



**COUNTY OF HUMBOLDT**  
**PLANNING AND BUILDING DEPARTMENT**  
**CURRENT PLANNING DIVISION**

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3015 H Street Eureka CA 95501  
Phone: (707)445-7541 Fax: (707) 268-3792

Hearing Date: December 13, 2018

To: Humboldt County Planning Commission

From: John H. Ford, Director of Planning and Building Department

Subject: **Schackow Farms, Inc. Conditional Use Permit**  
Application Number: 11708  
Case Number: CUP16-351  
Assessor's Parcel Number (APN): 211-401-007  
400 Carrol Lane, Miranda area

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Please contact Rodney Yandell, Planner II, at 707-445-7541 or by email at [ryandell@co.humboldt.ca.us](mailto:ryandell@co.humboldt.ca.us) if you have any questions about the scheduled public hearing item.

**AGENDA ITEM TRANSMITTAL**

<b>Hearing Date</b> December 13, 2018	<b>Subject</b> Conditional Use Permit	<b>Contact</b> Rodney Yandell, Planner II
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**Project Description:** A Conditional Use Permit (CUP) for 43,480 square feet (sf) of existing outdoor commercial cannabis cultivation. Cannabis cultivation will occur in three cultivation areas. Cultivation Areas 1 and 2 contain greenhouses and will use light deprivation to harvest two times annually. Cultivation Area 3 is used for full sun outdoor plants. Water for irrigation will be supplied via a rooftop rain catchment system, a permitted cistern, six existing hard tanks totaling 7,750-gallons of water storage, and a 235,000-gallon rain catchment pond. Total water use is expected to be approximately 271,000 gallons per year. Peak water usage will total approximately 44,000 gallons from July to October and will be approximately 6,000 gallons from November through April. Cannabis will be watered using a drip irrigation system. Once harvested, the cannabis will be processed (dried and trimmed) in an existing on-site building. The applicant will employ between 10-15 seasonal employees for cannabis cultivation. The cannabis will be irrigated by a drip system. Power is provided by P. G. & E. and a generator.

**Project Location:** The proposed project is located in Humboldt County, in the Miranda Area, on the west US Highway 101 (US-101), approximately 477 North feet from the intersection of Somerville Road and Carol Lane, on the property known as 400 Carol Lane.

**Present Plan Land Use Designations:** Residential Agriculture (RA5-20), Humboldt County General Plan (GP), Density: 20 to 5 acres per dwelling unit, Slope Stability: Moderate Instability (2)

**Present Zoning:** Unclassified (U)

**Application Number:** 11708

**Case Number:** CUP16-351

**Assessor Parcel Numbers:** 211-401-007

<b>Applicant</b>	<b>Owner</b>	<b>Agent</b>
Schackow Farms, Inc. Matthew Schackow 1880 Aspen Ct. McKinleyville, CA 95519	Matthew Shackow 1880 Aspen Ct. McKinleyville, CA 95519	N/A

**Environmental Review:** The proposed project is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) per Class 1, 15301 (Existing Facilities), Class 3, 15303 (New Construction or Conversion of Small Structures), and Class 4, 15304 (Minor Alterations to Land) of the California Environmental Quality Act (CEQA) Guidelines.

**State Appeal Status:** Project is located outside the Coastal Zone and is therefore NOT appealable to the California Coastal Commission.

**Major Issues:** None

## Schackow Farms, Inc. Conditional Use Permit

Case Number: CUP-16-351

Assessor's Parcel Number: 211-401-007

### Recommended Commission Action:

1. Describe the application as part of the Consent Agenda.
2. Survey the audience for any person who would like to discuss the application.
3. If no one requests discussion, make the following motion to approve the application as a part of the consent agenda:

*Find the project exempt from environmental review pursuant to Section 15301, 15303 and 15304 of the State CEQA Guidelines, make all of the required findings for approval of the Conditional Use Permit based on evidence in the staff report and any public testimony, and adopt the Resolution approving the proposed Schackow Farms, Inc. project subject to the recommended conditions.*

**Executive Summary:** Schackow Farms, Inc. seeks approval of a Conditional Use Permit for 43,480 square feet of cultivation area in compliance with the County Commercial Medical Marijuana Land Use Ordinance (CMMLUO) and the Medical and Adult Use Cannabis Regulation and Safety Act (MAUCRSA) for an existing outdoor commercial medical cannabis cultivation located on Assessor's Parcel Number (APN) 211-401-007, which is 23.5 acres in size. The cultivation areas, pond, residence, and appurtenant facilities are in the southerly half of the project site. In addition to the cultivation related structures, the project site includes one permanent residence, a 1,400 sf home built in 1973.

Cannabis cultivation will occur in three cultivation areas (CA), CA#1, CA#2, and CA#3. CA#1 consists of 32,280 sf and has four light deprivation greenhouses each measuring 75ft by 12ft for a total of 3,600 sf. Two cycles per yearly season are harvested. The remaining 28,680 sf of CA#1 will be used for outdoor plants in 150-gallon fabric grow pots. CA#2 is on an area of 4,100 sf and includes three greenhouses two of which will be used for light deprivation and are 12ft by 75ft and 12ft by 60ft. The third greenhouse in CA#2 is 2,500 sf and is 25ft by 100ft and will be used primarily for propagation. CA#3 is used for outdoor plants in 100-gallon fabric pots and total 7,100 sf.

The home is served by an existing permitted onsite wastewater treatment system (OWTS), and has electrical power provided by PG&E. The applicant plans to permit the remaining structures and supply them with electricity from PG&E. The applicant plans to complete this after the issuance of the cannabis permit, so used of the Honda EU6500 5,500-watt generator used for lights, fans, and power points inside the trimming and harvesting facility can cease. Honda rates the noise produced by the generator at 60 db(A)/7m] while at the rated load for 5.1 hours of continuous operations. This is below the all allowable noise thresholds at property line.

The project site is on the westerly side of US Route 101 (US-101) approximately one mile southwest of the intersection with Salmon Creek Road. Salmon Creek Road is paved and striped and intersects with Somerville Road approximately one mile to the south of the US 101 intersection with Salmon Creek Road. Somerville Road is a dirt and gravel road and winds to the project site for a total distance of approximately 1.5 miles. The applicant completed a Road Evaluation Report on November 29, 2017 depicting the site, local roadways, and pictures of the roadway conditions and widths. Conditions of approval require the applicant to obtain a certification from a licensed engineer or County staff that the access road and/or improved to meet the functional equivalent of a Category 4 road with slopes consistent with Fire Safe Regulation standards.

The applicant will use two cultivation cycles per year and the cannabis will be processed (dried and trimmed) in an existing on-site building. The applicant will hire 10-15 seasonal workers and one part-time farm hand. Plants will be harvested and trimmed by temporary workers in a designated processing facility built in August 2014 for which the applicant is seeking to be permitted. Employees will travel to the site by car daily, and the applicant will provide parking for at least 15 cars. The project parcel is 23.5 acres, and the existing graveled area in front of the processing facility and west of CA#1 will be used for employee parking. This area is adequate for 15 vehicles. The applicant expects two-four vehicle trips to and from

the site each day. Although the existing residence has a permitted septic system, the applicant will supply workers with rented portable toilets. The applicant also plans to construct an Americans with Disability Act (ADA) compliant bathroom on-site after the cannabis permit is issued. With this, the applicant plans to provide the workers with a permanent restroom facility and no longer need the portable restrooms.

Fertilizers, soil amendments and all other regulated products are stored indoors in their original containers and within Rubbermaid totes in an existing shed with wooden floor.

Water for cultivation activities will be supplied from three sources including a diversion from an existing concrete cistern, from a rooftop rainwater catchment system, and from rain water catchment into an existing storage pond. Water is then pumped into four 1,500-gallon tanks which serve the applicants home and garden. Water also is stored in a 1,000-gallon tank in CA#2. The 235,000-gallon rain catchment pond will be primary source of water for the cultivation areas. The pond will be filled by rainwater captured from the rooftop catchment system on top of the 2,000-sf processing facility. This area is estimated to capture approximately 50,000 sf per year (based on Humboldt County average annual rainfall of 40 inches per year). An additional 156,103 gallons of water per year is expected to be captured by the pond. The remaining approximate 29,000 gallons of water will be piped from the diversion to the pond between the months of January and April to reach maximum storage.

Originally, yearly water demand was approximately 528,000 gallons per year. The applicant, however, is installing a drip irrigation system that will reduce water demand by almost half to approximately 271,000 gallons. The monthly water use demand is provided in Table 1 – Month Water Use Estimates, below.

<b>January</b>	<b>February</b>	<b>March</b>	<b>April</b>	<b>May</b>	<b>June</b>
6,000	6,000	6,000	6,000	20,000	39,000
<b>July</b>	<b>August</b>	<b>September</b>	<b>October</b>	<b>November</b>	<b>December</b>
44,000	44,000	44,000	44,000	6,000	6,000

The water storage needed during the forbearance period is approximately 225,000 gallons. Considering the pond holds approximately 235,000 gallons, there would be adequate volume of water with an approximate surplus water supply of 10,000 gallons during the forbearance period.

The applicant has an agreement for four encroachments from California Department of Fish and Wildlife (CDFW) under Notification Number 1600-2017-0137R1 dated July 14, 2017.

The applicant has enrolled in the North Coast Regional Water Quality Control Board (NCRWQCB) Cannabis Waste Discharge Regulatory Program as a Tier 2 discharger (WDID# 1B170405CHUM). The surface drainage of roads and all-terrain vehicle (ATV) trails have been improved with soil stabilizers and rocking, out sloping, rolling dips, installation of cross drains, water bars, etc. to improve roadway drainage and reduce erosion. The project is mapped by County WebGIS as being located within a historic landslide but the proposed cultivation area is located within a relatively flat area. The California Department of Conservation (CDOC) lists this slide as, "dormant mature, dormant old/relic, or dormant age not specified." The CDOC does not map the site as being in the Seismic Hazard Program and is not listed or mapped in an existing landslide zone, Alquist-Priolo fault zone, or liquefaction zone. Lastly, the WRPP contains a discussion of the site and stability and noted that physical reconnaissance revealed no unstable areas per 14 California Code of Regulations (CCR) 895.1 within or nearby any of the developed areas of the property.

In correspondence dates September 4, 2017, CAL FIRE indicated not supporting the proposed project noting that forest practice violations had occurred and that a Registered Professional Forester must evaluate the site. On April 25, 2018, a (RPF) from Timberland Resource Consultants evaluated the project site for potential timberland conversion. The report found that a total of 1.5 acres of unauthorized timberland conversion occurred but that it does not exceed the three acre-conversion exemption maximum and recommended treatment for the slash and woody debris. Conditions of approval require the applicant to adhere to the recommendations of the April 25, 2018, report. Planning staff reached out

to CAL FIRE to review the report, however, no response was received.

Environmental review for the proposed project was conducted and based on the results of that analysis, staff believes the existing cultivation operation can be considered to be "Existing Facilities" as defined by Section 15301 because it consists of "the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination." In addition, the operation is considered to be "New Construction or Conversion of Small Structures" as defined by Section 15303 due to the new small structures and modifications proposed. The proposed project also is consistent with, "Minor Alteration of Land" as defined by Section 15304 due to the minor grading and BMP installation. Based on these facts, the proposed project is Categorically Exempt based on the State CEQA Guidelines.

Based on a review of Planning Division reference sources and comments from all involved referral agencies, planning staff believes that the applicant has submitted evidence in support of making all of the required findings for approving the CUP.

**ALTERNATIVES:** The Planning Commission could elect not to approve the proposed project, or to require the applicant to submit further evidence, or modify the proposed project. If modifications may cause potentially significant impacts, additional CEQA analysis and findings may be required. These alternatives could be implemented if the Commission is unable to make all of the required findings. Planning Division staff has stated that the required findings in support of the proposal have been made. Consequently, Planning staff does not recommend further consideration of either alternative.

The Commission could also decide the proposed project may have environmental impacts that would require further environmental review pursuant to CEQA. Staff did not identify any potential impacts. As Lead Agency, the Department has determined that the Project is Categorically Exempt under the Exemption Class stated above. However, the Commission may reach a different conclusion. In that case, the Commission should continue the item to a future date at least two months later to give staff the time to complete further environmental review.

**RESOLUTION OF THE PLANNING COMMISSION  
OF THE COUNTY OF HUMBOLDT  
Resolution Number 18-**

**Case Number: CUP-16-351  
Assessor Parcel Number: 211-401-007**

**Makes the required findings for certifying compliance with the California Environmental Quality Act and conditionally approves the Matthew Schackow Conditional Use Permit request.**

**WHEREAS**, Schackow Farms, Inc. submitted an application and evidence in support of approving a Conditional Use Permit to permit 43,560 square feet of existing outdoor commercial medical cannabis cultivation located on APN 211-401-007. Water for cultivation activities will be supplied from three sources including a diversion from an existing concrete cistern, from a rooftop rainwater catchment system, and from rain water catchment into an existing storage pond. Processing will occur on-site in a 2,000-square-foot facility. The applicant will hire 10-15 seasonal workers and one part-time farm hand to meet operational needs; and

**WHEREAS**, the County Planning Division has reviewed the submitted application and evidence and has referred the application and evidence to involved reviewing agencies for site inspections, comments and recommendations; and

**WHEREAS**, the project is categorically exempt from environmental review pursuant to Class 1, 15301 (Existing Facilities), Class 3, 15303 (New Construction or Conversion of Small Structures), Class 4 and 15304 (Minor Alterations to Land) of the California Environmental Quality Act (CEQA) Guidelines; and

**WHEREAS**, Attachment 2 in the Planning Division staff report includes evidence in support of making all of the required findings for approving the proposed Conditional Use Permit (Case Number CUP16-351); and

**WHEREAS**, a public hearing was held on the matter before the Humboldt County Planning Commission on December 13, 2018.

**NOW, THEREFORE**, be it resolved, determined, and ordered by the Humboldt County Planning Commission that:

1. The project is categorically exempt from environmental review pursuant to Class 1, Section 15301 (Existing Facilities), Class 3, Section 15303 (New Construction or Conversion of Small Structures), Class 4, Section 15304 (Minor Alterations to Land); and
2. The findings in Attachment 2 of the Planning Commission staff report for Case Number CUP-16-351 support approval of the project based on the submitted substantial evidence; and
3. Conditional Use Permit CUP-16-351 is approved as recommended and conditioned in Attachment 1.

Adopted after review and consideration of all the evidence on December 13, 2018.

The motion was made by Commissioner \_\_\_\_ and seconded by Commissioner \_\_\_\_.

AYES: Commissioners:

NOES: Commissioners:

ABSTAIN: Commissioners:

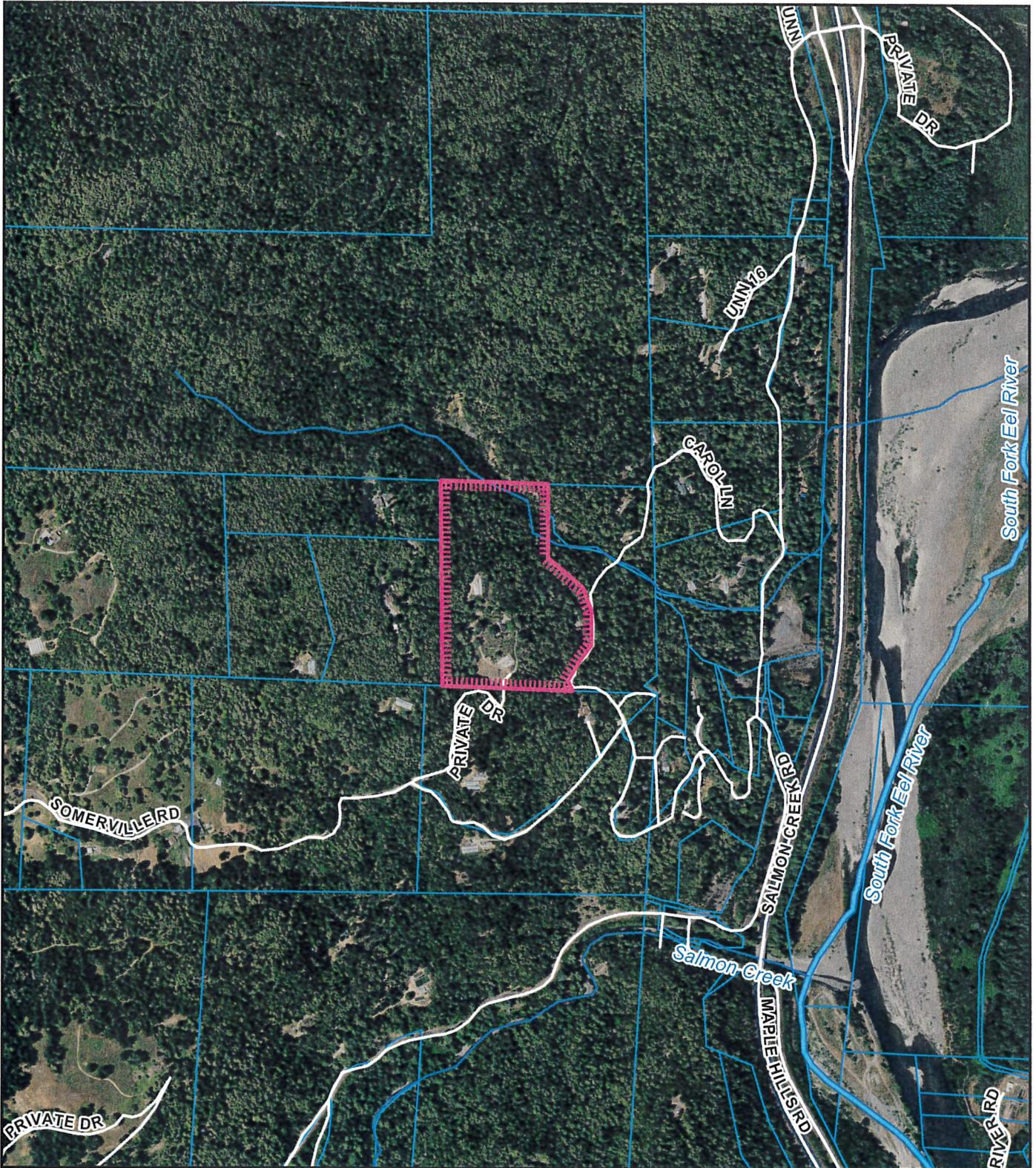
ABSENT: Commissioners:

DECISION:

I, John Ford, Secretary to the Planning Commission of the County of Humboldt, do hereby certify the foregoing to be a true and correct record of the action taken on the above entitled matter by said Commission at a meeting held on the date noted above.

