sorted product will be weighed, labeled, and sent to either the Humidor or the Cold Intake areas (20° or 34°) for quarantine.

2.2.4 VAULT FOR QUARANTINE

RiveRidge will have different quarantine areas- Humidor and Cold Intake. The Humidor is for dried products and is equipped with ventilation systems to control temperature and humidity.

Each quarantine area will secure and store product while RiveRidge sends the required batches of product to a licensed 3rd party testing lab. When the results have been approved by the testing lab, RiveRidge Distribution will transfer vaulted product to RiveRidge processing or manufacturing.

2.2.5 PACKING, PROCESSING AND QUALITY CONTROL.

The packing, processing, and quality control phase will begin when either flowered product needs processed and packaged, or once RiveRidge Manufacturing has finished processing of product. RiveRidge Distribution will be transferred the manufactured product and will be begin packing and processing product into the desired finished product. Packaging will meet the California standards for cannabis products. All packaging will be certified child-resistant and tamper evident. Labeling will include a "Primary Panel" and the "Information Panel." The California THC label will be clearly printed and featured on packaging. Products will not be marketed, alluring, or attractive to children and will be sent to the finished product vault in their final form.

2.2.6 VAULT FOR DISTRIBUTION

The finished vault for RiveRidge distribution will record and hold all products that have been received from RiveRidge manufacturing areas or processed and packaged from the RiveRidge distribution. The vault will require ventilation systems to control temperature and humidity.

2.2.7 SECURE EXCHANGE AND TRANSPORT

The final stage of the RiveRidge distribution is secure exchange and transport. Transportation of products may be handled by RiveRidge or a licensed transporter depending on market demands. Prior to moving products from the vault distribution area to another physical location, a transport manifest will be created. This distribution document is required for each movement of packages and will be recorded in the RiveRidge inventory and tracking system.

The Director of Distribution or associate *is* responsible for performing a physical inventory of all products being transported, ensuring that the physical inventory reconciles with the transport manifest. The distribution document records the current location and status of the packages, such as "in-transit" or "received." The manifest contains details such as:

- Time of departure
- Time of arrival
- Product and product count
- Route to be travelled
- Origin and destination address

2.3. MANUFACTURING SUMMARY

RiveRidge intends to manufacture cannabis concentrates using non-volatile solvent-based extraction methods. To ensure that all cannabis products manufactured at the processing facility are done so in a manner that is compliant with local and state ordinances.

The Manufacturing facility generally operates as follows:

1. Holding and Staging
2. Pre-Processing
3. Primary Extraction
4. Post Processing

2.3.1 HOLDING AND STAGING

RiveRidge Manufacturing begins with the transfer of product from the distribution and has been logged and checked into the holding and staging area. Product will be prepared to begin pre-processing. Once the product has completed all the manufacturing operations, the product will return to the holding and staging area to be transferred back to distribution.

2.3.2 PRE-PROCESSING

All manufacturing operations will follow California Building Codes, local regulations, and State Licensing requirements. RiveRidge manufacturing pre-processing methods generally included preparation of product, cleaning, and sterilized equipment, grinding and staging for manufacturing activities. Pre-processing prep is the stage where the product is broken down, remaining stems are removed, and organized into manageable amounts to be processed.

2.3.3 PRIMARY EXTRACTION

RiveRidge will only use non-flammable manufacturing. Non-flammable manufacturing is using solvents in the manufacturing process that included cold water, heat press, lipid, or other non-chemical extraction methods to make bubble hash, kief, rosin, and cannabis-infused lipids. Ethanol, alcohol, and Co2-based solvents extraction to make cannabis concentrates/oils are also a proposed extraction technique.

Ethanol will be a solvent used by RiveRidge for nonvolatile manufacturing. The process involves the product/biomass mixed in an ethanol solution. The use of a centrifuge to agitate the mixture while the biomass is contained in a filter bag. A second option is for the plant material to be loaded into an extraction tank with cooled ethanol drawn into the tank via a vacuum. The ethanol is recirculated over the plant material to improve efficiency. After the extraction process the ethanol can be recovered by rotary evaporator system under vacuum and low heat to recover and reuse the ethanol.

All extraction activities and facilities will be compliant with the California Building Code, California Department Public Health, the State Fire – Fire Marshall, and State and Local requirements.

2.3.4 Post Processing

Post processing occurs after the primary extraction and is intended to prepare cannabis manufacture products for retail products. This can include removing unwanted solvents, further refinement of crude oils through distillation, or reintroduction of flavor. When post processing is complete, the product will be transferred back to the manufacturing holding and storage area.

