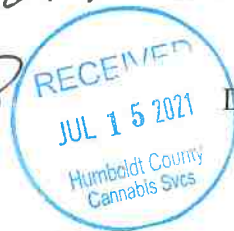


APN# 210-012-019-000

BOP, LLC #10822



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December 31, 2018

**CONFIDENTIAL**

## Initial Study for the Bridgeville Organics Pharms, LLC Cannabis Cultivation Project

### 1. INTRODUCTION

Bridgeville Organics Pharms, LLC or "Bridgeville Organics Pharms" (BOP), is a small cannabis farm owned by the Silva family. Operating under a 2018 Interim permit (APPE No: 10822), in 2018 this project involves 18,153 sq. ft. mixed-light and 4,184 sq. ft. of outdoor cultivation located in southeastern Humboldt County, on a parcel assessed by the County Recorder's Office as 70 acres (APN 210-012-019), the N $\frac{1}{2}$  of SW $\frac{1}{4}$  of Section 35, in Township 2 North, Range 4 East.

Informed by the Humboldt County Planning and Building Department's (HCPBD) Cannabis Service Division of the "possible occurrences of rare or endangered species on the subject parcel", the Silva's asked me to prepare a "biological resources assessment" for this project. Having consulted on northern California forest-wildlife matters since 1990, I specialize in biological impacts analysis for protected and sensitive species in compliance with state and federal law. A qualifying "Spotted Owl Expert" (SOE), my resume also demonstrates extensive knowledge of environmental regulations and policy.

Presented in the format of an Initial Study (IS), this report focuses on potential impacts of existing commercial agricultural activities pursuant to California Environmental Quality Act (CEQA) statute (Public Resources Code Section 21000 and following), the CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 and following), published court decisions interpreting CEQA, and locally adopted CEQA procedures. Streamlining investigation of potential significant environmental impacts, this report incorporates and builds upon (tiers) documentation for previously approved environmental permits, or in the process of final review.

Specifically, in addition to BOP's draft Cultivation Operations Plan, this report relies on a Water Resource Protection Plan (WRPP) that has been prepared by Pacific Watershed Associates (PWA), as well as permitting associated with California Department of Fish and Wildlife (CDFW) Lake and Streambed Alteration Agreements (LSAA). Minor clearings for cannabis cultivation conducted prior to January 1, 2016, have been addressed in report to California Department of Forestry and Fire Protection (Calfire) by Blair Forestry Consulting (BFC).

### 2. PROJECT DESCRIPTION

This project involves existing cannabis cultivation in a cleared "Non-forested Area". On the south bank of the Van Duzen River, across from its confluence with Hogback Creek, approximately 10 miles upstream from the small town of Bridgeville (6 miles east northeast as the crow flies), in addition to six greenhouses totaling 18,153 sq. ft. utilized for mixed-light cultivation, another 4,184 sq. ft. of outdoor cultivation will take place in "hoophouses" and open-air planter beds.

This property is off-the-grid and not associated with existing residential dwellings. As such, quiet gas generators will be used to power lights, fans, and for trimming as well as harvesting. Notably, mixed-light cultivation will be covered with tarps, adhering to Dark Sky Association guidelines. According to BOP's draft operation plan:

*"The property is located at the end of a four-mile dirt road accessing State hwy 36. The route includes three locked gates crossing six other neighbors' lands. The road is passable by all types of vehicles, including passenger vehicles, at all times of the year, other than during heavy rains."*

Compelled to reduce the size of operations in order to comply with existing rules, BOP was also required to upgrade access road stream crossings. Self-reporting water use, BOP's total yearly water consumption is estimated at 101,500 gallons, to be collected during the winter months, and used throughout the growing season. Diverted from a class 2, non-fish bearing, intermittent stream, no water will be diverted from this stream after March 15. Supplemented if necessary, by a permitted well, BOP proposes to store 95,700 gallons water in 26 on-site plastic poly tanks.

### 3. ENVIRONMENTAL SETTING

Proposed cannabis cultivation activities are located on the south bank of the Van Duzen River, at a mid-slope elevation of 1,200 feet, in cleared mature second growth Douglas-fir habitat (Mayer and Laudenslayer 1988). Approximately thirty miles from the Ocean, this project is outside the range of the marbled murrelet (*Brachyramphus marmoratus*), but within the range of the northern spotted owl (NSO) (*Strix occidentalis caurina*). However, there are no records of NSOs nesting within ¼ mile of this project. According to the California Natural Diversity Data Base (CNDDB), the closest Territory is more than two thousand feet to the southeast.