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John Ford, Director  
Planning and Building Department

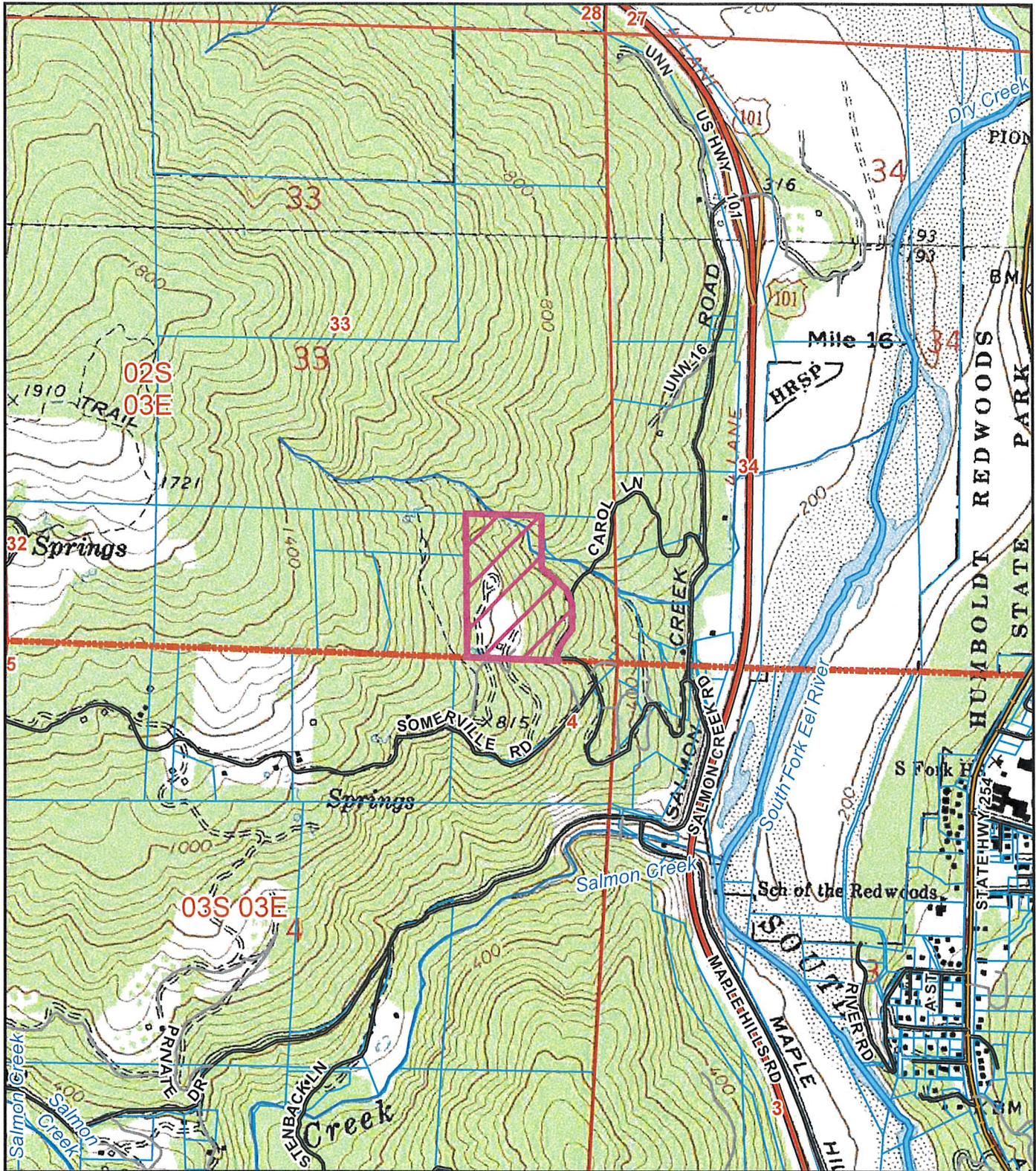


**Project Area =** 

**AERIAL MAP  
PROPOSED SCHACKOW FARMS  
MYERS FLAT AREA  
CUP-16-351  
APN: 211-401-007  
T02S R03E S33 HB&M (MIRANDA)**

  
 0                      1,000                      2,000  
 Feet

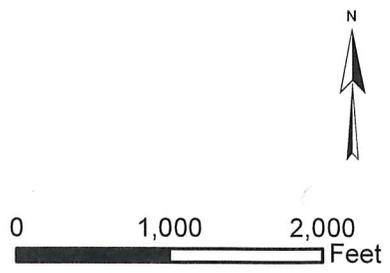
This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

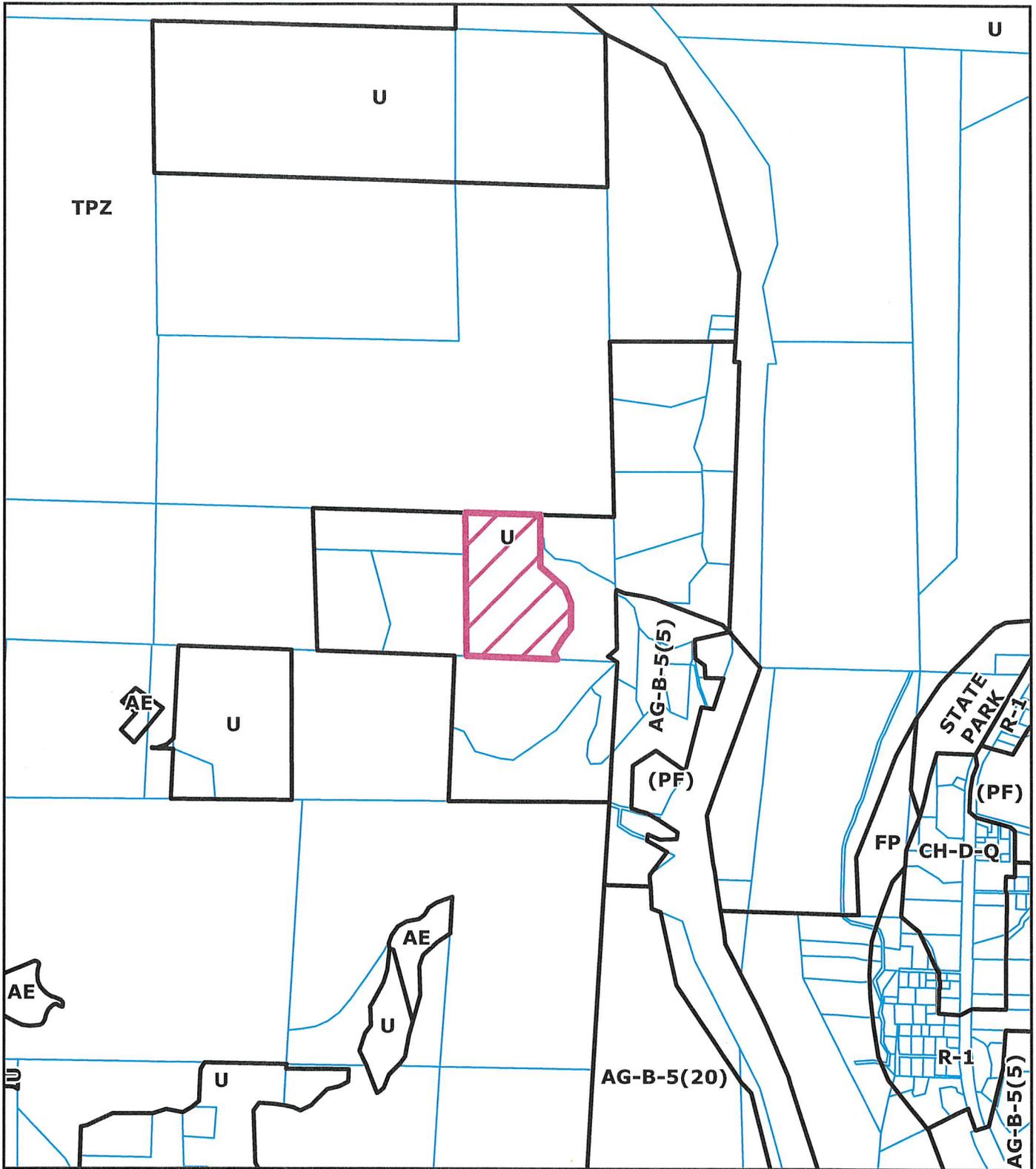


**TOPO MAP**  
**PROPOSED SCHACKOW FARMS**  
**MYERS FLAT AREA**  
**CUP-16-351**  
**APN: 211-401-007**  
**T02S R03E S33 HB&M (MIRANDA)**

Project Area = 

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.





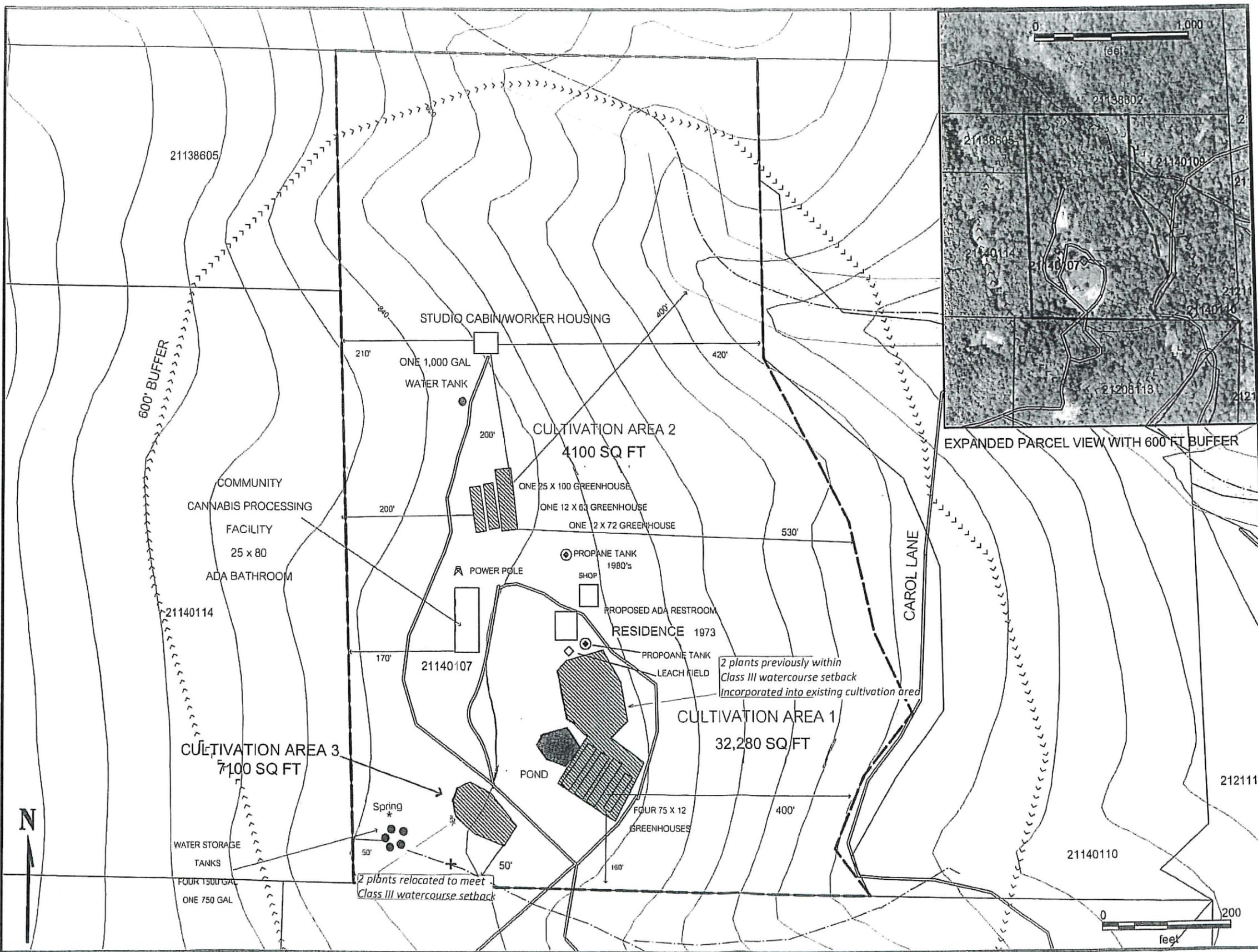
**ZONING MAP  
 PROPOSED SCHACKOW FARMS  
 MYERS FLAT AREA  
 CUP-16-351  
 APN: 211-401-007  
 T02S R03E S33 HB&M (MIRANDA)**

**Project Area =**

0      1,000      2,000  
 Feet

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

MAP CREATED BY: A.CANTER 11/28/2016 S:\my documents\Chris\CULTIVATION PERMITTING\Mathew S. Schackow



- EXISTING CULTIVATION AREA
- PROPERTY BOUNDARY
- STRUCTURES
- WATER STORAGE
- ACCESS ROAD
- WATER COURSE
- STREAM SIDE MANAGEMENT AREA



APPLICANT: MATHEW SCHACKOW  
 APPS # 11708 CUP16-351  
 APN: 211-401-007  
 LOT SIZE: 23.50 ACRES  
 ZONING: U- UNCLASSIFIED  
 EXISTING CULTIVATION AREA: 43,500 SQ FT  
 PROPOSED ONSITE PROCESSING FACILITY

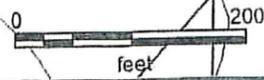
DIRECTIONS TO SITE:  
 DRIVING SOUTH ON US HWY 101  
 TAKE EXIT 653 FOR SALMON CREEK RD  
 IN 0.2 MI TAKE A RIGHT ON SALMON CREEK RD  
 IN 1 MI TURN RIGHT ONTO SOMERVILLE RD  
 IN 500 FT TURN RIGHT ONTO CAROL LN  
 THE SITE IS LOCATED IN 0.2 MILES  
 400 CAROL LANE, MIRANDA

THERE ARE NO SCHOOLS, PLACES OF WORSHIP, OR PUBLIC PARKS WITHIN 600 FT OF THE CULTIVATION AREAS. THERE ARE NO OFF SITE RESIDENCES LOCATED WITHIN 300 FEET OF THE CULTIVATION AREA.

SITE PLAN  
 PAGE 1 OF 1  
 3/6/2018



165 South Fortuna Blvd  
 Fortuna CA 95540  
 707-725-1897



## ATTACHMENT 1

### RECOMMENDED CONDITIONS OF APPROVAL

Approval of the Conditional Use Permit is conditioned on the following terms and requirements which must be satisfied before release of the building permit or initiation of operations, whichever occurs first.

