

ATTACHMENT 1B

Cultivation and Operations Plan

APPS:11816

Revised CMMLUO SITE/OPERATIONS OVERVIEW

APN: 221-201-007



Project Description: The applicant is seeking approval under the Humboldt County CMMLUO to allow continued **outdoor cannabis cultivation up to 11,600 ft²** (as described Interim Permit) and development of appurtenant support infrastructure/facilities on the subject parcel.

The applicant acknowledges that the commercial cannabis activity approval being sought under the aforementioned conditional use permit, pursuant to CMMLUO, is subject to compliance with all other applicable Humboldt County zoning and land use regulations, as well as other applicable provisions of the Humboldt County Code and applicable state laws. Determination of compliance will require multi-agency review of proposed activity/development described in the aforementioned permit and, may also require site inspections by personnel from various governmental agencies.

If development and/or activities on the subject parcel are determined, for some reason, to be out of compliance with any applicable State or County code, regulation or policy, a compliance agreement can be formulated between the applicant and relevant agency or agencies, which includes a compliance timeline whereby operations may continue under a "Provisional Clearance or Permit" and corrective action is initiated to achieve compliance under agreed upon terms.

Parcel Information: The subject parcel (APN: 221-201-007) It is approximately 41 acres and zoned FR-B-5(40)

Topography/Landscape: The subject parcel sets on a south- west facing hillside. Development on the parcel is situated on very gently sloped ground on the south-southeast section of the parcel with the remaining portion to the north-northwest covered by native tree species.

Surface Water Features: The Mattole River borders the south-west edge of the subject parcel with miscellaneous unnamed seasonal Class III watercourses located in the south portion of the parcel.

Roads/Stream Crossings/Easements: The subject parcel is accessed via Dutyville Road. Interior roads are classified as permanent (year-round usage) and seasonal. The main interior road is a permanent rocked road accessing the residence and cultivation area. Seasonal roads are adequately surfaced but exhibit some signs of concentrated runoff at two locations. Assessment of interior road conditions was completed as part of a Water Resources Protection Plan (WRPP) included with this submission. The assessment identified road deficiencies and corrective measures are prescribed in the "Mitigation Report" within the attached WRPP.

Three stream crossings are located on the subject parcel. Corrective measures addressing each are described in the "Mitigation Report" section of the WRPP included.

Easements related to the subject parcel are described in the deed; a copy of which is contained in the County file for this project - APPS: 11816

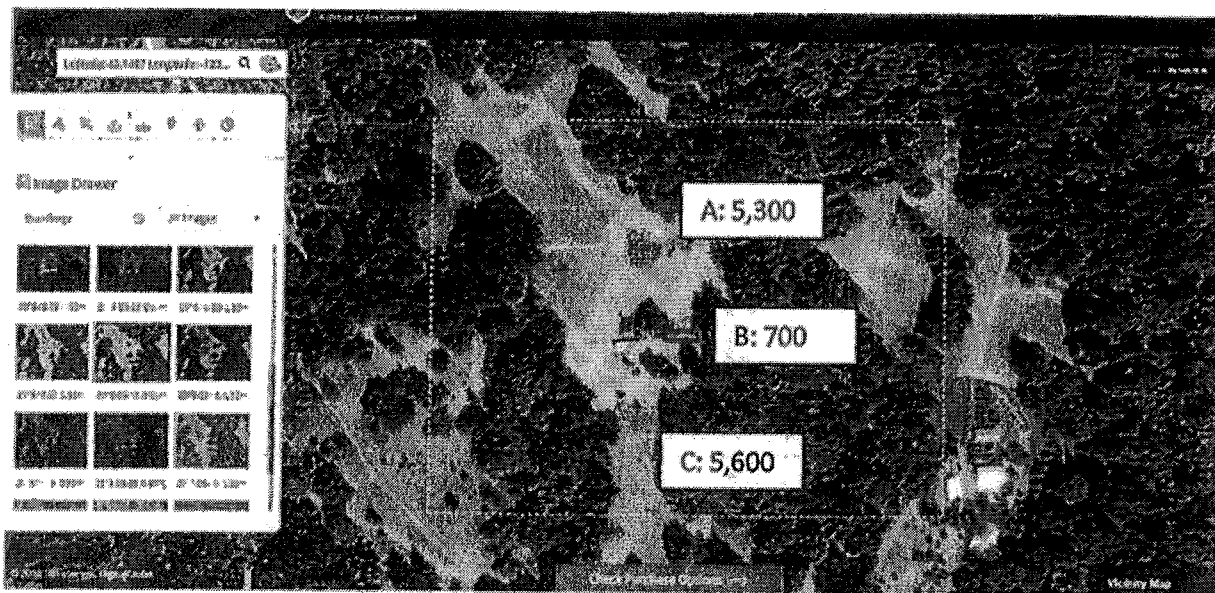
Utilities: Domestic and Irrigation water are sourced from a permitted water well and CDFW approved diversion(s) along the aforementioned class III watercourse. A copy of the 1600 Agreement is included with this submission. A conventional septic tank and leach-field serve the mobile home. Electric power is supplied from PG&E