2.4 Farm Based Retail

RiveRidge is proposing to provide a farm-based retail services to the public. The retail services will be provided in a portion of the proposed 50'x100' mixed use commercial building. The proposed building is located directly off Hwy 271. The Hwy 271 is paved with a centerline stripe and will require an encroachment permit from Cal-Trans.

Retail services will have limited hours that do not exceed 9:00 am to 6:00 pm. Parking and restroom facilities will be provided and comply with the Americans with Disabilities Act (ADA). Any agricultural exempt structures on-site will not be opened to the public.

RiveRidge will only sell products produced on the RiveRidge premises. Cannabis products produced off-site are prohibited to be sold.

2.5 Employee plan

The applicant is an "agricultural employer" as defined in the Alatorre-Zenovich-Dunlap-Berman Agricultural Labor Relations Act of 1975 (Part 3.5 of Division 2 of the Labor Code), and complies with all applicable federal, state, and local laws and regulations governing California Agricultural Employers.

2.5.1 Staffing Requirements

At full build out RiveRidge will have 24 employees during a peak shift. This includes both full-time and seasonal labor. Below is a breakdown of the estimate number of employees during peak shifts for all aspects of the proposed operations:

Activity	Full-time	Seasonal Labor	Total
Mixed Light Cultivation	4	4	8
Processing	1	10	11
Distribution	1	1	2
Manufacturing	1	-	1
Farm-based Retail	1	1	2
Total	8	17	24

2.5.2 Employee Training and Safety

On-site cultivation activities will be performed by employees trained on each aspect of the procedure, including cultivation/harvesting techniques, use of pruning tools, and proper application/storage of pesticides and fertilizers, and manufacturing processes. As per Pesticide compliance, training must occur before a new employee begins to work in the field. Safe move to state all training occurs before the worker begins. All cultivation staff will be provided with proper hand, eye, body and respiratory

Personal Protective Equipment (PPE). Access to the on-site cultivation and drying facilities will be limited to authorized and trained staff. All employees will be trained on proper safety procedures including fire safety, use of PPE, proper hand washing guidelines, and emergency protocol. Contact information for the local fire department, Cal Fire, Humboldt County Sheriff and Poison Control as well as the Agent in Charge will be posted at the employee restroom. Each employee is provided with a written copy of emergency procedures and contact information. The material safety data sheets are kept on site and accessible to employees.

2.5.3 Toilet and Handwashing Facilities

The proposed commercial building will include at least one (1) ADA-compliant restroom, including a working flush toilet and a sink with hot and cold running water. Anti-bacterial liquid soap and hand towels will be available. Employees will work at a distance no greater than 2,000 ft from the restroom facility. 5-gallon bottle drinking water will be brought on site for employees and retail customers. Portable toilets will be used on the upper site during the cultivation season.

2.5.4 On-Site Housing

There is a residential structure on the project site. The residence is not proposed as part of cultivation operations and will not be associated with the proposed project.

2.5.5 Parking Plan

Parking is proposed to be located near the cultivation area and at the commercial building location. (Appendix A).

2.5.6 Facility Security

The portion of the property that is accessed from Milky Way Road and has an existing entry gate that is to remain locked at all times. Cultivation facilities (greenhouses, storage sheds, nursery) will only be accessible through the locked gate. Access to this area is limited to employees and approved personnel including agency staff, consultants, and distributors.

The commercial building located off Hwy 271 will have an entry gate that will remain locked and closed during non-business hours. A proposed perimeter fence is a standard 6-foot chain link fencing feet. The fence will not contain any signage. The distribution office onsite will include a monitoring area for digital surveillance viewing and recording system with cameras installed. The recording system will have 24-hour monitoring and a minimum of 45-day archiving of video. Cameras will have a minimum resolution of 1280 x 720 pixels. The storage device and camera will be transmission control protocol (TCP) capable of being accessed through the internet. Areas that have limited access will have a door and lock that meets commercial grade standards. The project site will have low intensity exterior lighting to illuminate the entrances and will include a small number of motions activated security lights. All lighting will be designed and located so that direct rays are confined to the property. Security cameras will be installed at the main access gates and at entrances to the facilities and will include an alarm system.

2.5.7 Hours of Operation

Activities associated with cultivation in the greenhouses (watering, transplanting, and harvesting) generally occur during daylight hours. All other activities such as harvesting and drying typically occur no earlier than 8 AM and extend no later than 8 PM. Farm based retail hours are limited from 9am -6 pm. Overnight or off shift work may be on a limited basis due to unknown variables that can occur during a cultivation cycle.