#### Section 1: Development Restrictions

1. Within 60 days of the effective date of project approval, the applicant shall execute a Compliance Agreement with the Humboldt County Planning Department detailing all necessary permits and infrastructure improvements described under Conditions of Approval #2 -19. The agreement shall provide a timeline for completing all outstanding items. All activities detailed under the agreement must be completed to the satisfaction of the Planning and Building Department before the permit may be finalized and no longer considered provisional.
2. The Applicant shall be responsible for obtaining all necessary County and State permits or licenses, and for meeting all of the requirements as set forth by other regulatory agencies.
3. The applicant shall secure permits for all structures related to the cannabis cultivation and other commercial cannabis activity. The plans submitted for building permit approval shall be consistent with the project description and approved project Plot Plan. A letter or similar communication from the Building Division verifying that all structures related to the cannabis cultivation are permitted will satisfy this condition.
4. The applicant shall secure permits for all structures related to the cannabis cultivation and other commercial cannabis activity. A letter or similar communication from the Building Division verifying that all structures related to the cannabis cultivation are permitted will satisfy this condition.
5. The applicant shall improve the apron from Salmon Creek Road to Somerville Drive to current standards. The applicant shall obtain an encroachment permit from the Department of Public Works prior to the commencement of any work. The driveway shall be paved for a minimum width of 20 feet and a length of 50 feet where it intersects the County road. A letter from that agency indicating approval has been issued will satisfy this condition.
6. The access road shall be certified and/or improved to meet the functional equivalent of a Category 4 road with slopes consistent with Fire Safe Regulation standards as certified by a licensed engineer or county staff.
7. The applicant shall supply a copy of the Notice of Intent and Monitoring Self-Certification and other documents filed with the North Coast Regional Water Quality Control Board demonstrating enrollment in Tier 1, 2 or 3, North Coast Regional Water Quality Control Board Order No. 2015-0023, or any substantially equivalent rule that may be subsequently adopted by the County of Humboldt or other responsible agency.
8. The applicant shall implement all corrective actions detailed within the WRPP developed for the parcel, prepared pursuant to Tier 2 enrollment under the North Coast Regional Water Quality Control Board (NCRWQCB) Cannabis Waste Discharge Regulatory Program. A letter or similar communication from the NCRWQCB verifying that all their requirements have been met will satisfy this condition.
9. The applicant shall submit a Bullfrog Management Plan for the review and approval of the CDFW. The applicant shall file annual Bullfrog Management monitoring reports to DFW, the Eureka office, no later than December 31.

10. The Applicant shall agree to obtain approval of water rights for the cannabis irrigation needs from the State Water Board and to monitor water diversion and usage to demonstrate that there is sufficient water supply to meet the demands of the proposed project without having to rely on surface water diversion for cultivation activities during the forbearance period of May 15 to October 15. As part of the annual inspection, the applicant shall present water use records for the year broken down by month.
11. The applicant shall agree to finalize the LSAA with the California Department of Fish and Wildlife and obtain the required permit.
12. Prior to any ground-disturbance or the issuance of any permits for new construction, a qualified biologist shall survey the project site for sensitive species and habitat, including Western Bumble Bee and Northern Spotted Owl and shall require an appropriate buffer or protection measures in consultation with CDFW and the County Planning Department.
13. On-grid power shall be brought to all structures and facilities requiring electricity within 2 years of the effective date of project approval. Where generators are used for backup power the applicant shall provide a noise pollution plan demonstrating that the proposed generator would not deliver noise pollution, which may affect fish and/or wildlife directly, or from a distance. Conformance will be evaluated using auditory disturbance guidance prepared by the United States Fish and Wildlife Service. Should the applicant propose to achieve noise attenuation by placing the generators inside a building(s), the applicant shall secure a building permit prior to construction.
14. Any light source shall comply with the International Dark Sky Association standards for Lighting Zone 0 and Lighting Zone 1, and be designed to regulate light spillage onto neighboring properties resulting from backlight, uplight, or glare (BUG). Should the Humboldt County Planning Division receive complaints that the lighting is out of alignment or not complying with these standards, within ten (10) working days of receiving written notification that a complaint has been filed, the applicant shall submit written verification that the lights' shielding and alignment has been repaired, inspected and corrected as necessary.
15. The applicant is responsible for obtaining all necessary County and State permits and licenses, and for meeting all of the requirements as set forth by other regulatory agencies.
16. The applicant shall be compliant with the County of Humboldt's Certified Unified Program Agency (CUPA) requirements regarding any hazardous materials. A written verification of compliance shall be required before any provisional permits may be finalized. Ongoing proof of compliance with this condition shall be required at each annual inspection in order to keep the permit valid.
17. Prior to initiating commercial medical cannabis cultivation or associated activities the applicant shall obtain a Business License from the Humboldt County Tax Collector.
18. Prior to initiating commercial medical cannabis cultivation or associated activities the applicant shall execute and file with the Planning Division the statement titled, "Notice and Acknowledgment regarding Agricultural Activities in Humboldt County," ("Right to Farm" ordinance) as required by the HCC and available at the Planning Division.
19. The applicant shall contact the local fire service provider [Miranda Community Services District] and furnish written documentation from that agency of the available emergency response and fire suppression services and any recommended project mitigation measures. If emergency response and fire suppression services are not provided, the applicant shall cause to be recorded an "ACKNOWLEDGMENT OF NO AVAILABLE EMERGENCY RESPONSE AND FIRE SUPPRESSION SERVICES" for the parcel(s) on a form provided by the Humboldt County Planning Division.
20. The Applicant shall submit \$50.00 cash or check payable to the Humboldt County Recorder's Office to file the Notice of Exemption pursuant to Section 15062(c) of the CEQA Guidelines.

21. The applicant is required to pay for permit processing on a time and material basis as set forth in the schedule of fees and charges as adopted by ordinance of the Humboldt County Board of Supervisors. The Department will provide a bill to the applicant after the decision. Any and all outstanding Planning fees to cover the processing of the application to decision by the Hearing Officer shall be paid to the Humboldt County Planning Division, 3015 "H" Street, Eureka.

**Section 2: Ongoing Requirements/Development Restrictions Which Must be Satisfied for the Life of the Project:**

1. All components of proposed project shall be developed, operated, and maintained in conformance with the Project Description, the approved Plot Plan, the Plan of Operations, and these conditions of approval. Changes shall require modification of this permit except where consistent with Humboldt County Code Section 312-11.1, Minor Deviations to Approved Plot Plan. If offsite processing is chosen to be the preferred method of processing, the Applicant shall notify the Department of the identity of the offsite licensed facility. This change will be processed as a Minor Deviation.
2. Cannabis cultivation and other commercial cannabis activity shall be conducted in compliance with all laws and regulations as set forth in the Humboldt County Commercial Medical Marijuana Land Use Ordinance (CMMLUO) and the Medical and Adult Use Cannabis Regulation and Safety Act (MAUCRSA), as may be amended from time to time, as applicable to the permit type.
3. The operation shall participate in the Medical Cannabis Track and Trace Program administered by the Humboldt County Agricultural Commissioner or State equivalent, when available.
4. Possession of a current, valid required license, or licenses, issued by any agency of the State of California in accordance with the MAUCRSA, and regulations promulgated thereunder, as soon as such licenses become available.
5. Compliance with all statutes, regulations and requirements of the California State Water Resources Control Board and the Division of Water Rights, at a minimum to include a statement of diversion of surface water from a stream, river, underground stream, or other watercourse required by Water Code Section 5101, or other applicable permit, license, or registration, as applicable.
6. Maintain enrollment in Tier 1, 2 or 3, certification with the North Coast Regional Water Quality Control Board (NCRWQCB) Order No. R1-2015-0023, if applicable, or any substantially equivalent rule that may be subsequently adopted by the County of Humboldt or other responsible agency.
7. Confinement of the area of cannabis cultivation, processing, manufacture or distribution to the locations depicted on the approved Plot Plan. The commercial cannabis activity shall be set back at least 30 feet from any property line, and 600 feet from any School, School Bus Stop, Church or other Place of Religious Worship, or Tribal Cultural Resources, except where a reduction to this setback has been approved pursuant to Section 55.4.11(d).
8. At all times, on-site workers shall have access to safe drinking water and toilets and handwashing facilities that comply with applicable federal, state, and local laws and regulations. Plumbing facilities and water source must be capable of handling increased usage without adverse consequences to neighboring properties or the environment.
9. Comply with the terms of any applicable Streambed Alteration (1600) Permit obtained from the Department of Fish & Wildlife, which may be required for the proposed well.
10. Odors shall be contained on the property on which the Cannabis activity is located. To implement this requirement air filtration and ventilation equipment is to be maintained in good working condition and monitored on an on-going basis to limit potential adverse odor emission impacts to employees and/or properties located in the vicinity of the operation. If the County receives any odor complaints, the permit holder shall work with the Building Official to correct odor concerns.

11. Consent to an annual on-site compliance inspection, with at least 24 hours prior notice, to be conducted by appropriate County officials during regular business hours (Monday – Friday, 9:00 am – 5:00 pm, excluding holidays).
12. Refrain from the improper storage or use of any fuels, fertilizer, pesticide, fungicide, rodenticide, or herbicide.
13. Pay all applicable application and annual inspection fees.
14. Storage of Fuel - Fuel shall be stored and handled in compliance with applicable state and local laws and regulations, including the County of Humboldt's CUPA program, and in such a way that no spillage occurs.
15. The Master Log Books maintained by the Applicant to track production and sales shall be maintained for inspection by the County.
16. Pay all applicable taxes as required by the Humboldt County Commercial Marijuana Cultivation Tax Ordinance (Humboldt County Code Section 719-1 et seq.).
17. Term of Commercial Cannabis Activity Conditional Use Permit. Any Commercial Cannabis Cultivation CUP issued pursuant to the CMMLUO shall expire after one (1) year after date of issuance, and on the anniversary date of such issuance each year thereafter, unless an annual compliance inspection has been conducted and the permittees and the permitted site have been found to comply with all conditions of approval.

If the inspector or other County official determines that the permittees or site do not comply with the conditions of approval, the inspector shall serve the SP or permit holder with a written statement identifying the items not in compliance, and the action that the permit holder may take to cure the non-compliance, or file an appeal within ten (10) days of the date that the written statement is delivered to the permit holder. Personal delivery or mailing the written statement to the mailing address listed on the application by regular mail, plus three (3) days after date of mailing, shall constitute delivery. The permit holder may request a reinspection to determine whether or not the permit holder has cured all issues of non-compliance. Failure to request reinspection or to cure any items of non-compliance shall terminate the Special Permit, immediately upon the expiration of any appeal period, or final determination of the appeal if an appeal has been timely filed pursuant to section 55.4.13.

18. Acknowledgements to Remain in Full Force and Effect. Permittee Acknowledges that the County reserves the right to reduce the size of the area allowed for cultivation under any clearance or permit issued in accordance with this Section in the event that environmental conditions, such as a sustained drought or low flows in the watershed in which the cultivation area is located will not support diversions for irrigation.

Permittee further acknowledges and declares that:

- I. All commercial cannabis activity that I, my agents, or employees conduct pursuant to a permit from the County of Humboldt shall be solely for medical purposes and all commercial cannabis products produced by me, my agents, or employees are intended to be consumed solely by qualified patients entitled to the protections of the Compassionate Use Act of 1996 (codified at Health and Safety Code section 11362.5); and
- II. All cannabis or cannabis products under my control, or the control of my agents or employees, and cultivated or manufactured pursuant to local Ordinance and the California Medical Marijuana Regulation and Safety Act will be distributed within the State of California; and

- III. All commercial cannabis activity conducted by me, or my agents or employees pursuant to a permit from the County of Humboldt will be conducted in compliance with the California Medical Marijuana Regulation and Safety Act.
19. Transfers. Transfer of any leases or permits approved by this proposed project is subject to the review and approval of the Planning Director for conformance with CMMLUO eligibility requirements, and agreement to permit terms and acknowledgments. The fee for required permit transfer review shall accompany the request. The request shall include the following information:
- a. Identifying information for the new Owner(s) and management as required in an initial permit application;
  - b. A written acknowledgment by the new Owner in accordance as required for the initial Permit application;
  - c. The specific date on which the transfer is to occur; and
  - d. Acknowledgement of full responsibility for complying with the existing Permit; and
  - e. Execution of an Affidavit of Non-diversion of Medical Cannabis.
20. Inspections. The permit holder and subject property owner are to permit the County or representative(s) or designee(s) to make inspections at any reasonable time deemed necessary to assure that the activities being performed under the authority of this permit are in accordance with the terms and conditions prescribed herein

#### Performance Standards for Cultivation and Processing Operations

21. Pursuant to the MAUCRSA, Health and Safety Code Section 19322(a)(9), an applicant seeking a cultivation license shall "provide a statement declaring the applicant is an 'agricultural employer,' as defined in the Alatorre-Zenovich-Dunlap-Berman Agricultural Labor Relations Act of 1975 (Part 3.5 commencing with Section 1140) of Division 2 of the Labor Code), to the extent not prohibited by law."
22. Cultivators shall comply with all applicable federal, state, and local laws and regulations governing California Agricultural Employers, which may include: federal and state wage and hour laws, CAL/OSHA, OSHA, California Agricultural Labor Relations Act, and the Humboldt County Code (including the Building Code).
23. Cultivators engaged in processing shall comply with the following Processing Practices:
- i. Processing operations must be maintained in a clean and sanitary condition including all work surfaces and equipment.
  - ii. Processing operations must implement protocols which prevent processing contamination and mold and mildew growth on cannabis.
  - iii. Employees handling cannabis in processing operations must have access to facemasks and gloves in good operable condition as applicable to their job function.
  - iv. Employees must wash hands sufficiently when handling cannabis or use gloves.
24. All persons hiring employees to engage in commercial cannabis cultivation and processing shall comply with the following Employee Safety Practices:
- I. Cultivation operations and processing operations must implement safety protocols and provide all employees with adequate safety training relevant to their specific job functions, which may include:
    - (a) Emergency action response planning as necessary;
    - (b) Employee accident reporting and investigation policies;
    - (c) Fire prevention;
    - (d) Hazard communication policies, including maintenance of material safety data sheets (MSDS);

- (e) Materials handling policies;
- (f) Job hazard analyses; and
- (g) Personal protective equipment policies, including respiratory protection.

- II. Cultivation operations and processing operations must visibly post and maintain an emergency contact list which includes at a minimum:
  - (a) Operation manager contacts;
  - (b) Emergency responder contacts; and
  - (c) Poison control contacts.
- III. At all times, employees shall have access to safe drinking water and toilets and handwashing facilities that comply with applicable federal, state, and local laws and regulations. Plumbing facilities and water source must be capable of handling increased usage without adverse consequences to neighboring properties or the environment.
- IV. On site-housing provided to employees shall comply with all applicable federal, state, and local laws and regulations.

25. All cultivators shall comply with the approved Processing Plan as to the following:

- I. Processing Practices.
- II. Location where processing will occur.
- III. Number of employees, if any.
- IV. Employee Safety Practices.
- V. Toilet and handwashing facilities.
- VI. Plumbing and/or septic system and whether or not the system is capable of handling increased usage.
- VII. Drinking water for employees.
- VIII. Plan to minimize impact from increased road use resulting from processing.
- IX. Onsite housing, if any.

26. Term of Commercial Cannabis Activity Special Permit. Any Commercial Cannabis Cultivation Special Permit (SP) issued pursuant to the CMMLUO shall expire after one (1) year after date of issuance, and on the anniversary date of such issuance each year thereafter, unless an annual compliance inspection has been conducted and the permittees and the permitted site have been found to comply with all conditions of approval.

If the inspector or other County official determines that the permittees or site do not comply with the conditions of approval, the inspector shall serve the SP or permit holder with a written statement identifying the items not in compliance, and the action that the permit holder may take to cure the non-compliance, or file an appeal within ten (10) days of the date that the written statement is delivered to the permit holder. Personal delivery or mailing of the written statement to the mailing address listed on the application by regular mail, plus three (3) days after date of mailing, shall constitute delivery. The permit holder may request a reinspection to determine whether or not the permit holder has cured all issues of non-compliance. Failure to request reinspection or to cure any items of non-compliance shall terminate the SP, immediately upon the expiration of any appeal period, or final determination of the appeal if an appeal has been timely filed pursuant to HCC Section 55.4.13.

27. Permit Renewals to comply with Updated Laws and Regulations. Permit renewal per Ongoing Condition of Approval #25 above is subject to the laws and regulations effective at the time of renewal, which may be substantially different than the regulations currently in place and may require the submittal of additional information to ensure that new standards are met.

28. Acknowledgements to Remain in Full Force and Effect. Permittee acknowledges that the County reserves the right to reduce the size of the area allowed for cultivation under any clearance or permit issued in accordance with this Section in the event that environmental conditions, such as

a sustained drought or low flows in the watershed in which the cultivation area is located, will not support diversions for irrigation.