Water Supply: Currently Domestic and Irrigation Water are sourced from a permitted well and the aforementioned diversion(s). All state and local documentation demonstrating the legal authorization for the ongoing use of the existing water source and/or other potential water sources shall be provided when available.

Water Storage: Currently consists of eight (13) 5,000-gallon HDPE tanks totaling approximately 65,000 gallons. Water storage will be adjusted as required by state and local requirements applicable to the activity/development proposed under the aforementioned conditional use permit application.

Other Structures/Facilities: The residence/dry barn (60' x 80') was constructed in 2017 and is used in part for drying plants and seasonal occupancy. A mobile home (20' x 40') was installed on the subject parcel in 1968 and is used for seasonal living quarters and domestic storage.

Figure 1: Evidence of existing on 9/18/2015. Cultivation totals 11,600 square feet outdoor.



Proposed cultivation consolidates square footage from areas B & C above with cultivation in area A to total 11,600 ft² of outdoor cultivation. The proposed square footage is distributed amongst three (3) greenhouses (totaling 11,550 ft²) shown on the site plan having the following measurements:

(2) – 35' x 120' = 8,400 ft²

(1) – 35' x 90' = 3,150 ft²

A propagation area (1,200 ft²) is proposed in conjunction with the aforementioned greenhouses.

The **relocation/consolidation** of cultivation areas B & C to a single site (encompassing area A) designed specifically for the proper placement of greenhouses is an **environmentally superior** cultivation option when weighed against the continuance of the cultivation configuration shown in Figure 1 above.

Area C shown on the figure above, sets on a hillside above a class III watercourse. No protective provisions were incorporated into this cultivation to address runoff/sediment transport. Continued trail usage to operate and service this cultivation area presents the potential for runoff and discharge into downslope watercourses. Abandonment of this cultivation area, which is situated near the apex of a ridge system, will increase an important wildlife corridor positioned between cool-weather resting sites and nearby water resources. Given the engineered design and location (natural grassland) proposed for cultivation relocation/consolidation, continuance of cultivation in the haphazardly placed cultivation area C is no longer warranted.

Cultivation occurring in area B shown above, was minimal and easily incorporated into the proposed relocation/consolidation area. A residence/barn structure currently occupies this area.

Remediation of Relocated Cultivation Area

All cultivation related materials shall be removed from area C (proposed for relocation/consolidation). This area shall remain undisturbed and provide significant ecological benefit over continued cultivation therein.

A review of historical aerial imagery going back 14 years, shows that the cultivation area C, currently proposed for relocation was sited within a narrow grassland clearing. There was **no tree removal and/or grading** employed to establish and operate this cultivation area.