3 ENVIRONMENT

3.1 WATER SOURCE, STORAGE, AND PROJECTED USE

The annual water demand is estimated to be approximately 560,000 gallons. Water for the cultivation is estimated at 500,000 gallons (11.5 gal/sf/year) with an additional 60,000 gallons used as part of the cannabis support facility. The water source for the proposal is a 950,000-gallon rain catchment pond. Table 1 outlines the estimated irrigation water usage for cultivation during a typical year. Variables specific to cultivated cannabis strains may have a slight effect on water use.

Table 1: Estimated Annual Irrigation Water Usage (gallons)

	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
Cultivation	10k	15k	25k	30k	55k	75k	80k	85k	70k	35k	10k	10k	**500,000**
Processing	1k	1k	1k	1k	1k	1k	1k	1k	1k	1k	1k	1k	**12,000**
Distribution	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Manufacturing	2k	2k	2k	2k	2k	2k	2k	2k	2k	2k	2k	2k	**24,000**
Farm-Based Retail	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Support Facilities (Bathroom and handwashing)	2k	2k	2k	2k	2k	2k	2k	2k	2k	2k	2k	2k	**24,000**
Total Estimated Annual Use	15k	20k	40k	60k	75k	100k	100k	115k	95k	35k	15k	15k	**560,000**

3.1.1 RAINWATER CATCHMENT

The estimated amount of available rainwater was based on the existing and proposed capture area and historic rainfall data. Rainfall data was sourced from PRISM Climate Group (PRISM Climate Data, 2023), which provides site-specific average annual rainfall data based on topography and historic precipitation values. Based on rainfall values from 2000-2022, the average rainfall for the project area is 64.5 inches (5.37 ft.). The lowest rainfall year was 2013 and totaled 23.35 inches (1.94 ft.).

Rainwater catchment is proposed to be implemented are comprised of three (3) potential catchment surfaces: the proposed pond and drying building. Refer to Table 2 for details of the catchment areas and potential harvest volumes during average and record-low precipitation years.

Table 2: Rainwater catchment surface details and harvest volume potential during an average year.

Catchment Surface	Catchment Area (sf)	Average Annual Rainfall (in)	Low Rainfall year (in)	Potential Harvest Volume (gal) in average year	Potential Harvest Volume (gal) in low rainfall
<P>Rain Catchment Pond	16,000	64.5	23.3	643,500	232,400
<P> 50'x100' Drying Building	5,000	64.5	23.3	201,100	72,600
<P> Lower Site Parking Area	10,760	64.5	23.3	430,000	156,300

<P> 13,000 sq. ft. of greenhouse	13,000	64.5	23.3	522,000	188,000
Total	44,760			**1,796,600**	**649,300**

On an average rainfall year, an estimated 1,796,600 gallons of potential rainwater can be harvested from proposed structure and developed areas. During the driest year on recent record, an estimated 649,300 gallons of potential rainwater can be harvested from proposed structure and developed areas. During both an average rainfall year and a record-low rainfall year, there is an excess of rainwater catchment potential to fulfill 100 percent of irrigation demands for the proposed project (Table 3).

3.1.2 Supplemental Well

The existing well is permitted through the Department of Water Resources (WCR2020-009348) and the Humboldt County Department of Health and Human Services (19/20-0793). The well will be used to supplement the rain catchment pond as a secondary source for the cannabis operations. The well is not proposed to use more than the 360,000 gallons that was approved in the existing 1.0 project (PLN-10993). Once the project is fully constructed the use of this well will assist RiveRidge in filling the pond during years with lower rainfall and to serve as a backup in case of emergencies like water pump failure, ensuring a secondary water source is available. This size of the pond's proposed capacity will provide additional storage that will allow RiveRidge to rely less on the supplemental well, while also offering additional benefits, including emergency fire water, drought resilience of over 2-3 years, and a potential domestic water source for landscaping and fruit trees.

3.2 Site Drainage, Runoff, and Erosion Control

The applicant has enrolled with the State Water Resources Control Board (SWRCB) for coverage under the General Order. Upon approval, a Site Management Plan (SMP) for the proposed expansion will be developed; the SMP will detail erosion control and sediment capture measures, as well as road maintenance and runoff activities.