Inspected by BFC biologist and forestry professional, Alex Powell on October 10, 2018, this qualified Spotted Owl Expert (SOE) also assessed the NSO habitat within 120 feet of proposed cultivation activities with respect to existing baseline conditions. Finding the noise level of generators well below the 60 decibel (dB) threshold for disturbance established by the USFWS, he also confirmed the absence of wetlands and/or other sensitive habitats within 175 feet.

### 4. REGULATORY SETTING

Proposition 64 (the California Marijuana Legalization Initiative) gives each municipality the right to make their own rules. As such, the Humboldt County Planning and Building Department (HCPBD) began accepting applications for projects in the Inland Zone after the Commercial Medical Marijuana Land Use Ordinance (CMMLUO) was adopted by the Board of Supervisors on February 26, 2016. Accordingly:

*"It is intended to address the County of Humboldt's prerogative to license, permit, and control commercial cultivation, processing, manufacturing and distribution of cannabis for medical marijuana as set forth in the MMRSA, including, but not limited to the provisions of Business and Professions Code Sections 19315, 19316,*

*19320, 19322, 19332, and 19360 and Health and Safety Code Section 11362.777, in conjunction with state licensing requirements, in order to protect the public health, safety, and welfare of the residents of the County of Humboldt, and to reduce or eliminate any adverse environmental effects of existing commercial cannabis cultivation operations in the County of Humboldt, and to prevent adverse environmental effects of any new commercial cannabis activities which may be permitted in the future in accordance with this Section and state law.”*

The Commercial Cannabis Land Use Ordinance (CCLUO), as revised on January 11, 2018, limits the maximum allowable cultivation area for outdoor and/or mixed light cultivation to the size of the existing cultivation area prior to January 1, 2016. As per Section 314-55.4.9, Table of Humboldt County Commercial Cannabis Cultivation Permit Types – Inland Zone, the maximum area for an existing cultivation project, on a single parcel ten acres or larger, is 22,000 sq. ft. for mixed-light and 43,560 sq. ft. for outdoor cultivation.

Although 55.4.6.5 provides accommodations for pre-existing cultivation sites that exempts them from performance standards required of new developments, general provisions applicable to all commercial cannabis land use activities intended to alleviate adverse environmental impacts require permittee to address potential disturbance of federally listed species in accordance to the Endangered Species Act (ESA). Currently, regulations adopted by Humboldt County for cannabis related commercial activities specify:

*“The noise produced by a generator used for cannabis cultivation shall not be audible by humans from neighboring residences. The combined decibel level for all noise sources, including generators, measured at the property line shall be no more than 60 decibels. Where applicable, sound levels must also show that they will not result in the harassment of Marbled Murrelet or Spotted Owl species. Conformance will be evaluated using current auditory disturbance guidance prepared by the United State Fish and Wildlife Service, and further consultation where necessary.”*

Additionally, cannabis cultivators applying for an Annual License from the California Department of Food and Agriculture must address potentially significant adverse environmental effect in accordance to CEQA. Although CEQA does not directly regulate land use, it does require state and local agencies to follow a protocol of analysis and public disclosure. Consequently, this IS relies on thresholds of environmental significance for biological resources and associated mitigations adopted under the 1973 Z’berg-Nejedly Forest Practice Act (Public Resources Code Section 4551 et seq.).

Thereto referred to as the California Forest Practice Rules (FPRs), these rules are functionally equivalent to CEQA. As such, the clearing of up to three acres in size are exempt from preparing a full-blown Timber Harvest Plan (THP) because such limited habitat modifications are a fundamental landowner right, as long as they comply with other federal, State and County ordinances. According to Humboldt County Code, Ordinance No. 2559 (Commercial Medical Marijuana Land Use), Section 55.4.10(j), minor clearings for cannabis cultivation conducted prior to January 1, 2016, have been addressed by BFC Licensed Registered Professional Forester (RPF) Thomas Blair (#2607).