Under these specific conditions, removal and proper disposal of all cultivation related materials will result in restoration of the landscape topography to pre-cultivation conditions. Once cultivation related materials are removed and properly disposed the area shall be remain undisturbed allowing for surrounding vegetation and wildlife to repopulate this area.

When assessed during the development of the WRPP, cultivation areas were found to be well maintained with no existing erosion features. The WRPP prescribed preventative measures to maintain favorable conditions. Preventative measures prescribed in the WRPP do not preclude the need for Cultivation Areas or other manmade features on the subject parcel to be brought into compliance with all applicable state and local grading, excavation and erosion/sediment control regulations and requirements.

Peak Water Demand: The projected peak water demand to maintain plant growth during the warm summer months is approximately 36,000 gallons per month. The “Monthly Water Use” Table below shows projected water use throughout the growing season. An inline totalizing flow meter shall be installed so that Water Use can be monitored and recorded in accordance with state requirements.

January-March: No Water Use

	<i>Cultivation 11,600 ft²</i>
<i>April</i>	<i>9,300</i>
<i>May</i>	<i>21,600</i>
<i>June</i>	<i>28,800</i>
<i>July</i>	<i>36,000</i>
<i>August</i>	<i>36,000</i>
<i>September</i>	<i>25,200</i>
<i>October</i>	<i>7,200</i>

Irrigation Method(s): Irrigation is accomplished by hand watering at agronomic rates. Water delivery throughout the system is carefully monitored on a regular basis to ensure optimal application and responsible water use. Mulch is carefully placed as a top dressing to optimize soil water retention.

Irrigation Runoff/Erosion control: Irrigation runoff from cultivation areas is minimized by carefully controlled hand watering; which prevents overwatering or residual discharge of nutrient solutions outside of the “targeted” root zone. In the unlikely event that residual discharge did occur, it would be absorbed upon contact with permeable soil surrounding the cultivation area. Cultivation activities are limited to the immediate area surrounding cultivation areas and conducted so materials are kept confined. The ground surface within and around the cultivation areas is formed and managed year-round to prevent any movement of entrained constituents such as fine sediment, fertilizer or other organic particles beyond the cultivation area.

Watershed Protection: The Cultivation Areas on the subject parcel meet applicable setback requirements to watercourses, riparian zones or wetlands (see site plan). Sheet flow of rainwater or transport of cultivation byproducts over permeable, gently sloped soils in and around the cultivation area is unlikely. Vegetative buffers have been maintained at natural slope around the entire perimeter of cleared/developed area. **Watershed protection** will be ensured by adherence to measures prescribed in the Water Resources Protection Plan (WDID: 1B16404CHUM)) developed specifically for this parcel by Timberland Resource Consultants under Regional Water Quality Control Board WDR Order # R1-2015-0023 enrollment requirements. Included with this submittal is a signed copy of Appendix A, “Enrollment Notice of Intent”.

Once enrolled under R1-2015-0023, participants are required to engage in ongoing monitoring, reporting and maintenance including periodic site inspections and reviews of operational practices to ensure regulatory requirements related to the following listed items are being met:

<i>Site maintenance, erosion control, and drainage features</i>	<i>Stream crossing maintenance</i>
<i>Riparian and wetland protection and management</i>	<i>Spoils management</i>
<i>Water storage and use</i>	<i>Irrigation runoff</i>
<i>Fertilizers and soil amendments</i>	<i>Pesticides and herbicides</i>
<i>Petroleum products and other chemicals</i>	<i>Cultivation-related wastes</i>
<i>Refuse and human waste</i>	

Additionally, participants ensure that management measures and controls are effectively protecting water resources, and that any newly developing problems representing a water quality concern are identified and corrected quickly.

Upon completion of seasonal cultivation, cover crops are planted for soil management/protection and areas surrounding cultivated sites are sown with grass seed to stabilize surface soil over winter.