29. Permittee further acknowledges and declares that:

- I. All commercial cannabis activity that I, my agents, or employees conduct pursuant to a permit from the County of Humboldt shall be solely for medical purposes and all commercial cannabis products produced by me, my agents, or employees are intended to be consumed solely by qualified patients entitled to the protections of the Compassionate Use Act of 1996 (codified in Health and Safety Code Section 11362.5);
- II. All cannabis or cannabis products under my control, or the control of my agents or employees, and cultivated or manufactured pursuant to local Ordinance and the California MAUCRSA will be distributed within the State of California; and
- III. All commercial cannabis activity conducted by me, or my agents or employees pursuant to a permit from the County of Humboldt will be conducted in compliance with the California MAUCRSA.

30. Transfers. Transfer of any leases or permits approved by this proposed project is subject to the review and approval of the Planning Director for conformance with CMMLUO eligibility requirements, and agreement to permit terms and acknowledgments. The fee for required permit transfer review shall accompany the request. The request shall include the following information:

- f. Identification of information for the new Owner(s) and management as required in the initial permit application;
- g. Acknowledgment, in writing, by the new Owner(s) as required for the initial permit application;
- h. Inclusion of the specific date on which the transfer is to occur;
- i. Acknowledgement of full responsibility for complying with the existing Permit; and
- j. Execution of an Affidavit of Non-diversion of Medical Cannabis.

31. Inspections. The permit holder and subject property owner are to permit the County or representative(s) or designee(s) to make inspections at any reasonable time deemed necessary to assure that the activities being performed under the authority of this permit are in accordance with the terms and conditions prescribed herein.

#### **Informational Notes:**

1. Pursuant to Section 314-55.4.11(a) of the CMMLUO, if upon inspection for the initial application, violations of any building or other health, safety, or other state of county statute, ordinance, or regulation are discovered, the Planning and Building Department may issue a provisional clearance or permit with a written approved Compliance Agreement. By signing the agreement, the permittee agrees to abate or cure the violations at the earliest opportunity but in no event more than two (2) years of the date of issuance of the provisional clearance or permit. Plans for curing the violations shall be submitted to the Planning and Building Department by the Permittee within one (1) year of the issuance of the provisional certificate or permit. The terms of the compliance agreement may be appealed pursuant to section 314-55.4.13 of the CMMLUO.

2. This provisional permit approval shall expire and become null and void at the expiration of one (1) year after all appeal periods have lapsed (see "Effective Date"); except where the Compliance Agreement per Condition of Approval #1 has been executed and the corrective actions pursuant to the agreement are being undertaken. Once building permits have been secured and/or the use initiated pursuant to the terms of the agreement, the use is subject to the Permit Duration and Renewal provisions set forth in Conditions of Approval #23 of the On-Going Requirements /Development Restrictions, above.

3. If cultural resources are encountered during construction activities, the contractor on site shall cease all work in the immediate area and within a 50-foot buffer of the discovery location. A qualified archaeologist as well as the appropriate Tribal Historic Preservation Officer(s) are to be contacted to evaluate the discovery and, in consultation with the applicant and lead agency, develop a treatment plan in any instance where significant impacts cannot be avoided.

Prehistoric materials may include obsidian or chert flakes, tools, locally darkened midden soils, groundstone artifacts, shellfish or faunal remains, and human burials. If human remains are found, California Health and Safety Code Section 7050.5 requires that the County Coroner be contacted immediately at 707-445-7242. If the Coroner determines the remains to be Native American, the Native American Heritage Commission will then be contacted by the Coroner to determine appropriate treatment of the remains pursuant to Public Resources Code Section 5097.98. Violators shall be prosecuted in accordance with Public Resources Code Section 5097.99.

4. The applicant is required to pay for permit processing on a time and material basis as set forth in the schedule of fees and charges as adopted by ordinance of the Humboldt County Board of Supervisors. The Department will provide a bill to the applicant after the decision. Any and all outstanding Planning fees to cover the processing of the application to decision by the Hearing Officer shall be paid to the Humboldt County Planning Division, 3015 "H" Street, Eureka.

5. The Applicant is responsible for costs for post-approval review for determining project conformance with conditions on a time and material basis as set forth in the schedule of fees and charges as adopted by ordinance of the Humboldt County Board of Supervisors. The Department will send a bill to the Applicant for all staff costs incurred for review of the project for conformance with the conditions of approval. All Planning fees for this service shall be paid to the Humboldt County Planning Division, 3015 "H" Street, Eureka.

6. A Notice of Exemption (NOE) will be prepared and filed with the County Clerk for this project in accordance with the State CEQA Guidelines. Within three days of the effective date of permit approval, it is requested that the applicant submit a check or money order for the required filing fee in the amount of \$50 payable to the Humboldt County Clerk/Recorder. If this payment is not received within this time period, the Department will file the NOE and will charge this cost to the project.

7. If any wildlife is encountered during the authorized activity, the applicant shall not disturb the wildlife and shall allow wildlife to leave the work site unharmed.

8. The Applicant is responsible for costs for post-approval review for determining project conformance with conditions prior to release of building permit or initiation of use and at time of annual inspection. In order to demonstrate that all conditions have been satisfied, applicant is required to pay the conformance review deposit as set forth in the schedule of fees and charges as adopted by ordinance of the Humboldt County Board of Supervisors (currently \$750) within sixty (60) days of the effective date of the permit or upon filing of the Compliance Agreement (where applicable), whichever occurs first. Payment shall be made to the Humboldt County Planning Division, 3015 "H" Street, Eureka.

## ATTACHMENT 2

### STAFF ANALYSIS OF THE EVIDENCE SUPPORTING THE REQUIRED FINDINGS

**Required Findings:** To approve this proposed project, the Hearing Officer must determine that the applicant has submitted evidence in support of making **all** of the following required findings.

The County Zoning Ordinance, Sections 312-1.1.2 and 312-17.1 of the HCC (Required Findings for All Discretionary Permits) specify the findings that are required to grant a CUP and Special Permit:

1. The proposed development is in conformance with the County General Plan;
2. The proposed development is consistent with the purposes of the existing zone in which the site is located;
3. The proposed development conforms with all applicable standards and requirements of these regulations;
4. The proposed development and conditions under which it may be operated or maintained will not be detrimental to the public health, safety, or welfare; or materially injurious to property or improvements in the vicinity;
5. The proposed development does not reduce the residential density for any parcel below that utilized by the Department of Housing and Community Development in determining compliance with housing element law (the midpoint of the density range specified in the plan designation) unless the following written findings are made supported by substantial evidence: 1) the reduction is consistent with the adopted general plan including the housing element; and 2) the remaining sites identified in the housing element are adequate to accommodate the County share of the regional housing need; and 3) the property contains insurmountable physical or environmental limitations and clustering of residential units on the developable portions of the site has been maximized; and
6. In addition, the California Environmental Quality Act (CEQA) states that one of the following findings must be made prior to approval of any development which is subject to the regulations of CEQA. The project either:
  - a. Is categorically or statutorily exempt; or
  - b. Has no substantial evidence that the proposed project will have a significant effect on the environment and a negative declaration has been prepared; or
  - c. Has had an environmental impact report (EIR) prepared and all significant environmental effects have been eliminated or substantially lessened, or the required findings in Section 15091 of the State CEQA Guidelines have been made.

**Staff Analysis of the Evidence Supporting the Required Findings:** To approve this proposed project, the Hearing Officer must determine that the applicant has submitted evidence in support of making **all** of the following required findings.

**1. The proposed development must be consistent with the General Plan.** The following table identifies the substantial evidence which supports finding that the proposed development is in conformance with all applicable policies and standards of the Humboldt County General Plan.

Plan Section	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
<p>Land Use Chapter 4</p> <p>Land Use Designations Section 4.8</p>	<p><b>Residential Agriculture (RA5-20):</b> Large lot residential units that typically rely upon on-site water and wastewater systems. Varying densities are reflective of land capabilities and/or compatibility issues. RA40 designations are applied to more remote, steep and high hazards areas or where appropriate to ensure compatibility with adjacent resource production and open space uses.</p> <p>Density range is 20 to 5 acres/unit</p>	<p>The Applicant is proposing to permit an existing commercial cannabis cultivation operation consisting of 43,480 sf of outdoor cannabis cultivation on lands designated as Residential Agriculture. Intensive agriculture and agriculture product processing are allowable use types for this designation.</p>
<p>Circulation Chapter 7</p>	<p>Goals and policies contained in this Chapter relate to a balanced, safe, efficient, accessible and convenient circulation system that is appropriate for each type of unincorporated community (C-G1,CT-G2); coordinated planning design, development, operations, and maintenance between the County and other transportation system service providers (C-G3); and access for all transportation mode types with improved opportunities to move goods within, into and out of Humboldt County (C-G4, C-G5)</p> <p>Related policies: C-P3. Consideration of Transportation Impacts in Land Use Decision Making.</p>	<p>The access road to the site is from US-101 to Salmon Creek Road which is a maintained paved public road. Salmon Creek Road provides access to Somerville Road via a gravel driveway. Travel along Somerville Road for approximately 0.8 miles is needed to access the private drive for to access the project site. The applicant completed a Humboldt County Department of Public Works Road Evaluation Report on 11/29/2017 stating the entire road segment of Somerville Road is the equivalent of a category 4 standard. The road evaluation shows all area roadways including intersections of US-101, Salmon Creek Road, Somerville Road, and Carol Lane. As requested by the Humboldt County Division of Public Works, a condition of approval has been added requiring the access road from the Salmon Creek Road to Somerville Road be improved to meet County standards with a 20-foot-wide by 50 feet in length apron. Conditions of approval also require the access road to be certified and/or improved to meet the functional equivalent of a Category 4 road with slopes consistent with Fire Safe Regulation standards as certified by a licensed engineer or County staff.</p>

Plan Section	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
Housing Chapter 8	<p>Goals and policies contained in this Element seek to identify existing and projected housing needs and establish goals, policies, standards and measures for the preservation, improvement, and development of housing.</p> <p>Related policies: H-P3, Development of Parcels in the Residential Land Inventory</p>	<p>The proposed project does not involve residential development, nor is the project site part of the Housing element Residential Land Inventory, and the proposed project will not preclude any future residential development. The proposed project will not reduce the residential density for any parcel below that utilized by the Department of Housing and Community Development in determining compliance with housing element law.</p>
<p>Conservation and Open Space Chapter 10</p> <p>Open Space Section 10.2</p>	<p>Goals and policies contained in this Chapter relate to an Open Space and Conservation Program that is complimentary to other agencies' plans and that preserves the county's unique open spaces. (CO-G1, CO-G3)</p> <p>Related policies: CO-P1, Conservation and Open Space Program; CO-P12, Development Review, CO-S1. Identification of Local Open Space Plan, and CO-S2. Identification of the Open Space Action Program.</p>	<p>The proposed project is located within Open Space Land Plan because the project site is planned Residential Agriculture (RA). The proposed project can be found consistent with the Open Space Plan Open Space Action because the proposed project is consistent with the allowable uses of the Land Use Designations. The proposed cannabis cultivation is considered an agricultural product and consistent with land uses planned for agricultural purposes, and is consistent with the use of Open Space land for management production of resources. The cultivation areas will be greater than 150 from SMAs, and the proposed project also will remove a former cultivation area from an SMA to a previously disturbed environmentally superior site. The former site will be revegetated and with native grasses and trees to protect water resources. Therefore, the proposed project is consistent with the preservation of natural resources within open space.</p>

Plan Section	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
<p>Conservation and Open Space Chapter 10</p> <p>Biological Resources Section 10.3</p>	<p>Goals and policies contained in this Chapter relate to mapped sensitive habitat areas where policies are applied to protect fish and wildlife and facilitate the recovery of endangered species (BR-G1, Threatened and Endangered Species, BR-G2, Sensitive and Critical Habitat, BR-G3, Benefits of Biological Resources)</p> <p>Related policies: BR-P1. Compatible Land Uses, BR-P5. Streamside Management Areas.</p>	<p>There are no positive spotted owl sightings within a mile of the project site, however, CDFW has commented on the potential for NSO habitat in the proximity. The project site is mapped as habitat for the Western Bumble Bee. The project is for outdoor cultivation, the applicant is not planning any expansion of the existing cultivation areas, and power is provided by PG&amp;E. The applicant has an existing water diversion permit from a cistern in a Class II watercourse. None of the cultivation areas are within 150 feet of this or any other water course. Humboldt County WebGIS maps a SMA in the northern portion of the project site but the nearest cultivation area is approximately 325 feet to the southwest. A private driveway with culvert crosses this stream and has been improved according to the WRPP. Due to the mapped Western Bumble Bee habitat and proximity to potential Northern Spotted Owl occurrences, a condition of approval has been added to require a biological evaluation prior to any future construction or grading activities.</p> <p>Due to the presence of the existing pond, the applicant has included a bullfrog management plan to the Cultivation and Operations Plan and this will be incorporated to the project operations. The bullfrog management plan includes monitoring the pond for bullfrog presence, options for removal including manual or dewatering, reporting requirements, and criteria for success. Incorporation of this plan and listed measures would reduce the environmental effects should bullfrogs be located on the project site.</p>
<p>Conservation and Open Space Chapter 10</p> <p>Cultural Resources Section 10.6</p>	<p>Goals and policies contained in this Chapter relate to the protection and enhancement of significant cultural resources, providing heritage, historic, scientific, educational, social and economic values to benefit present and future generations (CU-G1, Protection and Enhancement of Significant Cultural Resources)</p> <p>Related policies: CU-P1. Identification and Protection, CU-P2. Native American Tribal Consultation]</p>	<p>A Cultural Resources Investigation was conducted by Arsenault and Associates and documented in a report entitled A Cultural Resources Investigation for The Schackow Farms, Inc. Commercial Cannabis Cultivation, Humboldt County, California. A California Historic Resource Information System search (CHRIS), historical background search, Native American outreach, and pedestrian survey was conducted as part of the Cultural Resources Investigation. The survey did not locate any sensitive cultural resources and recommended that no additional archeological studies were needed for permit approval. A condition of approval has been incorporated regarding inadvertent discovery protocol to protect cultural resources.</p>

Plan Section	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
<p>Conservation and Open Space Chapter 10</p> <p>Scenic Resources Section 10.6</p>	<p>Goals and policies contained in this Chapter relate to the protection of scenic areas that contribute to the enjoyment of Humboldt County's beauty and abundant natural resources (SR-G1); and a system of scenic highways roadways that increase the enjoyment of, and opportunities for, recreational and cultural pursuits and tourism in the County. (SR-G2)</p> <p>Related policies: SR-S4. Light and Glare</p>	<p>The proposed project involves the outdoor cultivation of approximately 43,480 sf of existing outdoor cultivation on a 23.5 acre parcel. The parcel is located approximately 1,900 feet west of US 101, which is listed as an Eligible State Scenic Highway but is not officially designated. The project site is not visible from the highway. In addition, the proposed project would be required to comply with International Dark Sky Association standards for Lighting Zone 0 and Lighting Zone 1, and be designed to regulate light spillage onto neighboring properties resulting from backlight, uplight, or glare (BUG). International Dark Sky Association Standards exceed the requirements of Scenic Resources Standard SR-S4, Light and Glare, that lighting be fully shielded, and designed and installed to minimize off-site lighting and direct light within the property boundaries.</p>
<p>Water Resources Chapter 11</p> <p>Stormwater Drainage</p>	<p>Goals and policies contained in this Chapter relate to coordinated watershed planning and land use decision making to advance management priorities (WR-G3, WR-G4, WR-G5); watershed conservation and restoration efforts aimed at de-listing water bodies and watersheds which are restored to meet all beneficial uses, including water use, salmon and steelhead recovery plans, recreational activities, and the economy. (WR-G1, WR-G2, WR-G7, WR-G8, WR-G9)</p> <p>Related policies: WR-P10. Erosion and Sediment Discharge; WR-42 Erosion and Sediment Control Measures.</p>	<p>The Project site falls within Tier 2 of the North Coast Regional Water Quality Control Board's (NCRWQCB) Order No. 2015-0023 (Order), which requires preparation of a WRPP to protect water quality from cannabis cultivation and related activities. The applicant has retained Timberland Resources Consultants and a WRPP was prepared that identified areas of the project site that are deficient in meeting the terms established by the Order. The WRPP includes specific measures, milestones, and a monitoring plan to ensure that corrective actions are met. The applicant has completed the installation of many the BMPs listed in the WRPP and has a timeline to implement the balance. Conformance to the WRPP and associated requirements have been added as a condition of approval.</p>

