



**RGI Farms Cultivation and Operations Plan
Humboldt County APN: 522-024-004
Humboldt County Permit No. PLN-12750**

Project Description

Existing cannabis cultivation: 8,475 SQ FT of Mixed Light Cultivation with supplemental artificial lighting, and 7000 SQ FT of Outdoor Cultivation no artificial lighting/light deprivation only.

Water

Water Source

Water source is a permitted groundwater well put in by Fisch Drilling of Hydesville. Well Permit and Well Completion Report on File with county.

Water Storage

Water currently used for cultivation is stored on the property in a 5000-gallon tank, a 1500-gallon tank, and 2 of the 1000-gallon tanks. The pond or any diverted surface water are not being used for irrigation or domestic use. The 20,000- and 10,000-gallon bladders have been removed.

Upgrades to water storage include increasing the number of 3000-gallon tanks to eight for a total of 32,000 gallons of onsite tank storage.

I propose the flat area above GH #5 where the 1000-gallon tank is positioned to be the site for 10 more 5000-gallon tanks in the future.

Irrigation Plan

Irrigation will be gravity fed to the cultivation sites. Dosatron fertilizer injectors will be at the greenhouses and outdoor sites to accurately supply the pressure compensated drip emitters an even metered nutrient solution.

Water Usage

The following is a description of estimated yearly water usage in gallons per month.

January: 0

February: 0

March: 0

April: 500 gallons

May: 1500 gallons

June: 3000 gallons

July: 6500 gallons

August: 12,400 gallons to possibly 18,600 gallons

Sept: 18,600 gallons

Oct: 15,500 gallons

Nov: 0

Dec: 0

Site Drainage

Runoff and Erosion Control

Greenhouse cultivation areas are graded nearly flat with a slope of 1-3%. Runoff is controlled and kept to a minimum with proper construction techniques, irrigation and drainage practices in the greenhouse and cultivation areas. All soil used for cultivation is stored over winter inside greenhouses and covered to control erosion. All bare ground around the cultivation area is covered with straw and seeded with native grass species as needed to reduce erosion. Straw waddles are used to control the effects of erosion from winter water flows. All roads will be maintained in accordance with the PWA Road Manual and State water Board Cannabis General Order policy requirements.

Watershed and Habitat Protection

All cultivation areas observe and exceed the mandatory setbacks from all watersheds. Organic nutrients certified by CCOF, California Certified Organic Farmers, are used for cultivation. The IPM used is Humtea an organic compost tea containing beneficial bacteria and fungi. No pesticides or fungicides will be needed.

All fertilizers and IPM products will be stored in secondary containers inside a designated nutrient and IPM product storage area. Only approved products shall be used in accordance with each product's directions.

The bulk of nonnative soils onsite have already been present in the cultivation site areas for multiple seasons and are amended annually. Only small amounts of supplemental nonnative soils are brought to the site each year, if at all. Any new soils brought in are used immediately. Only small amounts of soil are stored onsite in an enclosure or in accordance with Caltrans Construction Manual Stockpile Management WM-3 guidelines. At the conclusion of each season's activities, the site is prepared for winter. All soils are amended and reused. In the event of there being waste soil or spent growing medium, it will be transported off-site and disposed of at a licensed waste facility. Any waste soil or media shall be stored in accordance with Caltrans WM-3 until it can be transported off-site.

Cultivation Activities

Mixed Light Cultivation greenhouse activities will use natural sunlight with light deprivation techniques inside greenhouse structures. There will only be one crop cycle in the greenhouses. Greenhouse #2 (GH #2) will be harvested first and dried in GH #2. The shortened growing cycle in greenhouses is to provide drying and processing space for the greenhouse and outdoor crop when they are ready.

Plants are propagated onsite with the use of natural and supplemental lighting in the immature plant greenhouse. Plants will be directly transplanted into the greenhouses and outdoor cultivation areas.

The greenhouses have pervious floors, bare soil, and are in compliance with Humboldt County code section 314-43.132. They do not contain perimeter foundations, do not have improved floors and do not have improved footpaths.

All greenhouses and operations comply with International Dark Sky Association Standards. The greenhouse will be covered with blackout tarps to prevent nocturnal light emission. No artificial light will be emitted from sunset to sunrise or be visible from any neighboring properties.

Onsite Relocation

On the site map there remains Outdoor #2 (OD#2) and OD #6 as outdoor cultivation sites. OD #3 is proposed to be a 30 by 50 square foot immature plant/seed production greenhouse. OD #3 is a 1 to 3% sloped area and is a former skid road.

OD #1, OD #4, OD #5 were proposed but not used due to limitations in allowable outdoor square footage and they were not ideal sites that would meet Best Management Guidelines. OD #1 was behind GH #2 and has returned to native grass which bordered it on all sides,

OD #4 was a site removed from the list because of its slope being close to 20% or greater. OD #5 was a flat along the main road toward the east of the pond. OD #5 was removed from the proposal list in order to meet State Water Board Cannabis General Order criteria. OD #7 was proposed but would potentially narrow the main fire road going to the top of the ridge. It would also exceed the 7000 square foot allowable outdoor cultivation limit.