Black-out tarps shall be employed to prevent light spillage from propagation greenhouse any time lights are in use from 1 hour prior to sunset through 30 minutes following sunrise.

Fertilizers, Pesticides, other Regulated products:

List and describe machinery and equipment used for cultivation and associated activities.

fans, dehumidifier,

Describe equipment service and maintenance; including where it is done.

n/a

List and describe compressed gases, cleaners, solvents and sanitizers used- indicate amounts normally stored and how/where they are stored.

Regular non-toxic household cleaners in original domestic-use containers and 1 quart rubbing alcohol stored on shelves in the Ag barn.

Fertilizers/Soil Amendments. Products are normally obtained and brought to the site at the start of the season. Mixing of products takes place near the point of use and if there is any products no used upon start-up they are stored in the Fert Storage Shed in original containers/packaging atop pallets.

The applicant acknowledges that the storage and/or use of certain materials in specified volumes and/or weights will be subject to regulation/inspection through **Humboldt County Division of Environmental Health CUPA** and may require: submittal of inventories for those materials, documentation of emergency and training procedures, maintenance of hazardous waste disposal records, obtaining an EPA generator ID number and be subject to **ongoing site inspections**.

Cultivation Related Wastes: Cultivation related wastes are sorted such that compostable materials are recycled/composted onsite within a small area equipped with perimeter and top containment to prevent unwanted movement of materials due to weather conditions or animals/pests. Other materials, unsuitable for composting, are stored in conventional lid trash containers along with domestic garbage and hauled to an approved transfer station/disposal facility as needed.

If necessary, exhausted soil is removed from cultivation beds and carefully mixed and spread over native soils on level ground at select locations to initiate microbial reconditioning and prevent unwanted constituent migration. Spent growth medium containing inorganic substances such as perlite, will be stored in weatherproof containers and hauled to an approved waste facility as needed.

Human Waste: Restroom facilities in the mobile-home/residence are located in close proximity to cultivation areas. A conventional septic tank and leach-field system serves the residence.

Cultivation Operations/Practices: Applicant anticipates two harvests during the grow season by use of light dep greenhouses. Up to three (3) individuals residing at the premises, in addition to the applicant may carry out operational activities.

January	Monitor culverts and evaluate site maintenance requirements, plant cover crops
February	Ongoing site and infrastructure maintenance
March	General site maintenance and garden preparation.
April	Establish clones/seeds seed inside propagation greenhouse – generator use to add 3 hours of light at sundown, black-out tarps placed to prevent light spill.
May	Transplant young plants to appropriate containers, continue garden preparation and site maintenance, generator use to add 3 hours light at days end, black out tarps cover to prevent light spill. Generator/light usage ends.
June	Full term plants set, initiate 1 st round light dep. – Ongoing garden care and site maintenance.
July	Ongoing garden care, monitor water supply, etc. Start harvest 1 st round light dep
August	Ongoing garden care, monitor water supply, etc., utilize generator to run fans to facilitate drying 7-10 days
September	General garden care
October	Begin full term harvest, set plants to dry – generator for fans and dehumidifier, site cleanup
November	start site preparations for winter.

Processing: Plants are periodically inspected to ensure that any indication of pests, molds, mildews or disease are immediately addressed and crop quality is maintained. When ready, individual plants are hand harvested, placed inside clean transport containers and immediately transferred to the Dry Barn where they are hung to dry. The drying area is cleaned thoroughly prior to placement of any harvested plants therein to minimize potential contaminant contact. Natural air flow may be supplemented with careful use of household fans/dehumidifiers to facilitate drying and maintain product quality control.

All equipment, surfaces and tools used in the harvesting/drying of cultivated product are used exclusively for that purpose. Equipment, surfaces and tools are visually inspected, washed and sanitized throughout the day. A Gentle detergent (such as *Simple Green* or equivalent) is used for cleaning followed by rinsing with potable water. Isopropyl Alcohol is applied as a sanitizer.