Plan Section	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
<p>Water Resources Chapter 11</p> <p>Onsite Wastewater Systems</p>	<p>Goals and policies contained in this Chapter relate to adequate public water supply as well as onsite wastewater systems and natural and developed storm drainage systems that minimize interference with surface and groundwater flows and storm water pollution. (WR-G6, WR-G9, WR G10)</p> <p>Related policies: WR-IM7. Basin Plan Septic Requirements; and IS-P20. On-Site Sewage Disposal Requirements.</p>	<p>The project site is served by an existing permitted Onsite Wastewater Treatment System (OWTS) that serves the existing residence. The applicant also is seeking a permit for a proposed ADA restroom that would be available to workers. The applicant will supply workers with rented portable toilets. The applicant also plans to construct an Americans with Disability Act (ADA) compliant bathroom on-site after the cannabis permit is issued. With this, the applicant plans to provide the workers with a permanent restroom facility and no longer need the portable restrooms.</p>
<p>Noise Chapter 13</p>	<p>Goals and policies contained in this Chapter discourage incompatible uses within communities and reduce excessive noise through the application of standards (N-G1, N-G2)</p> <p>Related policies: N-P1, Minimize Noise from Stationary and Mobile Sources; N-P4, Protection from Excessive Noise</p>	<p>The subject parcel is not located in an area that requires special noise attenuation measures. The existing and proposed cultivation areas are mixed-light, and a Honda EU6500 5,500-watt generator is used for lights, fans, and power points inside the trimming and harvesting facility. Honda rates the noise produced by the generator at 60 db(A)/7m] while at the rated load for 5.1 hours of continuous operations. The applicant is in the process of permitting power from PG&amp;E to the processing facility which would eliminate noise from the generator with the exception of emergency back-up power. by the proposed. Noise generated from the generator shall comply with the standards set forth in Section 55.4.11(o) of the CMMLUO and Department Policy Statement #DPS-16-005. The applicant states that the generator is not audible from property line. Conditions requiring conformance with noise standards have been added to the proposed project.</p>

Plan Section	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
<p>Safety Element Chapter 14</p> <p>Geologic &amp; Seismic</p>	<p>Goals and policies contained in this Chapter relate to communities that are designed and built to minimize the potential for loss of life and property resulting from natural and manmade hazards; and to prevent unnecessary exposure to areas of geologic instability, floodplains, tsunami run-up areas, high risk wildland fire areas, and airport areas planned and conditioned to prevent unnecessary exposure of people and property to risks of damage or injury. (S-G1, S-G2)</p> <p>Related policies: S-P11. Site Suitability, S-P7. Structural Hazards.</p>	<p>The project site is not located in a mapped Alquist-Priolo fault zone nor is it mapped in a liquefaction zone per Humboldt County WebGIS. Humboldt County WebGIS shows an unnamed historic quaternary fault trending in the northwesterly to southeasterly direction through the central portion of the project site. The fault, however, is not shown as an Alquist-Priolo fault and it does not underlay any of the existing cultivation areas, residence, or appurtenant facilities. The unnamed fault is approximately 175 feet from the nearing cultivation site and approximately 200 feet from the existing residence. The existing cultivation site is in an area of moderate instability and is mapped as having experienced a historic landslide. but about 90% of the cultivation occurs on slopes less than 15% or between 15%-30%. The California Department of Conservation (CDOC) lists this slide as, "dormant mature, dormant old/relic, or dormant age not specified." The CDOC does not map the site as being in the Seismic Hazard Program. The WRPP contains a discussion of the site and stability and noted that physical reconnaissance revealed no unstable areas per 14 California Code of Regulations (CCR) 895.1 within or nearby any of the developed areas of the property. The cultivation site is located in an area with a high fire rating. The proposed project does not pose a threat to public safety related from exposure to natural or manmade hazards. If additional construction is proposed, the applicant must secure a grading permit which requires the applicant to, at a minimum, incorporate the standard erosion control measures enumerated in the Framework Plan. These measures are a Condition of Approval. In addition, the applicant has implemented and will continue to implement erosion control BMPs, including diking the lowest part of the cultivation area to contain any runoff, installation of culverts, rocking roads, stabilizing soils, etc.</p>
<p>Safety Element Chapter 14</p> <p>Flooding</p>	<p>Goals and policies contained in this Chapter relate to the use of natural drainage channels and watersheds that are managed to minimize peak flows in order to reduce the severity and frequency of flooding. (S-G3)</p> <p>Related policies include: S-P12,</p>	<p>The project site is outside any mapped flood hazard areas. The project site is not within a mapped dam or levee inundation area and, at approximately 17 miles from the coast and approximately 757 feet above mean sea level, is outside the areas subject to tsunami run-up.</p>

Plan Section	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
	Federal Flood Insurance Program; S-P13, Flood Plains; S-P15, Construction Within Special Flood Hazard Areas.	
<p>Safety Element Chapter 14</p> <p>Fire Hazards</p>	<p>Goals and policies of this Chapter encourage development designed to reduce the risk of structural and wildland fires supported by fire protection services that minimize the potential</p> <p>Related policies: S-P15, Conformance with State Responsibility Areas (SRA) Fire Safe Regulations;</p>	<p>The parcel is in an area of High Fire rating and within the State Fire Responsibility Area (SRA) where the State of California has the primary financial responsibility for the prevention and suppression of wildland fires. The Humboldt County Fire Safe Ordinance (Section 3111-1 et seq.) establishes development standards for minimizing wildfire danger in SRAs. The applicant will implement any improvements needed to meet requirements. The project site has an existing horseshoe driveway that encircles CA#1 providing direct access to Somerville Road. This negates the need for the installation of pullouts or other turnarounds. The applicant will maintain the surrounding vegetation at the required distance from structures and is included as an ongoing condition of approval. All physical structures will meet the 30-foot SRA setback from property lines. In addition, the Humboldt County Fire Safe Ordinance (Section 3111-1 et seq.) establishes development standards for minimizing wildfire danger in state responsibility designated areas. The applicant will be required, as a condition of approval, to conform to these and other CAL FIRE standards.</p> <p>There will be 10-15 seasonal workers and one part time farm hand on the subject parcel. There is more than 250,000 gallons of water storage on the subject parcel to assist with fire protection in an emergency situation.</p>
Community Infrastructure and Services Element, Chapter 5	IS-S5 requires new industrial, commercial and residential development located outside of fire district boundaries to obtain written acknowledgment of available emergency response and fire suppression services from the local fire agency, including any recommended mitigation.	To implement this policy, conditions of approval for the proposed project required the applicant to contact the local fire service provider [Miranda Community Services District] and furnish written documentation from that agency of the available emergency response and fire suppression services and any recommended project mitigation measures. If emergency response and fire suppression services are not provided, the applicant shall cause to be recorded an "ACKNOWLEDGMENT OF NO AVAILABLE EMERGENCY RESPONSE AND FIRE SUPPRESSION SERVICES" for the parcel(s) on a form provided by the Humboldt County Planning Division.

Plan Section	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
Air Quality Chapter 15	<p>Goals and policies contained in this Chapter relate to improved air quality to meet current and future state and federal standards, including attainment of particulate matter requirements (AQ-G1, AQ-G2, AQ-G3) and the successful reduction of greenhouse gas emissions to levels consistent with state and federal requirements (AQ-G3)</p> <p>Related policies: AQ-P4, Construction and Grading Dust Control, AQ-S1. Construction and Grading Dust Control, AQ-P7. Interagency Coordination.</p>	Applications for grading and or building permits shall be referred to the North Coast Air Quality Management District (NCAQMD) for review and consultation. Dust control practices during construction and grading shall achieve compliance with NCAQMD fugitive dust emission standards.

**2. Zoning Compliance and 3. Conforms with applicable standards and requirements of these regulations:**  
The following table identifies the evidence which supports finding that the proposed development is in conformance with all applicable policies and standards in the Humboldt County Zoning Regulations.

Zoning Section	Summary of Applicable Requirement	Evidence That Supports the Zoning Finding
§312-1.1.2  Legal Lot Requirement	Development permits shall be issued only for a lot that was created in compliance with all applicable state and local subdivision regulations.	The parcel of land known as APN 211-401-007-000 is Parcel 1 as shown on Parcel Map No. 1550 on file in the Recorder's Office of Humboldt County in Book 13 of Parcel Maps, pages 99 and 100. There is no evidence indicating there have been any subsequent acts to merge or divide this parcel. Therefore, the subject parcel was lawfully created in its current configuration and can be developed as proposed.
§314-8.1  Unclassified (U)	<b>Unclassified (U):</b> Intended to be applied in areas in which general agriculture, one-family dwelling, rooming and boarding of not more than two (2) persons, and manufactured home are desirable predominant uses.	The applicant is seeking a Conditional Use Permit for 43,480 square feet (sf) of existing outdoor commercial cannabis cultivation on a property zoned U. The proposed use is specifically allowed with a Conditional Use Permit in this zoning district and under Section 314-55.4.8.2.2 of the CMMLUO.

Zoning Section	Summary of Applicable Requirement	Evidence That Supports the Zoning Finding
Minimum Lot Size	6,000 square feet	23.5 acres
Maximum Ground Coverage	40 percent	The proposed project is the cultivation of approximately 43,480 sf of outdoor commercial medical cannabis on a 23.5 acre parcel. Ground coverage from cannabis cultivation would be less than 5 percent, which is well below the lot coverage.
Minimum Lot Width	50 feet	650 feet.
Maximum Lot Depth	Three (3) times the width	1,200 feet.
Minimum Yard Setbacks  (Through the SRA requirements)	Front: 20 feet  Rear: 10 feet  Side: 5 feet  SRA: 30 feet, all sides	Front: 100 feet Rear: 550 feet Sides: 150 feet (west) 250 (east)
Max. Building Height	None specified	>35 feet
§314-61.1  Streamside Management Area (SMA)	Purpose: to provide minimum standards pertaining to the use and development of land located within Streamside Management Areas (SMAs) and other wet areas (OWA) to implement the County's Open Space Element of the General Plan.	There is one SMA within the northerly portion of the project site. The unnamed SMA flows in an easterly direction to the South Fork Eel River. The nearest cultivation area is approximately 325 feet from this SMA and there are no diversions in the SMA. As part of the WRPP measures to ensure downstream water health have been implemented and will continue to be implemented. The applicant does maintain one existing concrete cistern within an unnamed spring in the southwestern project site. The applicant has filed for an Initial Statement of Water Diversion and Use with the SWRCB to permit this use. In addition, the applicant filed a LSAA with CDFW. As a condition of approval, the applicant will be required to have completed both process and be issued the pertinent permits.

<p>§314-109.1 Off-Street Parking</p>	<p>Off Street Parking for Agricultural use*: Parking space per employee at peak shift. A minimum of 15 parking spaces are required.</p> <p>*Use for this activity is not specified. Per Section 314-109.1.2.9, the Director may fix the required number of parking spaces based on standards for most comparable use.</p>	<p>The applicant will hire between 10 and 15 seasonal employees and one farm hand to assist in cultivation activities. The HCC does not contain specific standards and regulation as to the off-street parking requirement for agricultural employees. The most comparable standard for employees in this situation is one space for each employee at peak shift (per Section 314-109.1.3.4.2 - Manufacturing).</p> <p>There is sufficient space on the 23.5 acre property to park fifteen vehicles. The Cultivation and Operations Plan indicates there is a gravel lot south of the cannabis processing facility and west of CA#1. The applicant has designated this area to be used for employee parking.</p>
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<p><b>314-55.4 et seq. HCC: Commercial Cultivation, Processing, Manufacturing and Distribution of Cannabis for Medical Use Inland Land Use Regulation (CMMLUO)</b></p>		
<p>§ 314-55.4.8.2.2</p>	<p>On...U parcels of 1 acre or larger, outdoor cultivation may be permitted with a Use Permit.</p>	<p>In accordance with the referenced section the applicant has applied for the necessary CUP due to the cannabis cultivation of 43,480 sf on a 23.5 acre parcel.</p>
<p>§314-55.4.8.2.2 Existing Outdoor and Mixed-Light Cultivation Areas</p>	<p>On parcels 5 acres or larger in size, a Zoning Clearance Certificate, Special Permit or Conditional Use Permit may be issued for existing outdoor and mixed light cultivation for some or all of the cultivation area in existence prior to January 1, 2016. The total cultivation area allowed on a single parcel shall not exceed one acre for outdoor cultivation or 22,000 square feet for mixed-light cultivation.</p> <p>A Conditional Use Permit is appropriate for existing outdoor and/or mixed-light cultivation &gt;10,000 - 43,560 sf on parcels over 1 acre, zoned U.</p>	<p>The proposed action is a Conditional Use Permit for 43,480 sf of cannabis cultivation on APN 211-401-007, which is a 23.5 acre parcel zoned U. Aerial imagery on TerraServer indicates that existing cultivation operations on the property were in place in 2015. The cultivation area, type, status, and zoning of the parcel are consistent with the requirements for a Conditional Use Permit. The applicant will comply with all conditions of the CMMLUO, as specified in the recommended conditions of approval.</p>

§314-55.4.8.2	In all zones where cultivation is allowed consisting of timberland, the commercial cultivation of cannabis for medical use shall only be permitted within a 3-acre conversion exemption area, or non-timberland open area, subject to the conditions and limitations set forth in this Section.	CAL FIRE commented that forest practice violations have occurred on the property based off aerial imagery and that no conversion permits are on file with CAL FIRE for the tree removal. In correspondence dated September 4, 2017, CAL FIRE indicated not supporting the proposed project noting that forest practice violations had occurred and that a Registered Professional Forester must evaluate the site. On April 25, 2018, a (RPF) from Timberland Resource Consultants evaluated the project site for potential timberland conversion. The report found that a total of 1.5 acres of unauthorized timberland conversion occurred but that it does not exceed the three acre-conversion exemption maximum and recommended treatment for the slash and woody debris. Conditions of approval require the applicant to adhere to the recommendations of the Timber Conversion Evaluation Report. The report was sent back to CAL FIRE for additional comments and no response was received.
§314-55.4.8.10 Permit Limit	No more than four commercial cannabis activity permits may be issued to a single person, as defined in the referenced section.	According to records maintained by the Department, the applicant has only applied for one cannabis activity permit, and he is entitled to four. This application is for a single permit for outdoor cultivation, which would bring the applicants total to two cannabis activity permits.
§314-55.4.9.1 Accessory Processing	Processing for cultivation requiring a Special Permit or Use Permit will be considered in the Use Permit application.	All commercial cannabis cultivated will be processed at the applicant's currently unpermitted cultivation operation on APN 211-401-007. The Cultivation and Operations Plan indicates that all requirements related to processing of commercial cannabis will be processed in accordance with HCC Section 314-55.4.11(q) through (u).
§314-55.4.9.4 Pre-Application Registration	Existing cultivation sites shall register with the County within 180 days of the effective date of this ordinance.	A Commercial Cannabis Registration Form for APN 211-401-007, was filed with the Planning Division on December 8, 2016, and within the specified window.
§314-55.4.10 Application Requirements	Identifies the Information Required for All Applications	Attachment 3 identifies the information submitted with the application, and shows all the required information was received.
§314-55.4.11 Performance Standards	Identifies the Performance Standards for Cannabis Cultivation Activities	All the applicable performance standards are included as condition of approval. They are required to be met throughout the timeframe of the permit.