While the USFWS and the National Marine Fisheries Service (NMFS) have authority over federally listed species, CDFW is responsible for implementation of the California Endangered Species Act (CESA). Other relevant environmental laws include the Federal Clean Water Act (CWA), the Bald and Golden Eagle Protection Act, as well as the California Fish and Game Code. Although the Department is also authorized to comment and make recommendations on CEQA projects, as the Lead Agency, it is important to note that permitting legal cannabis cultivation in a manner that prevents or minimizes significant environmental impacts is ultimately a Humboldt County responsibility.

## 5. BIOLOGICAL COMMUNITIES

Preliminary environmental scoping included a literature review of floral and faunal communities likely impacted by the proposed cannabis cultivation using CDFW's List of Special Animals (2018). In addition, a query of the CNDDDB was conducted within 1.3 miles of the project. Compatible with an assessment area recommended by the USFWS for evaluating impacts of forest management on inland spotted owls, in addition to NSO Territory HUM0947, the CNDDDB indicates the presence of two other special status species. North Central Coast Summer Steelhead (*Oncorhynchus mykiss irideus*) and peregrine falcon (*Falco peregrinus anatum*) are both non-listed sensitive species for which the FPR provide special protection. Nevertheless, a more comprehensive assessment of floral and faunal communities potentially impacted by proposed cannabis cultivation has been conducted considering protected and sensitive amphibians, reptiles, birds and mammals in terms of ecological management guilds.

## 6. DISCUSSION OF ENVIRONMENTAL IMPACTS

Article 5 of the CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, Sections 15000-15387) provides rules for "Preliminary Review of Project and Conduct of Initial Study". Concerned with present plant or animal communities threatened by local elimination, in jeopardy of experiencing substantial habitat reduction, or dropping below self-sustaining levels as a result of proposed project [§15065(a)(1)], CEQA requires that a decision-making body provide substantial evidence of significant environmental effects before empowering lead agency to authorize additional mitigations or alternatives [CCR 14 §15126.4 (a)(3)].

To the best extent possible, such arguments should contain an element of Forecasting (CCR 14 §15144), as well as a degree of Specificity (CCR 14 §15146), and Technical Detail (CCR 14 §15147). Limited to activities which are within the agency's area of expertise [§15096 (d)], comments need to be written in a manner that is meaningful and useful to decision making body and the public [§21003(b)].

*"Argument, speculation, unsubstantiated opinion or narrative, or evidence that is clearly inaccurate or erroneous, or evidence that is not credible, shall not constitute substantial evidence" [14 CCR §21080(e)(2)].*

As such, sensitive and protected species potentially impacted by proposed cannabis cultivation have been discussed with emphasis on CEQA significance, starting with those listed under the ESA, followed by species considered under the CESA, followed by non-

listed sensitive species. Potential significant effects to animals with large territories were considered inside 1.3 miles, an area corresponding to the FPRs recommended assessment area for NSOs in the Interior Region. Impacts to species with smaller ranges and/or specific habitat requirements were evaluated within the disturbance footprint of proposed operations.

Parameters used to appraise potential CEQA significance included (1) occurrence and distribution of the species in relation to the project area, (2) species sensitivity to disturbance, (3) existing baseline conditions, and (4) the species legal status and population size. A species was dropped from further consideration, if the project area was found to occur outside its distribution, or vital habitat requirements for that species were absent.

#### Northern Spotted Owl and Late Mature Forest Guild Species

The northern spotted owl (NSOs) require mature forest patches with permanent water and suitable nesting trees and snags (Zeiner et al. 1990). Although initially believed to be old growth obligate, NSOs commonly occur in younger forest types of northern California (USDA 1994). Rather than habitat encroachment, it seems competition from the closely related, exotic and invasive barred owl (*Strix varia*) is now regarded as the largest threat to the California NSO population (USFWS 2011).

Although suitable NSO nesting habitat does not exist within 120 feet of proposed operations, a query of the CNDDDB indicates a historical Territory, HUM0947, approximately two thousand feet to the southeast. Based on a single detection in 2000, the CNDDDB gives no indication NSOs have ever nested within a ¼ mile of proposed cannabis cultivation.