Schedule of cultivation activities

Month

January: No activities.

February: No activities.

March: No activities.

April: Site preparation, plant propagation, IPM activities.

May: Getting plants established, planting greenhouses, IPM activities.

June: Greenhouse cultivation stage, planting outdoor, vegetative stage.

July: Greenhouse flowering stage, outdoor vegetative, IPM activities.

August: Greenhouse flowering stage, outdoor vegetative, IPM activities.

September: Greenhouses at harvest stage, outdoor entering flowering stage.

October: Greenhouse processing, outdoor is harvested, site preparation and clean up.

November: No activities

December: No activities

Power Use

Seven Evergreen 250-watt solar panels, 26 Canadian Solar model CSP-250PX solar panels delivering 250 watts each, inverters for groundwater well pump and all five greenhouses, deep cycle lithium sealed batteries are Battle Born LiFePO4 from Reno, Nevada. Greenhouses #1, #3, and #4 will have four solar panels, a deep cycle Battle Born lithium sealed battery and inverter to power air circulation fans.

Greenhouse #2 will have six solar panels, an inverter and deep cycle Battle Born lithium sealed battery backup for extra air circulation fans during harvest for drying.

Greenhouse #5, the immature plant/ seed production greenhouse, will have LED lights at less than six watts/square foot, in accordance with the county ordinance, to keep immature plants from flowering. Greenhouse #5 will have seven solar panels, an inverter and deep cycle Battle Born lithium sealed battery backup.

The groundwater well pump will be powered by solar panels, an inverter and have back up deep cycle sealed Battle Born lithium sealed batteries.

The solar panels will provide ample power for each greenhouse and the groundwater well pump. The excess power will be stored in the batteries which easily will keep the batteries topped off to their maximum 100 amp/hours capacity.

Processing Plan

Cannabis will be harvested in GH #2 first. Greenhouse #2 will then be used to dry the cannabis. This high ceiling greenhouse is easy to control humidity using solar powered fans with battery backup during the nighttime. Next GH #3 and GH #4 are harvested and will be dried in GH #2. The dried cannabis will be processed in GH #3.

A new steel agricultural barn is proposed at the location of the tool trailer and office storage trailer which are to be removed. The exact location of the proposed agricultural barn will be determined in consultation with the civil engineer and Pacific Watershed Associates consultants.

The applicant reserves the right to, in the future, process offsite at a licensed 3rd party facility and/or processed onsite by a fully licensed mobile processing contractor and/or processing (harvest direct to extraction) and/or another processing method/approach that meets all industry, county, and state rules and guidelines.

Harvesting protocols will be established to ensure compliant harvesting, processing, and packaging of cannabis in accordance with rules and regulations of the CCLUO.

Great care is to be taken to maintain all work surfaces and equipment are kept in a clean and sanitary condition. Protocols to prevent contamination of cannabis product with mold or mildew are strictly followed. Curing takes place in a controlled environment. The finished product is then moved to a secure location.

Processing operations include the following Processing Practices:

- (1) Processing operations will be maintained in a clean and sanitary condition including all work surfaces and equipment.
- (2) Processing operations will implement protocols which prevent processing of mold and mildew growth on cannabis.

- (3) Persons handling cannabis in processing operations will have access to face masks, gloves and any other relevant PPE in good and operable condition as applicable to their job function.

Staff and Staff Screening Processes

No employees at this time. Operations are conducted by the applicant and family members only.

Days and Hours of Operation

The facility is not open to the public and will not accept visitors without a specific business purpose.

Hours of operation will be typically from 8:00 am to 7:00 pm. Commercial activities such as shipping and receiving will be limited to 8:00 am to 6:00 pm. Due to the remote location of the facility and the limited commercial activity window, there are to be no significant noise or traffic impacts upon the occupants of the neighboring properties.

Safety Practices

Cultivation and processing operations implement best practices to the highest degree possible. There are no employees at this time. If the operation chooses to include employees in the future it will comply with any other relevant county and state regulations where applicable.

Safe Drinking Water, Toilets and Sanitary Facilities

At all times there will be access to safe drinking water, toilets, and handwashing facilities in accordance with the requirements of all relevant regulations.

Drinking water is supplied by the permitted groundwater well.

A B+B portable toilets is currently onsite until a permitted Onsite Wastewater Treatment System (OWTS) can be installed. The portable toilet and hand washing facility will be used and maintained in accordance with the requirements of all relevant regulations.

Increased Road Use

Project activities will not present a significant increase in road use.

Onsite Parking: There is ample onsite parking at GH #2.

Onsite Housing: There is no onsite housing.

Security Plan

The cultivation site is on a private road behind three locked gates from the 3 Creeks Side and three locked gates from the Willow Creek side with controlled access. Motion detectors and security lights will be checked for operation after the snow clears. There is no winter access at this elevation of 3,500 feet. Upon permit approval a security service company may be contracted to patrol. The cultivation site is not visible from any road or visible from any of the surrounding neighbors. The cultivation site does not draw attention.