<p>§314-55.4.11.c Performance Standards-Water</p>	<p>Compliance with all statutes, regulations and requirements of the California State Water Resources Control Board, Division of Water Rights, at a minimum to include a statement of diversion of surface water from a stream, river, underground stream, or other watercourse required by Water Code Section 5101, or other applicable permit, license, or registration.</p>	<p>Water is sourced from an existing concrete cistern for which the applicant filed an Initial Statement of Water Diversion and Use with the State Water Resources Control Board Water Diversion. The applicant has installed a rainwater catchment system on the existing roof of the processing facility and installed a permitted pond approximately 80 feet by 50 feet. Both the rooftop catchment and pond will catch rainwater and reduce the demand on the diversion. Upon receipt of the permit, the proposed project will comply with the referenced section. The proposed project has been conditioned upon the applicant receiving the diversion permit.</p>
<p>§314-55.4.11.d Performance Standards-Setbacks</p>	<p>The area of cannabis cultivation and on-site processing shall be setback at least 30 feet from any property line, and 600 feet from any school, school bus stop, church or other place of religious worship, public park, or tribal cultural resources (TCRs).</p>	<p>The applicant's site plan shows and evaluation of aerial photography shows that that the cultivation areas are setback at least 30 feet from any property line, and at least 600 feet from any school, school bus stop, church or other place of religious worship, public park, or tribal cultural resources (TCRs). A Cultural Resources Investigation was conducted by Arsenault and Associates and documented in a report entitled A Cultural Resources Investigation for The Schackow Farms, Inc. Commercial Cannabis Cultivation, Humboldt County, California. The survey did not locate any sensitive cultural resources and recommended that no additional archeological studies were needed for permit approval. A condition regarding inadvertent archaeological discovery of cultural resources has been included.</p>
<p>§314-55.4.11.o Performance Standards-Generator Noise</p>	<p>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, 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, when generator use is to occur in the vicinity of potential habitat. Conformance will be evaluated using current auditory disturbance guidance prepared by the United State Fish and Wildlife Service.</p>	<p>The subject parcel is not located in an area that requires special noise attenuation measures. The existing and proposed cultivation areas are mixed-light, and a Honda EU6500 5,500-watt generator is used for lights, fans, and power points inside the trimming and harvesting facility. Honda rates the noise produced by the generator at 60 db(A)/7m] while at the rated load for 5.1 hours of continuous operations. The applicant is in the process of permitting power from PG&amp;E to the processing facility which would eliminate noise from the generator with the exception of emergency back-up power. by the proposed. Noise generated from the generator shall comply with the standards set forth in Section 55.4.11(o) of the CMMLUO and Department Policy Statement #DPS-16-005. The applicant states that the generator is not audible from property line. Conditions requiring conformance with noise standards have been added to the proposed project.</p>

§314-55.4.17 Sunset Date	No application for any Use Permit pursuant to the CMMLUO shall be processed for issuance or approval that is received after December 31, 2016.	The applicant filed the application prior to December 31, 2016.
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**4. Public Health, Safety and Welfare, and 6. Environmental Impact:** The following table identifies the evidence which supports finding that the proposed development will not be detrimental to the public health, safety and welfare or materially injurious to properties or improvements in the vicinity, and will not adversely impact the environment.

Code Section	Summary of Applicable Requirements	Evidence that Supports the Required Finding
§312-17.1.4	The proposed development will not be detrimental to the public health, safety and welfare, and will not be materially injurious to properties or improvements in the vicinity.	The Department finds that the proposed project will not be detrimental to the public health, safety and welfare since all reviewing referral agencies have approved the proposed project design. The project as proposed and conditioned is consistent with the general plan and zoning ordinances; and the proposed project is not expected to cause significant environmental damage.
§§ 15304 (a) and 15311 of CEQA	Categorically exempt from State environmental review.	CEQA Exemption Sections Class 1, 15301 (Existing Facilities), Class 3, 15303 (New Construction or Conversion of Small Structures), Class 4, and 15304 (Minor Alterations to Land) of the California Environmental Quality Act (CEQA) Guidelines. Per the submitted evidence and agency responses, none of the exceptions to the Categorical Exemption per Section 15300.2 of the State CEQA Guidelines apply to this proposed project. Based on the environmental review of the proposed project staff believes use of CEQA Exemptions including Sections Class 1, 15301 (Existing Facilities), Class 3, 15303 (New Construction or Conversion of Small Structures), and Class 4 (Minor Alterations to Land) are applicable to the proposed project. Exemptions under these Sections are valid because the proposed project consists of the operation, repair, maintenance, permitting, leasing, licensing or minor alterations of existing public or private structures, facilities, mechanical equipment, or topographical features, that would involve negligible or no expansion of use. The proposed project would seek proper permitting to convert and improve existing structures to support the proposed cannabis operations. These improvements would occur within the existing building footprint. The proposed project seeks to improve the site with additional electricity service and eliminate the need for a portable generator. In addition, a minimal amount of ground disturbance would be needed to remove an existing cultivation area from within an SMA buffer to an upland previously disturbed environmentally superior location. The previous cultivation areas would be reseeded with native vegetation, covered in straw mulch, and planted with redwood seedling at the appropriate density. None of the proposed changes would substantially alter the existing conditions of the land, water, and/or vegetation including trees outside permitted changes such as those needed for

		compliance with SRA fire prevention. Therefore, these activities are consistent with these exemptions.
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**5. Residential Density Target:** The following table identifies the evidence which supports finding that the project will not reduce the residential density for any parcel below that utilized by the Department of Housing and Community Development in determining compliance with housing element law.

<b>Code Section</b>	<b>Summary of Applicable Requirement</b>	<b>Evidence that Supports the Required Finding</b>
17.1.5 Housing Element Densities	The proposed development shall not reduce the residential density for any parcel below that utilized by the Department of Housing and Community Development in determining compliance with housing element law (the midpoint of the density range specified in the plan designation), except where: 1) the reduction is consistent with the adopted general plan including the housing element; and 2) the remaining sites identified in the housing element are adequate to accommodate the County share of the regional housing need; and 3) the property contains insurmountable physical or environmental limitations and clustering of residential units on the developable portions of the site has been maximized.	The property was not included in the 2014 Housing Inventory because of the land use designation and zoning. The proposed project is in conformance with the standards in the Housing Element.

### ATTACHMENT 3

#### Applicant's Evidence In Support of the Required Findings

Attachment 3 includes a listing of all written evidence which has been submitted by the applicant in support of making the required findings. The following materials are on file with the Planning Division:

1. The name, contact address and phone number(s) of the applicant. (Application form on file)
2. If the applicant is not the record title owner of parcel, written consent of the owner for the application with original signature and notary acknowledgement. (On file)
3. Site plan showing the entire parcel, including easements, streams, springs, ponds and other surface water features, and the location and area for cultivation on the parcel with dimensions of the area for cultivation and setbacks from property lines. The site plan shall also include all areas of ground disturbance or surface water disturbance associated with cultivation activities, including: access roads, water diversions, culverts, ponds, dams, graded flats, and other related features. If the area for cultivation is within ¼ mile (1,320 ft.) of a school, school bus stop, church or other place of religious worship, public park, or Tribal Cultural Resource, the site plan shall include dimensions showing that the distance from the location of such features to the nearest point of the cultivation area is at least 600 feet. (Attached)
4. A cultivation and operations plan that meets or exceeds minimum legal standards for water storage, conservation and use; drainage, runoff and erosion control; watershed and habitat protection; and proper storage of fertilizers, pesticides, and other regulated products to be used on the parcel, and a description of cultivation activities (outdoor, indoor, mixed light), the approximate date(s) cannabis cultivation activities have been conducted on the parcel prior to the effective date of this ordinance, if applicable, and schedule of activities during each month of the growing and harvesting season. (On file)
5. Copy of the statement of water diversion, or other permit, license or registration filed with the State Water Resources Control Board, Division of Water Rights, if applicable. (On file)
6. Description of water source, storage, irrigation plan, and projected water usage. (On file)
7. Copy of Notice of Intent and Monitoring Self-Certification and other documents filed with the North Coast Regional Water Quality Control Board demonstrating enrollment in Tier 1, 2 or 3, North Coast Regional Water Quality Control Board Order No. 2015-0023, or any substantially equivalent rule that may be subsequently adopted by the County of Humboldt or other responsible agency. (On file)
8. If any on-site or off-site component of the cultivation facility, including access roads, water supply, grading or terracing impacts the bed or bank of any stream or other watercourse, a copy of the Streambed Alteration Permit obtained from the Department of Fish & Wildlife. (On file)
9. If the source of water is a well, a copy of the County well permit, if available. (Not applicable)
10. If the parcel is zoned FR, U or TPZ, or involves the conversion of timberland as defined under section 4526 of the Public Resources Code, a copy of a Less-than-3-acre conversion exemption or timberland conversion permit, approved by the California Department of Forestry and Fire Protection (CAL-FIRE). Alternately, for existing operations occupying sites created through prior unauthorized conversion of timberland, evidence may be provided showing that the landowner has completed a civil or criminal process and/or entered into a negotiated settlement with CAL-FIRE. (Attached)

11. Consent for onsite inspection of the parcel by County officials at prearranged date and time in consultation with the applicant prior to issuance of any clearance or permit, and once annually thereafter. (On file)
12. For indoor cultivation facilities, identify the source of electrical power and how it will meet with the energy requirements in section 55.4.8.2.3, and plan for compliance with applicable Building Codes. (Not applicable)
13. Acknowledge that the County reserves the right to reduce the size of the area allowed for cultivation under any clearance or permit issued in accordance with this Section in the event that environmental conditions, such as a sustained drought or low flows in the watershed will not support diversions for irrigation. (On file)
14. Acknowledge that the county reserves the right to engage with local Tribes before consenting to the issuance of any clearance or permit, if cultivation operations occur within an Area of Traditional Tribal Cultural Affiliation, as defined herein. This process will follow current departmental referral protocol, including engagement with the Tribe(s) through coordination with their Tribal Historic Preservation Officer (THPO) or other tribal representatives. This procedure shall be conducted similar to the protocols outlined under SB 18 (Burton) and AB 52 (Gatto), which describe "government to government" consultation, through tribal and local government officials and their designees. During this process, the tribe may request that operations associated with the clearance or permit be designed to avoid, minimize or mitigate impacts to Tribal Cultural Resources, as defined herein. Examples include, but are not limited to: conducting a site visit with the THPO or their designee to the existing or proposed cultivation site, requiring that a professional cultural resources survey be performed, or requiring that a tribal cultural monitor be retained during project-related ground disturbance within areas of sensitivity or concern. The county shall request that a records search be performed through the California Historical Resources Information System (CHRIS). (On-file)
15. Streambed Alteration Agreement Notification No. 1600-2017-0137-R1 received October 16, 2018.
16. Water Resource Protection Plan dated September 15, 2017. (Attached)
17. Road Evaluation Reports dated November 30, 2108. (Attached)
18. Roads Assessment prepared by Matthew Schackow received November 30, 2017. (Attached)

**Mathew Schackow**  
**"SCHACKOW FARMS"**  
**Cultivation and Operations Plan**  
**Outdoor**  
**APN: 211-401-007**



**Description of water source, storage, irrigation, and projected water usage:**

The water source is a diversion from a cistern. The water flows by way of gravity through a sediment tank. It is then pumped into four 1,500 gallon tanks and a 750-gallon overflow tank which overflows back into the water system. My home and main garden area are served by the four 1500 gallon tanks. There is also a 1,000-gallon tank at cultivation area 2. This tank is filled as needed from the 750-gallon overflow tank controlled with a shut off valve. There is a 235,000-gallon pond. The pond will be filled mostly by rain water. A rain rooftop catchment system has been installed on the drying and trimming facility and is piped to catchment tanks and then to the pond. The 2,000-square foot (sf) rooftop will, considering average annual rainfall of 40 inches, capture approximately 49,000 gallons per year (cubic inches divided by 231). The pond will capture approximately 156,103 gallons. The remaining amount will be supplemented from the onsite diversion between the months of November and April.

**Water Diversion:** The point of diversion is located in a spring at the head of an unnamed class III watercourse tributary to South Fork Eel River. The diversion structure consists of a 12-inch diameter cylindrical concrete cistern that is 10 inches deep. The cistern is plumbed with 3/4-inch poly pipe, which feeds a series of water tanks located nearby

**Water usage and WRPP:**

Yearly total of water usage is approximately 271,000 gallons. January-April equals about 6,000 gallons a month(GPM), May approximately 20,000 approximate GPM, June 39,000 approximate GPM, July 44,000 approximate GPM, August 44,000 approximate GPM, September 44,000 approximate GPM, October 44,000 approximate GPM, November-December equals 6,000 gallons a month. A drip irrigation system is being installed to reduce usage to this amount from the original estimation of 528,000 gallons yearly. I am working with Timberland Resources to apply management measures and practices to prevent and minimize discharge to surface waters and further protect the habitat and watershed. They will be implemented as part of the WRPP. The WRPP has not yet been written but is in process and will be completed by Timberland Resources. The cultivation areas are more than 180 feet from nearest surface waters. Four of the seven greenhouses are

fenced with deer fencing. All gasoline cans, containers of oil, and all possible pollutants are kept in a shed which has a wood floor and a door. These products are typically only used during the trimming season when the generator is used. Cultivation began on this parcel before 2010, refer to the Humboldt County GIS website for aerial imagery.

## BMPs and Discussion

180101060407TRC272 - 9/15/17

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### Summary of Standard Conditions Compliance

1. Site maintenance, erosion control, and drainage features  Y  N  NC
2. Stream crossing maintenance  Y  N  NC
3. Riparian and wetland protection and management  Y  N  NC
4. Spills management  Y  N  NC
5. Water storage and use  Y  N  NC
6. Irrigation runoff  Y  N  NC
7. Fertilizers and soil amendments  Y  N  NC
8. Pesticides and herbicides?  Y  N  NC
9. Petroleum products and other chemicals  Y  N  NC
10. Cultivation-related wastes  Y  N  NC
11. Refuse and human waste  Y  N  NC

### Identified Sites Requiring Remediation (See Standard Conditions Assessment)

Unique Map Point(s)	Map Point Description	Associated Standard Condition	Temporary BMP	Permanent BMP	Priority for Action	Time Schedule for completion of Permanent BMP	Completion Date
Focus and ATV Trails	Surface drainage of roads and ATV trails.	A(1)(a)	N/A	Minimize or reconstruct worn down water breaks, rolling dips, and drainage 'cuts' as needed to prevent surface erosion on all roads and trails shown on the VSDPP map, refer to 1/1/16/17.	2	1/1/16/17	
Map Point 2	Cultivation Area within 50 ft of Class III watercourse.	A(3)	N/A	Beginning in 2018, relocate cultivation to outside of 50 ft from the Class III watercourse. Refrain from expansion towards the Class III watercourse. Allow bare soils within 50 feet of the Class III watercourse to revegetate with grass. Refrain from activities that would result in bare soils at Map Point 2. Take care to ensure that soil or plant waste is collected and not being directed or deposited towards the watercourse.	3	1/2/18	

211-401-007 -- Water Resource Protection Plan

WQID18170405CHUM

## Identified Sites Requiring Remediation (See Standard Conditions Assessment)

Unique Map Point(s)	Map Point Description	Associated Standard Condition	Temporary BMP	Permanent BMP	Priority for Action	Time Schedule for completion of Permanent BMP	Completion Date
Map Point 3	Cultivation areas with the potential to migrate below cultivation areas.	A(4)	N/A	Remove the part of the pile that is leaning up against the fence and install straw mulch as necessary to keep spots contained to the developed cultivation area.	2	11/18/17	
Map Point 4	Segment of Pond Overflow Route not yet diverted.	A(5)	N/A	Complete installation of the middle section of the Covered Pond Overflow.	2	11/18/17	
House, Cabin, Cabin	Septic systems associated with these structures.	A(1)	N/A	Septic systems on this property need to meet applicable County health standards, local agency management plans and ordinances, and/or the Regional Water Board's Onsite Wastewater Treatment System (OWTS) policy.	4	Prior to expiration of the Order, 2020	

**Priority:** Treatment Priority (1) indicates a very high priority with treatment being planned to occur immediately, (2) indicates a high priority site with treatment to occur prior to the start of the winter period (Nov. 15), (3) indicates a moderate priority with treatment being planned to occur within one year, or prior to the winter period (Nov. 15) of the 2<sup>nd</sup> season of operations, and (4) indicates a low priority with treatment being planned to occur in the shortest time possible, but no later than the expiration of this Order (five years).

Surface drainage of roads and ATV trails have water breaks, rolling dips, and drainage outs that have been maintained or reconstructed (completed 7/17). The cultivation within 50 feet of the class III watercourse at map point 2 will not be used. Before planting the pots in this area will be moved to an area outside this buffer zone (will be moved before planting 6/18). The spoils pile at map point 3 has been completely removed (completed 3/18). The segment of the pond overflow route at map point 4 has been connected and is completed as required (9/18). The house onsite has a permitted septic system. The farm will be renting portable toilets for the workers until the proposed ADAA compliant bathroom is built onsite (Compliant bathroom hopefully completed by 6/19). The cabin is not going to be used as worker housing.