3.2.1 Stormwater Management Plan

The proposed infrastructure totals approximately 70,000 sq. ft of increase onsite impermeable surfaces. This 70,000 sq. ft. of impermeable surface comprises approximately 11% percent of the 583,700-sq. ft. (13.4-acre) parcel. Drainage and stormwater runoff will be addressed in the Erosion and Sediment Control Plan, which will be submitted to the Humboldt County Planning and Building Department with the Grading Permit application. Stormwater management for the remainder of the property will follow the Humboldt County Low Impact Development Stormwater Manual and will also be addressed in the Stie Management Plan (SMP), which will also include recommendations for road network maintenance. In addition, the proposed development is located greater than 100-feet from any watercourses, providing a sufficient buffer to prevent potential sediment or nutrient delivery.

3.2.2 Erosion Control

The SMP and the Grading Permit will include erosion and sediment control best practicable treatment controls (BPTCs) designed to prevent, contain, and reduce sources of sediment. Additionally, the SMP will include site-specific corrective actions to ensure property maintenance and erosion control.

3.3 Watershed and Habitat Protection

All proposed cultivation activities will be set back at least 100-ft from any wetlands, drainages and watercourses on site, greater than the 50-ft setback required by the County's Streamside Management Ordinance. These setbacks should provide a suitable buffer between the cultivation

operation and habitat. Adherence to the Site Management Plan will ensure that erosion control and sediment capture BPTC measures are in place to prohibit water quality degradation of the nearby river. Any grading and earthwork activities will be conducted by a licensed contractor in accordance with approved grading permits.

Additionally, the applicant will follow all recommendations in the Biological Resources Assessment, which has been prepared for the property by Naiad Biological Consulting (2021).

3.4 Invasive Vegetative Species Control Plan

Once proposed cultivation activities commence, the cultivation area will be monitored for invasive species. If invasive species are located, hand tools (shovels, weed wrenches, trowels, or hand saws) may be used to remove them. The exact rate and method of invasive species removal will be determined based on the species identified. The areas of disturbance shall be surveyed and maintained twice each year, at a minimum, as part of the invasive species control plan.

The following is a partial list of websites to be used for proper identification and treatment:

1. https://calflora.org//
2. https://plants.usda.gov/java/
3. https://www.cal-ipc.org/
4. https://www.cal-ipc.org/solutions/
5. http://www.rareplants.cnps.org/
6. https://www.wildlife.ca.gov/Conservation/Plants#22064102-california-native-plant-information
7. http://ucjeps.berkeley.edu/
8. http://wetland-plants.usace.army.mil/nwpl_static/v33/home/home.html
9. https://www.fws.gov/invasives/partnerships.html

3.5 Materials Management Plan

Cultivation, harvesting, and drying shall be performed by employees trained on each aspect of the procedure, including cultivation, and harvesting techniques, the use of pruning tools, and proper application/storage of pesticides/ and fertilizers. All cultivation and processing staff are provided with proper hand, eye, body, and respiratory Personal Protective Equipment (PPE). Access to the onsite cultivation, drying and processing facilities are limited to authorized and trained staff. The mixing of fertilizers in small storage tanks is solely conducted in a designated area (to be determined) where the mix will not enter surface waters. For young plants, the mix is applied via watering wand and mature plants are fertigated at agronomic rates by drip emitters or hand watering methods. Spent soil is amended and reused as needed. The application of any agricultural chemical products will be conducted according to the manufacturer's recommendation.

Employees are trained in usage and handling procedures of associated equipment and cleaning procedures. Chemicals and hazardous materials are only used with equipment as recommended by manufacturers. Cleaning will occur regularly with instructions based on the manufacturer's recommendations. All cleaning materials will be put away and stored properly within secondary containment when not in use and hazardous containers will be properly disposed of. Additionally, if there are any spills on site, there will be a spill kit with sorbent pads that will be accessible.

On-site inventory is kept for all chemicals. Chemicals are used and stored based on manufacturer's recommendations and requirements. Any materials required for the use of chemicals will be provided to employees. The material safety data sheets (MSDS) are kept on site and accessible to employees.

All hazardous waste will be stored within secondary containment. Additionally, a log will be kept in order to keep the volume of hazardous waste accounted for. Fertilizers and pesticides are being stored in a separate location from petroleum products. The products will be located within secondary containment in a storage shed. No rodenticides will be used on site. At the end of the season, any unused liquid products are stored in secondary containment and will be applied the following year. Before unused products are stored at the end of the season, an employee will take inventory of the volumes and products. Additionally, all waste will be properly disposed of off-site and in the correct facility. All trash, empty product containers, and recycling are hauled off-site bi-weekly to nearest licensed waste management facility.