The applicant/operator is cognizant of potential mold and mildew problems associated with cultivation and product handling. Handwashing with potable water and soap occurs frequently throughout the day.

Any suspect plant matter which appears compromised for any reason is carefully removed and disposed of avoiding cross contaminant contact with other product, equipment or utensils. A separately designated green-waste stream is implemented to recycle plant waste.

The applicant/operator is well versed in the use/cleaning of equipment utilized throughout the operation. Cleaning materials are stored on shelves away from working surfaces. A fire extinguisher is readily available. The working space is kept clean and orderly.

Ample potable water for handwashing and restroom facilities are in close proximity to the Dry Barn. The restroom in the nearby residence is equipped with first aid kits and eye-wash kits for emergency use. Wastewater from the restroom is plumbed to a conventional septic system. Cultivation operations are carried out by no more than **three (3) individuals residing on the property**, not transient/temporary employees; therefore, the daily **wastewater flow** resulting will not increase above normal domestic usage and can be accommodated by the septic system described.

All processing/trimming is done off site by a licensed facility.

Security: Access to the parcel is restricted locking metal gates. The premises is normally occupied by the property owner and/or other individuals; there are also two dogs patrolling the premises.

Amendment to Cultivation & Operations Plan for APPS: 11816

Georgi Stoyanov

APN: 221-201-007

Water Source: Water for irrigation will be provided by (3) existing points of diversion. A rainwater catchment system will also be put in place to source water during the year. (4) 5,000-gallon tanks will be added for the storage of rainwater. The existing well will not be used until a qualified professional prepares a report determining the connectivity of the well to groundwater.

Megan Marruffo

From: Sara Maltzman <sara@northcoastcannacomp.com>
Sent: Friday, September 30, 2022 8:00 AM
To: Megan Marruffo
Subject: Re: Georgi Stoyanov - Apps# 11816 (Rainwater Catchment System Questions)

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Megan,

There will be gutters installed around the perimeter of the roof of the 32' x 84', 2 story, Ag Barn. (1-2) of the 5,000 gallon tanks will catch the run-off and the other (2) tanks will fill. Water will then be pumped up to Water Storage Area 4 and if need be to Areas 2 & 3.

Let me know what other details you would like. The installment of these gutters can hopefully happen before the wet months are in full effect. Fingers crossed.

Best,

Sara Maltzman
North Coast Cannabis Compliance
427 F Street; STE 214
Eureka, CA 95501
707.601.9621

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On Tue, Sep 27, 2022 at 8:35 AM Megan Marruffo <marruffom@lacoassociates.com> wrote:

Hi Sara! Thanks again for the additional information you sent. In addition to the status questions I sent yesterday, I'm reaching out regarding the proposed rainwater catchment system. We'll need additional details on the proposed system for the staff report. Specifically, how will the water be captured? Will it be captured from roofs of any on-site structures? If so, which specific structures?

Thank you,

Megan

Megan Marruffo

From: Sara Maltzman <sara@northcoastcannacomp.com>
Sent: Thursday, October 27, 2022 1:29 PM
To: Megan Marruffo
Subject: Re: Georgi Stoyanov - Apps# 11816 (Rainwater Catchment System Questions)

Hi Megan,

I am confirming that processing will happen on-site, in the Ag barn.

Thank you,

Sara Maltzman
North Coast Cannabis Compliance
427 F Street; STE 214
Eureka, CA 95501
707.601.9621

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On Fri, Sep 30, 2022 at 12:43 PM Megan Marruffo <marruffom@lacoassociates.com> wrote:

Whoops – please forgive me. I see the water use table with monthly usage in the Operations Plan. 😊

At this point, we're just needing clarification on whether processing occurs onsite or not. Page 7 of the Operations Plan notes that processing and trimming is done off-site; however, the Site Plan indicates that the first floor of the ag barn is used for "processing & harvest storage". Please clarify.

I think we're very close to wrapping this one up!

Thanks,
Megan