### Description of site drainage, including runoff and erosion control measures:

Site drainage includes one point of diversion, one existing stream crossing upgrade, the installation of a pond overflow culvert and rock lined ditch. The existing stream

crossing is currently an 8-inch metal culvert on a class II watercourse. The culvert is undersized and too short. This culvert has been replaced with an 18-inch diameter culvert. The replacement of this culvert shall required the excavation and temporary displacement of 22 cubic yards of fill and 200 square feet of overall disturbance. Dimensions of the off-stream pond are 80 feet long by 50 feet wide by 15 feet deep and holds 235,000 gallons. A 12-inch permanent culvert extending the length of the cultivation area has been installed connecting the outflow of the pond to the rock armored outlet. Soil stabilization measures within 100 feet of a watercourse will take place between May and October and will be completed before the rain comes. Within 100 feet of a watercourse, roads will be treated to prevent waterborne transportation of sediment and concentration of runoff that results from operations. Treatment includes; rocking, out sloping, rolling dips, cross drains, water bars, slope stabilization measures, or other practices to site-specific conditions. Large areas of disturbance exceeding 100 continuous feet of space, road cut banks and fills, or any other area of disturbed soil that threatens to discharge sediment into waters must be grass seeded to 90% coverage. Anywhere that groundcover cannot effectively prevent the introduction of sediment into the waterway must be treated with slope stabilization measures. Side cast or fill material extending more than 20 feet in slope distance from the outside edge of a roadbed, which has access to a watercourse, shall be treated with slope stabilization measures. All roads shall have drainage and/or drainage collection and storage facilities installed as soon as practical following operations prior to rain that causes overland flow in the area of disturbance within 100 feet of a watercourse. There are seven greenhouses. There are three greenhouses on one side of the parcel and four greenhouses on the other side. All of the greenhouses are mulched with straw and natural pruning's from native trees and shrubs. Native reseeding is employed as needed. This is very effective for preventing run off. Also, hay and grass seed are used inside the greenhouses to aid ground cover and help with absorbing water that may leech from the pots. This is also a good stability enhancer for the earth under the pots.

**Proper storage of fertilizers, pesticides, and other regulated products:**

All fertilizers, soil amendments, and all other regulated products are stored in the original containers grouped with similar products in Rubbermaid totes with lids. They are kept inside a shed with a wood floor that has a door. When using soil amendments, they are transported to greenhouses in secondary containment totes to assure nothing leaks, spills, or is transferred on to the ground. All amendments are environmentally friendly. We apply them as instructed by the products label.

**Proposed Generator Use:**

The generator is used for trimming and harvesting only. The generator powers lights, fans, and power points inside the drying and trimming facility. When the generator is in use it is on a thick large sheet of wood, so when adding gas or oil, nothing can seep into the earth. It is covered so, if it is raining no pollutants will be washed from the generator onto the ground. Gas cans are kept in a shed, and are

never left near the generator or outside. Typically, the generator is used 6 to 8 hours a day for the extent of the trimming session. The trim lasts 2 weeks in August and usually 4 weeks starting in October. This generator will be unneeded as soon as the county will permit a new electrical service for the processing building. I have already begun this process but was told it would not be considered until the cannabis permitting process is complete. I hope to get the service permitted ASAP to discontinue the use of the generator.

The generator is not audible at the property line.

The generator used is a Honda EU6500. Honda rates this generator's noise level at 60 [db(A)/7 m] while at the rated load for 5.1 hours of continuous operation. The generator is known and marketed as "super quiet".

**Description of cultivation activities:**

All Cultivation is outdoor. Cultivation area 1 consists of 32,280 square feet of total area. This space includes four light deprivation greenhouses measuring 75ft by 12ft. Two cycles per yearly season are harvested. No supplemental light is used in the light deprivation greenhouses. The remainder of cultivation site 1 is used for outdoor plants in 150-gallon fabric grow pots. Cultivation area 2 is made up of three greenhouses. Two of them are light deprivation greenhouses measuring 12ft by 75ft and 12ft by 60ft. Two cycles per yearly season are harvested. The third greenhouse on cultivation site 1 is a 25ft by 100ft greenhouse used primarily for propagation. Supplemental light is used only to give small plants a start in the early season when natural light is not sufficient for vegetation. Once propagation is complete lights are removed for the season and the greenhouse is planted with full term outdoor plants. No supplemental light is used on the full-term plants. Cultivation site 2 uses a total area of 4,100 square feet. Cultivation site 3 is used for outdoor plants in 100-gallon fabric pots. The total area of cultivation site 3 is 7,100 square feet. Currently the farm is using a total of 43,500 square feet of total cultivation area all classified as outdoor cultivation. I am only using supplemental light for propagation in the greenhouse measuring 25 by 100 and in the 10 by 10 clone room off located on the side of the building labeled "shop".

## **Schedule of activities during each month of the growing and harvesting seasons:**

**January:** In January we begin propagation for the outdoor season by cloning our mother plants in order to make more mother plants. We spend the month cloning and planting. Mothers and clones are held in a 10ft by 10ft room on the side of the building labeled shop.

**February:** In February, we continue to build mother plants for the outdoor season and care for them by watering, fertilizing, and pest control. We also begin gathering supplies we need for the season like amendments, greenhouse plastic, and other products.

**March:** If the weather gets nicer in March we start to repair things broken by the harsh winter weather. We also begin cleaning up any windfall or obstructions caused by the long winter. Mowing and weed whacking can usual begin as well. Our mother plants will be ready make clones off of in the last two weeks of the month. At that time, we make all the clones we will need for the "full term" outdoor plants and for the large greenhouse. Many mother plants will also be made at this time to use for propagation when it's time to make clones for the "light deprivation" greenhouses. Mothers are moved into the greenhouse measuring 25ft by 100ft at cultivation site 2. Clones remain in the small propagation room. We continue to gather essential supplies.

**April:** In April, we will spend a lot of time caring for our newly made clones and once they are ready to plant we will do so in the 25ft by 100ft greenhouse at site 2 with supplemental light. We continue to care for our mothers with pest control, fertilizer, and watering. We will also be transplanting many plants to bigger pots. Usually the last supplies are gathered by now. Overall the property is manicured, all fences maintained, and general maintenance is concluded. In the last two weeks of the month we will make all the clones needed for the "light deprivation" greenhouses. Clones are kept in a small propagation chamber off the side of the shop, total area is about 100 square feet and is only used for keeping clones and mothers. At the end of the month amendments will be added to the large fabric pots in sites 1 and 3 for the "full term" outdoor plants. They are mixed in by shovel and with a small tiller.

**May:** May is when the farm is in full swing. We continue to care for our "light deprivation clones and our "full term" plants. As soon as the "light Deprivation" clones are ready they are transplanted. Again, continuing to water, fertilize, and do pest control on all plants. Transplanting into bigger pots as necessary. Large "full term" soil pots will be turned with a shovel a couple times this month. If the weather is nice "full term" plants will be planted outdoors in the last week. "Light deprivation" plants are planted in the third week and put into their respective

greenhouses for two weeks of vegetation. No supplemental light is used in the "light deprivation" greenhouses. We begin making organic compost tea.

**June:** "Full term" outdoor plants are planted by June 1<sup>st</sup>, "light deprivation" greenhouses will begin flowering as soon as possible. "Light deprivation" greenhouses do not use supplemental lighting. At this point we are pulling blackout tarps over the greenhouses in the evening and taking them off in the morning to regulate the light cycle. This method uses only natural light. We continue watering fertilizing and doing pest control on all plants. As the month progresses we begin pruning outdoor and greenhouse plants alike. We are also improving their structures with bamboo stakes. At the end of the month we begin adding plastic trellis to the large outdoor plants to improve the structure of the large plants. We make compost tea all month.

**July:** In July we continue regulating the light cycle for our "light deprivation" greenhouses. We finalize all Plastic trellis on "full term" plants. We continue watering, fertilizing, and doing pest control. Organic compost tea is made in large batches twice a week. In the second week of this month we make clones for the second round of "light deprivation" greenhouse plants. Clones are kept in the small propagation room.

**August:** In the first days of august "light deprivation" greenhouses are harvested and hung in the onsite drying and trimming building. They are dried for about two weeks then a crew of trimmers will come and trim the dried flowers. The generator is used approximately six hours a day during the trim to power lights and fans. After quality control those flowers are ready for consumption. Immediately after harvest the second round of "light deprivation" plants are planted. They will vegetate for two weeks and then we will begin regulating the light cycle again by pulling tarps over the greenhouses in the evening and taking them off in the morning. Again, no supplemental light is used for this method. Around the last week of the month pest control via spray discontinues on all "full term" plants. We continue to water, fertilize, and make organic compost tea. Mother plants are moved back to the small propagation room on the shop.

**September:** We continue to regulate the light cycle of the "light deprivation" greenhouses until the second week in September. At this time, it is unnecessary because the days are short enough to flower naturally. We continually water and make organic compost tea. We also manage and mend all trellis. We modify the trellis as needed to help the plant's structure.

**October:** Watering and Compost tea continue. Constant mold watch is in effect. If any mold is found it is removed to a green waste heap well away from the garden. In the second week, the final harvest begins on all plants. Once cannabis is harvested it is hung to dry in the onsite drying building. A crew of trimmers will come and trim the dry flowers. Again, the generator is used for an average of six

hours per day to run lights and fans inside the building. This generator use continues throughout the 3-4 week trimming period. Key strains of cannabis are retained by keeping mother plants. Mother plants are kept inside the greenhouse using supplemental light. They will be continually maintained. At this time, all growing areas are cleaned up from the season's activities. All tools and materials are stored. The property is essentially winterized.

**November:** Trimming continues through the month. Once flowers are trimmed they are vigorously quality controlled and then deemed ready for consumption. The flowers are carefully sealed and stored. We continue to maintain our mother plants. Trimming usually discontinues by the end of the month.

**December:** Mother plants are continually maintained in the 10 by 10 propagation room. We maintain high security in the off-season.

**Processing plan:** There is one manager (the owner) and one part time farm worker. The farmhand lives off the property. The property owner lives onsite in a private residence. Processing is done in the on-site building, which is being brought up to commercial code. All drying and trimming is done in this building. There are on-going inspections of the plants for mold and other diseases or pests throughout processing. Problem plants are put in the compost pile, which is a substantial distance from all garden areas.

**The processing protocol:** The cultivator and his assistants begin harvesting the "light deprivation" greenhouses in August and hang them in the onsite drying and trimming building. They are dried for about two weeks then a crew of 10-15 trimmers will come and trim the dried flowers. This usually takes a couple weeks. After quality control those flowers are ready for packaging and subsequently consumption. This process will begin again at the end of October for trimming of the "full term" outdoor plants and second round of "light dep". This round of trimming usually lasts about a month.

Trimmers live off-site and come to camp for the period of each trimming cycle and work in the on-site building. Each has particular plants to trim, thus avoiding cross-contamination. Trimmers clean the work area at the end of each work day, wiping down trays with an alcohol wipe, the scissors are soaked in an alcohol solution at the same time. Each trimmer uses his or her own scissors that they store on site during the trimming period. Gloves and masks are provided during trimming.

There is running water and toilet facilities adequate for the number of trimmers and farmhands. Safe campsites are provided for the trimmers.

Schackow Farms shall comply with the following Processing Practices:

1. Processing operations must be maintained in a clean and sanitary condition including all work surfaces and equipment.
2. Processing operations must implement protocols which prevent processing contamination and mold and mildew growth on cannabis.
3. Employees handling cannabis in processing operations must have access to facemasks and gloves in good operable condition as applicable to their job function.
4. Employees must wash hands sufficiently when handling cannabis or use gloves

Cultivation operations and processing operations at Schackow Farms will implement safety protocols and provide all employees with adequate safety training relevant to their specific job functions, which may include:

- 1)Emergency action response planning as necessary;
- 2)Employee accident reporting and investigation policies;
- 3)Fire prevention;
- 4)Hazard communication policies, including maintenance of material safety data sheets (MSDS)
- 5)Materials handling policies
- 6)Job hazard analyses; and Personal protective equipment policies, including respiratory protection.

Schackow Farms will visibly post and maintain an emergency contact list which includes at a minimum:

- 1)Operation manager contacts
- 2)Emergency responder contacts
- 3)Poison control contacts.

At all times, employees shall have access to safe drinking water (from the house water system) and toilets (portable toilets cleaned weekly) and handwashing facilities (hand sink inside processing building) that comply with applicable federal, state, and local laws and regulations. Plumbing facilities and water source are capable of handling increased usage without adverse consequences to neighboring properties or the environment.

Sommerville road is maintained by the property owners on the road. It is graded and graveled yearly. Schackow farms maintains its own roads on a yearly basis by maintaining rolling dips and adding gravel.

**Employees:**

The applicant is an "agricultural employer" as defined in the Alatorre-Zenovich-Dunlap-Berman Agricultural Labor Relations Act of 1975 (part 3.5 commencing with section 1140 of Division 2 of the Labor Code, to the extent not prohibited by law.

Applicant will comply with all applicable federal, state, and local laws and regulations governing California Agricultural Employers, which may include: federal and state wage and hour laws, CAL/OSHA, California Agricultural Labor Relations Act, and the Humboldt County Code (including the Building Code. All workers will live offsite. After assessing the costs associated with housing employees, it has been determined that the farm cannot afford it. The building labeled employee housing will not be used for housing employees. Instead it will be used for personal storage unrelated to the cultivation onsite. All Employees will travel to the site by car. There is currently one full time manager (Matthew Schackow) and one part time farm hand. 10-15 seasonal workers will also be hired for harvest and trimming. Adequate parking exists onsite for at least 15+ cars. The parking places exists within the large graveled area in front of the processing building and west of cultivation area 1. On average there are 2-4 expected vehicle trips are expected per day.

### **Process Status of Pending Building Permits**

The unpermitted grading associated with the installation of the mandated pond has been surveyed by the engineering firm A.M Baird in Fortuna. The plans have been submitted to the county and a fee has been paid. Plan check has been done and I believe we are waiting for the engineers to sign off on the project. The processing building, shop, the large greenhouse, and employee housing (not to be used as employee housing) are to be surveyed by Atlas engineering starting in June. This is as soon as they could schedule it

### **Conformance with Department of Forestry and Fire Protection (CAL FIRE), Fire Safe, Resource Management, and Cannabis regulations pertaining to fire emergency services as detailed in the CAL FIRE Letter dated August 17, 2017.**

The main entrance to the property from "private drive" continues through the property and exits at the bottom of the property. This separate exit leads back to Somerville road. Sometimes called a horseshoe driveway, this layout option has an entrance at the road, rounds off as it approaches the house and then has a separate exit lane leading back to the road. This type of driveway is so popular because it eliminates the need for backing out or turning around so that you can always safely enter oncoming traffic in drive with a clear view of the road. The lower exit road is only used by the property owner.

# Bullfrog Management Plan

## EXHIBIT A.

### BULLFROG MONITORING AND MANAGEMENT PLAN FOR 1600-2016-0137-R1

#### GENERAL BULLFROG INFORMATION

The American bullfrog (*Lithobates catesbeianus* = *Rana catesbeiana*; hereafter bullfrog) is an invasive non-native species in California and poses a significant threat to California's native fish and wildlife resources. Bullfrogs were introduced in California over 100 years ago from eastern parts of the United States as a food supply, but have since caused substantial ecological consequences. Bullfrogs are considered highly invasive and are well documented to be prey upon a variety of fish and wildlife species, including some that are rare, threatened, and endangered. Human modifications to the environment provide favorable conditions to bullfrogs such as artificially created agricultural ponds, canals and ditches where warm still water occurs. As a result bullfrogs have spread throughout California.

Efforts to control bullfrogs have been met with varying degrees of success because: 1) bullfrogs can be difficult to detect and are dormant from fall through winter; 2) bullfrogs often also occur in difficult areas to manage (e.g. dense vegetation); 3) they can travel long distances to colonize and re-colonize areas; 4) they have high reproductive output; 5) they are wary and readily flee perceived threats; and 6) they can survive physical trauma remarkably well. CDFW scientific staff recognizes there is an urgent and immediate need to develop improved bullfrog management strategies to protect California's diverse fish, wildlife, and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public. Public support and implementation of bullfrog control in California is an important conservation strategy that will help protect natural resources for future generations.

#### MONITORING

The Project reservoir(s) shall be monitored for bullfrog presence on an annual basis with a minimum of five total surveys, no less than two weeks apart, throughout the months of May-July

- All pond survey effort must be made by a person knowledgeable in bullfrog identification (see Appendix A for reference photos);
- Survey efforts shall include filtering for bullfrog calls and slowly walking the complete perimeter of the pond at night (dark or late) while shining a flashlight to detect movement and eye-shine.

If bullfrogs are not detected upon completion of five total surveys, or at any other time of the year incidentally, removal efforts are not required that year.

\*Day time monitoring can also be conducted to aid detection but is not required under this plan.

#### SUCCESS CRITERIA

The level of effort needed to successfully manage bullfrog populations varies with infestation levels. This plan shall be considered successfully implemented if sufficient effort is provided to prevent adult bullfrogs from reproducing in the reservoir(s) each year, and no bullfrog life-stages can be detected. Bullfrogs are capable of traveling long distances over-land, and on-going

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efforts will be required to ensure dispersing bullfrogs do not colonize the reservoir(s) at a future time

#### OPTIONS FOR MANAGEMENT

Two removal methods may be employed for controlling bullfrogs under this plan and include:

- Manual direct removal
- Reservoir de-watering (Hydro-modification)

Implementing both reservoir de-watering and manual direct removal is currently believed to be the most effective method of managing bullfrog infestations. For reservoirs that are heavily infested with juvenile bullfrogs and/or tadpoles, reservoir de-watering may be necessary to break the bullfrog's life cycle and prevent on-going reproduction. Prior to conducting reservoir de-watering activities, please coordinate with CDFW Environmental Scientist Kalyn Bousat by phone at (707) 441-2077 or via email at [kalyn.bousat@cdfw.ca.gov](mailto:kalyn.bousat@cdfw.ca.gov).