Appropriate BPTC measures are being utilized when storing, handling, mixing, applying, and disposing of all fertilizers, pesticides, herbicides, rodenticides, or any other hazardous materials. Each year an inventory is conducted prior to the beginning of the grow season and necessary products are delivered to the site as needed.

3.6 Soils Management Plan

The applicant is proposing to plant all cultivation in raised beds or pots in the greenhouse structures. The growing medium will be reused and reamended each year until it is required to be removed from the site and sent to the correct disposal station. If stored on site during the wet season, any growing medium spoils piles will be in a flat area outside of riparian setbacks and winterized, likely with a tarp underneath the pile and straw wattles located around the pile to prevent leachate from entering surface waters. Potential spent soils will be properly disposed of off-site at an appropriate facility.

3.7 Hazardous Waste Statement

There are no hazardous materials mapped onsite. The site has been historically utilized for residential property and agriculture. A search of the EnviroSTOR database shows no GeoTracker Cleanup Programs on-site.

3.8 Energy Plan

Power will be sourced from the existing PG&E drop and a proposed solar array located on the 50'x100' proposed commercial building. An upgrade in service to PG&E will be applied for give the project more resiliency and flexibility in the future. The service upgrade is not required for the proposal. A generator will remain onsite for backup emergency use.

3.9 Waste Management

3.9.1 Cultivation

Organic cultivation-related waste, including root balls, branches, and leaves will be hauled off site to a green waste management facility as needed. All cultivation waste weight is recorded and logged for compliance purposes. Trash and recycling from cannabis operations, including empty soil or fertilizer bags, liquid fertilizer bottles, cultivation supplies, etc., will be taken to the nearest waste management facility as needed.

3.9.2 Sewage Disposal Plan

The applicant has a proposed ADA bathroom in the commercial building. A portable toilet will be brought on-site during peak operation season to accommodate for the increase demand.

4 PRODUCT MANAGEMENT

4.1 PRODUCT TESTING AND LABELING

Samples will be selected from individual harvested cannabis strains and tested by a licensed third-party lab in accordance with State and local standards. The finished product is labeled and will include tracking ID's provided by the California Cannabis Track-and-Trace (CCTT) METRC system.

4.2 PRODUCT INVENTORY AND TRACKING

The applicants will follow all regulations and requirements set by the CCTT-METRC system. After approval of state licenses related to the proposed cultivation, the applicants will request credentials and order unique identifiers (UIDs) which will be assigned to each immature lot, flowering plant, and distinct cannabis product.

4.3 TRANSPORTATION AND DISTRIBUTION

Transportation will be handled by a licensed transporter/distributor in accordance with State and Local regulations. All merchantable products will be distributed through licensed commercial cannabis dispensaries. The CCTT-METRC system will be used for all transactions with distributors or transporters.

APPENDIX A: PRISM RAINFALL DATA

PRISM day definition: 24 hours ending at 1200 UTC on the day shown	
Grid Cell Interpolation: Off	
Time series generated: 2023-Apr-28	
Details: http://www.prism.oregonstate.edu/documents/PRISM_datasets.pdf	
Date	ppt (inches)
2000	57.21
2001	62.12
2002	72.91
2003	72.38
2004	58.41
2005	86.18
2006	76.36
2007	46.08
2008	49.91
2009	54.94
2010	91.13
2011	61.88
2012	96.2
2013	23.35
2014	69.2
2015	50.01
2016	96.96
2017	87.89
2018	57.51
2019	78.5
2020	35.48
2021	57.24
2022	41.98

APPENDIX B: CULTIVATION ACTIVITIES SCHEDULE

Item	Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Drainage, Runoff, and Erosion Control	Winterization (storage of pots/greenhouse covers)												
	Temporary Erosion Control BMP's (straw, seeding, fiber rolls, etc.)												
	Road maintenance												
	Cover soil beds												
Irrigation Activities	Irrigation of juvenile plants/clones												
	Irrigation of flowering plants												
Mixed Light Cultivation and Harvest Schedule	Mixed Light / Light Dep Cycle 1												
	Mixed Light / Light Dep Cycle 2												
	Mixed Light / Light Dep Cycle 3												
	Mixed Light / Light Dep Cycle 4												
	Mixed Light / Light Dep Cycle 5												
	Harvest activities												
	Light deprivation: Greenhouses are covered with blackout covers												
Drying and Processing	Drying Activities												
	Trimming Activities												

APPENDIX C: REFERENCES

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