Nevertheless, because it is conceivable that disturbance from cannabis cultivation activities could potentially disrupt breeding pairs, the environmental significance of proposed operations has been assessed in accordance to **“Estimating the Effects of Auditory and Visual Disturbance to Northern Spotted Owls and Marbled Murrelets in Northwestern California (USFWS 2006)”**. As such, disturbance may reach the level of take when at least one of the following conditions is met:

- *Project-generated sound exceeds ambient nesting conditions by 20-25 decibels (dB).*
- *Project-generated sound, when added to existing ambient conditions, exceeds 90 dB.*
- *Human activities occur within a visual line-of-sight distance of 40 m or less from a nest.*

The NSO share affinity for mature forest with other sensitive species dependent on the larger, more decadent trees, downed woody debris and the lower ambient temperatures characteristic of forest interior conditions. Consequently, California's FPRs contain special provisions protecting such habitat. However, given that no additional trees will be removed, and that cannabis cultivation does not generate the same type of disturbance as logging, impacts to these guild species are unlikely.

### Bald Eagle, Osprey, Forest Raptors and Heron Rookeries

Bald eagles (*Haliaeetus leucocephalus*) and ospreys (*Pandion haliaetus*) are associated with streams and rivers. Fully protected, as are all nesting raptors, these mainly fish-eating birds occupy the same niche as great blue herons. Although the CNDDDB does not record rookeries or other nesting birds of prey within 1.3 miles of this project, these large birds are regularly observed in the Van Duzen River corridor. Nevertheless, no active raptor nests or rookeries were observed in association with this project. Given that it does not involve habitat removal, it is reasonable to conclude that proposed cannabis cultivation activities will not significantly impact these guild species.

### Anadromous Fisheries, Foothills Yellow-legged Frog and Aquatic/Wet Site Guild Species

There are no known listed Aquatic/Wet Site Guild Species occurring in association with this project. However, listed as a candidate species under the CESA, foothills yellow-legged frogs (*Rana boylei*) are common in the Van Duzen River and its larger tributaries. Lumped together based on their affinity for water and riparian habitat, in addition to summer steelhead, other non-listed guild species likely to occur in this watershed include pacific giant salamander (*Dicamptodon tenebrosus*), southern torrent salamander (*Rhyacotriton variegatus*), rough-skinned newt (*Taricha granulosa*), northern red-legged frog (*Rana aurora*) and tailed frog (*Ascaphus truei*). Nevertheless, given that proposed cultivation activities will not take place within 175 feet of such habitat, potential significant impacts to these guild species can reasonably be regarded as mitigated by BOP's LSAA and WRPP. Consequently, further consideration for anadromous fisheries, foothills yellow-legged frogs and aquatic/wet site guild species has been dropped.

### Forest Mustelids, Bats and Other Small Mammals

Although the CNDDDB contains no records of sensitive mammals within 1.3 miles, the surrounding mid-seral forest is likely to contain suitable habitat for Sonoma tree vole (*Arborimus pomo*) and North American porcupine (*Erethizon dorsatum*). Less common, fishers (*Polestania pennsylvanica*) have been recorded in the Larabee Valley, but this site is both lower than generally preferred, and outside the geographic range of the Humboldt martens (*Martes americana humboldtensis*).

Similarly, suitable habitat for Townsend's big-eared bats (*Corynorhinus townsendii*) was not observed, and lacking grasslands and open meadows, this ownership is also of questionable suitability for American badgers (*Taxidea taxus*). Nevertheless, prohibited from using rodenticides, disturbance from proposed cannabis cultivation is unlikely to significantly impact forest mammal populations. Consequently, further consideration of these guild species has been dropped.


## 7. DISCUSSION OF SIGNIFICANT ENVIRONMENTAL IMPACTS

Spotted owls are known to occupy low-quality sites where reproduction and survival are substantially reduced (Franklin et al. 2000, Dugger et al 2005). However, not only does the ESA limit consideration to sites with a reasonable expectation of occupancy, jeopardy must

also be analyzed against existing baseline conditions. Section 7 USFWS Consultation Handbook clearly indicates the importance of factoring in current habitat conditions when conducting an ESA "take" analysis, but environmental baselines analysis is also an explicit requirement for determining a CEQA significance.

Equivalent to the noise from a full-size pickup truck, at a distance of 40 meters the noise from potential cannabis cultivation was not found to exceed 20 dB above ambient conditions. Consequently, proposed cannabis cultivation is unlikely to affect NSOs, and meeting all the requirements of the law, this IS could not identify any plant or animal community potentially impacted by proposed activities in manner that would be CEQA significant.

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