#### Direct Removal

All direct removal efforts must be made by a person knowledgeable in bullfrog identification.

- Removal efforts must occur during, but are not be limited to the active/breeding season, occurring May – July;
- A minimum of five efforts throughout the season are considered necessary;
- Direct removal efforts are typically most effective when conducted at night with use of lights but can also be conducted during the day;
- Direct removal must include working the entire perimeter of the reservoir;
- A rubber raft or small boat may be necessary to successfully remove some individuals;
- A team of two individuals or more is often helpful, one person for shining lights and/or operating a boat and the other person to perform removal efforts;
- Bullfrog tadpoles must be removed and dispatched and must not be relocated or kept as pets.

#### Management Authorization

Take of bullfrogs is specifically allowed in the California Code of Regulations (CCR), Title 14 (F-14) section 5.05(a)(20), under the authority of a sport fishing license. There is no daily bag limit, possession limit or hour restriction, but bullfrogs can only be taken by hand, hand-held dip net, hook and line, lights, spears, gigs, grabs, paddles, bow and arrow or fish traps.

Alternatively, FGD Section 2501 allows CDFW, as limited by the commission, to issue a permit to destroy fish that are harmful to other wildlife. The regulations have addressed this under Section CCR T-14 228.5 issuance of Permits to Destroy Harmful Species of Fish in Private Waters for Management Purposes. This allows the CDFW to issue free permits to destroy harmful aquatic species by seining and draining.

**Pond Dewatering**

Pond dewatering may be appropriate if the reservoir can be successfully dewatered without adversely affecting stream resources. Careful planning and coordination with CDFW, is necessary to ensure potential impacts to stream resources can be addressed, prior to commencing with pond draining. Discharge of polluted water to waters of the state may require permitting from other agencies with permitting authority, such as the Regional Water Quality Control Board.

In general, bullfrog tadpoles require two years to develop into frogs, whereas native amphibians only require one year. Therefore, draining a reservoir every two years (or less) is intended to interrupt bullfrog tadpole development, dramatically decrease bullfrog populations and allow for reduced efforts as a measure of adaptive management. Typically in Northern California, reservoir draining should occur in September through October to avoid impacts to sensitive native amphibian and fishery resources. While draining occurs, direct removal efforts should be employed as described above if possible.

**REPORTING**

A written log shall be kept of monitoring and management efforts and shall be provided to CDFW each year by December 31. The written log shall include: 1) date and time of each monitoring and management effort, 2) approximate number of each bullfrog life stage detected and/or removed per effort, and 3) amount of time spent for each monitoring and management effort.

**APPENDIX A. BULLFROG REFERENCE PHOTOS**



This is a photo of a Bullfrog tadpole. (Photo taken by Mike van Hattem).



The photos shown in the Appendix demonstrate a medium sized adult bullfrog that was removed from Tanita Creek, Mendocino County. Note the bullfrog has a large tympanum, (circular ear drum shown with an arrow) and does not have distinct ridges along its back (dorsolateral folds). Photo taken by Wes Stokes.



The bullfrog has somewhat distinct mottling and the underparts of the bullfrogs hind legs are not shaded pink or red.

## Soils Management Plan

4. Spoils Management: In compliance? Y☒/N☐

- a. Spoils<sup>b</sup> shall not be stored or placed in or where they can enter any surface water.
- b. Spoils shall be adequately contained or stabilized to prevent sediment delivery to surface waters.
- c. Spoils generated through development or maintenance of roads, driveways, earthen fill pads, or other cleared or filled areas shall not be sidecast in any location where they can enter or be transported to surface waters.

<sup>b</sup> Spoils are waste earthen or organic materials generated through grading or excavation, or waste plant growth media or soil amendments. Spoils include but are not limited to soils, slash, bark, sawdust, potting soils, rock, and fertilizers.

The property is in compliance with this Standard Condition. Soils are amended and roused each year. They are mostly contained within planter boxes under cover of greenhouses or within outdoor pots. Two spoils piles are mapped and shown on the WRPP Map. Both piles are made up of five to ten gallon pots located on the immediate cultivation areas. There was no sign of cultivation soils being transported off of the developed cultivation areas, capable of being delivered to surface waters. At Map Point 3, part of the pile is built up and leaning against the wire fence that surrounds the cultivation area. To ensure that spoils remain on the cultivation area and does not leave the

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straw wattles as necessary to keep spoils contained to the developed portion of the cultivation areas. There are no road or site development related spoils being stored or placed on the property, or perched where they have access to a watercourse.

### Additional detail on Cultivation Area (CA)#3 and its movement out of the Stream Management Area to an environmentally superior area.

- a. Description of the area and why it is environmentally superior to being located within a stream buffer area.

Three pots in CA #3 do not comply with Water Board Order No. 2015-0023, Standard Condition (I)(A)(3)(a), which states: "*Cultivation areas and associated facilities shall not be located or occur within 100 feet of any Class I or II watercourse or within 50 feet of any Class III watercourse or wetlands.*" The relocation area is outside of a watercourse buffer zone and satisfies slope requirements.

CA #3's buffer zone for the adjacent Class III watercourse may not be adequate per Standard Condition (I)(A)(3)(c), which states: "*Buffers shall be of sufficient width to filter wastes from runoff discharging from production lands and associated facilities to all wetlands, streams,*

*drainage ditches, or other conveyances."*

- b. Measures that will be implemented to control erosion.

CA#3 shall be treated with soil stabilization measures as follows:

The Applicant shall seed all exposed bare mineral soil with native annual and perennial grasses, followed by the application of straw mulch. The Discharger shall also install straw waddles ALONG CA #3's southern boundary.

- c. Description of any revegetation efforts.

The Applicant consulted with Registered Professional Forester Chris Carroll (RPF #2628) regarding revegetation restoration of this site, and he recommends planting redwood seedlings at a spacing no less than 10 feet by 10 feet or 435 trees per acre. If deer browsing is expected (landowner's local knowledge), then the density can be slightly increased to 8 feet by 8 feet spacing to account for mortality and/or damage.

Most conifer seedlings that come from the nursery are usually available in two forms; bareroot seedlings and containerized seedlings. Bareroot seedlings are essentially stock whose roots are exposed at the time of planting. Bareroot seedlings are grown in nursery seedbeds and lifted from the soil in which they are grown to be planted in the field. Containerized seedlings are grown in a variety of hard-walled vessels or in peat pots from seed. Given the conditions of the site and the higher survival rate associated with containerized stock, the RPF recommends using containerized seedlings if available.

The area to be planted is approximately 7,100 ft<sup>2</sup> in size, which shall require a minimum of 70 conifer seedlings to be planted.



APP # 11708



165 South Fortuna Boulevard, Fortuna, CA 95540  
707-725-1897 • fax 707-725-0972  
trc@timberlandresource.com

April 25, 2018

Schackow Farms  
c/o Matthew Schackow  
1880 Aspen Court  
McKinleyville, CA 95519

Dear Schackow Farms:

The following is an evaluation of potential timberland conversion on cannabis cultivation sites and associated areas included in the Humboldt County Cannabis Permit Application (Apps #11708) for APN 211-401-007. Please accept this letter as the RPF's written report required by Humboldt County Code, Ordinance No. 2559 (Commercial Medical Marijuana Land Use), Section 55.4.10 (j), cited below.

*"Alternately, for existing operations occupying sites created through prior unauthorized conversion of timberland, if the landowner has not completed a civil or criminal process and/or entered into a negotiated settlement with CALFIRE, the applicant shall secure the services of a registered professional forester (RPF) to evaluate site conditions and conversion history for the property and provide a written report to the Planning Division containing the RPF's recommendation as to remedial actions necessary to bring the conversion area into compliance with provisions of the Forest Practices Act. The Planning Division shall provide CAL-FIRE written Notice of Availability of the RPF's report. If CAL-FIRE takes no action within ten (10) days of the notice of availability, the report recommendations shall become final."*

Timberland Resource Consultants (TRC) inspected and evaluated the cultivation sites and associated areas contained within the application on April 11<sup>th</sup>, 2018. Landowner Matthew Schackow also attended the site visit. The RPF and his designees have exercised due diligence in reviewing all sites and available resources to fully assess potential timberland conversion and consequential impacts. This report evaluates the cultivation sites and associated areas for timber operations only. The scope of this report does not include: all other land alteration (such as grading, construction, and other permit-regulated activities), all property features and sites unrelated to cultivation activities, or any proposed, planned, or absent cultivation-related project sites. All findings are summarized in the report below.

### **Project Location**

APN: 211-401-007

Acreage: 23.5 assessed acres/ 22.68 GIS acres

Legal Description: Portion of SE ¼ of SE ¼ of Section 33;  
Township 2 South, Range 3 East,  
Humboldt Base & Meridian, Humboldt County

Located on USGS 7.5' Quadrangle: Miranda, 1970

Humboldt County Zoning: Unclassified

Site Address: 400 Carol Lane, Miranda, CA 95553

Landowner/Timber Owner: Matthew Schackow, 1880 Aspen Court, McKinleyville, CA 95519

Project Location Description: The project area is located approximately 0.9 air miles north-northwest of Miranda, CA, and 2.4 air miles east-southeast of Myers Flat, CA. To access the project area from southbound CA Highway 101, take the Salmon Creek Rd exit; continue straight for 0.8 miles, then turn right onto private, gated Somerville Rd; continue for 0.8 miles, then turn sharply right on to an unnamed private drive; continue for 0.3 miles to reach the project area.

## Parcel Description & Timber Harvest History

*Note: The property background has been summarized using personal accounts of the current landowner, digital orthographic quadrangle (DOQ) imagery, Humboldt County Web GIS, CAL FIRE Watershed Mapper v2, and historic aerial imagery. To avoid speculation and maintain relevancy, the property background focuses mainly on the past 10-15 years.*

The property consists of a single, 23.5-acre parcel known as APN 211-401-007. The parcel is densely forested with mature Douglas-fir, redwood, tanoak, Pacific madrone, and other hardwood and conifer species (see all photos). The average age of the dominant Douglas-fir trees is estimated to be approximately 60-80 years old. The parcel contains segments of unnamed Class II and Class III watercourses, tributary to the South Fork Eel River. Additionally, there is a Class II spring located off property that feeds the Class II/Class III watercourse in the southwestern corner of the property. The property's road network consists of rockered, permanent roads; seasonal, dirt roads; rockered, ATV trails; and old skid trails.

Review of historic aerial imagery from 1968 to present does not show definitive evidence of logging events (such as truck roads, skid roads, and reduced canopy density). No definitive even-aged units were observed within the property. It does not appear that any documented commercial timber harvesting has occurred on the property in the last 20 years (*CAL FIRE Watershed Mapper v2*). Matthew Schackow purchased the property and its timber in 2011 from Michael J. and Dia Luehring.

## Project Description

Three cultivation sites and two associated areas were inspected during the field assessment within APN 211-401-007. See detailed site descriptions below.

Cultivation Site/Associated Area	Total Acreage
Cultivation Site 1	1.26
Cultivation Site 2	0.05
Cultivation Site 3	0.12
Agriculture Building (Storage/Processing)	0.05
Garage/Shop (Propagation)	0.02
<b>TOTAL</b>	<b>1.50</b>

### Cultivation Site 1

Cultivation Site 1 is a 1.26-acre area located in the southern portion of the property (see Photos 1 and 2). Cultivation-related activities observed included numerous, outdoor-grown cannabis plants and a manmade, Class IV rainwater catchment pond used for cultivation water storage. Review of aerial imagery reveals that the site was open with scattered, individual trees in 1968 and shown as a non-forested vegetation type on the Miranda USGS 7.5' Quadrangle, 1970. Though the site is labeled as non-forest, the area qualifies as timberland as it is available and capable of growing a crop trees of a commercial species used to produce lumber and other forest products (*FPRS, 14 CCR 895.1*). The site was periodically cleared of remaining trees, stumps, and vegetation between 2010 and 2016. It does not appear that any commercial timber harvesting occurred. Piles of slash or woody debris from the conversion activities exist along the western and northwestern edges of the site. The cultivation activities observed impede the use of this space for current timber growth and harvesting; in this way, the landowner has effectively converted the single use of this space from timber production to cannabis cultivation.

### Cultivation Site 2

Cultivation Site 2 is a 0.05-acre area located in the southern portion of the property, approximately 40 feet north of Cultivation Site 1 (Photo 3). Cultivation-related activities observed included several outdoor-grown cannabis plants. Review of aerial imagery reveals that the site was open in 1968 and shown as a non-forested vegetation type on the Miranda USGS 7.5' Quadrangle, 1970. Though the site is labeled as non-forest, the area qualifies as timberland as it is available and capable of growing a crop trees of a commercial species used to produce lumber and other forest products (*FPRS, 14 CCR 895.1*). Only minor if any tree, stump, or vegetation removal occurred to construct the site between 1998 and 2005. No slash or woody debris from the conversion activities remains onsite. The cultivation activities observed impede the use of this space for current timber growth and harvesting; in this way, the landowner has effectively converted the single use of this space from timber production to cannabis cultivation.

## Project Description cont'd

### Cultivation Site 3

Cultivation Site 3 is a 0.12-acre area located in the central portion of the property (see Photo 4). Cultivation-related activities observed included three greenhouses. Review of aerial imagery reveals that the site was open in 1968 and shown as a non-forested vegetation type on the Miranda USGS 7.5' Quadrangle, 1970. Though the site is labeled as non-forest, the area qualifies as timberland as it is available and capable of growing a crop trees of a commercial species used to produce lumber and other forest products (*FPRS, 14 CCR 895.1*). Trees, stumps, and vegetation along the periphery of the site were cleared between 2010 and 2012. This initial clearing was more expansive than the current footprint of the cultivation site. It does not appear that any commercial timber harvesting occurred. Slash and woody debris from the conversion activities exist along the western and southern edges of the site. The cultivation activities observed impede the use of this space for current timber growth and harvesting; in this way, the landowner has effectively converted the single use of this space from timber production to cannabis cultivation.

### Agriculture Building (Storage/Processing)

The Agriculture Building is a 0.05-acre area located in the southern portion of the property. This associated area is occupied by a building used for cultivation project materials storage and product processing (see Photo 5). Review of aerial imagery from 1968 reveals that the site was partially forested in 1968 and is shown as a non-forested vegetation type on the Miranda USGS 7.5' Quadrangle, 1970. Though the site is labeled as non-forest, the area qualifies as timberland as it is available and capable of growing a crop trees of a commercial species used to produce lumber and other forest products (*FPRS, 14 CCR 895.1*). The site was partially cleared of trees, stumps, and vegetation between 2010 and 2012. The building was constructed between 2014 and 2016. It does not appear that any commercial timber harvesting occurred. No slash or woody debris from the conversion activities remains onsite. The cultivation activities observed impede the use of this space for current timber growth and harvesting; in this way, the landowner has effectively converted the single use of this space from timber production to cannabis cultivation.

### Garage/Shop (Propagation)

The Garage/Shop is a 0.02-acre area located in the central portion of the property (see Photo 6). This associated area is occupied by a building used for propagation. Review of aerial imagery reveals that the site was forested in 1968 and remained forested in 1998. Poor visibility in the recent aerial imagery does not reveal a definitive date of construction. However, it may be inferred that these structures were installed concurrently with the nearby residence, likely between 1998 and 2005. It does not appear that any commercial timber harvesting occurred. No slash or woody debris from the conversion activities remains onsite. The cultivation activities observed impede the use of this space for current timber growth and harvesting; in this way, the landowner has effectively converted the single use of this space from timber production to cannabis cultivation.

### Other Mapped Features

The Overview Map shows the locations of two residences and an outhouse on the property (see Photos 3 and 8; outhouse not pictured). These buildings are used for personal and recreational purposes only, not for cultivation activities; therefore, they fall outside the scope of this report.

The Overview map also shows the locations of water storage tanks used for cultivation water storage (see Photo 7). Though minor tree and vegetation clearing may have occurred to install these features, the surrounding timber stand still meets the stocking standards of the California Forest Practice Rules (FPRs). Ultimately, the water tanks do not impede the use of the land for current or future timber growth and harvesting; therefore, they do *not* constitute timberland conversion.

### Timberland Conversion Summary

In total, TRC observed approximately 1.50 acres of unauthorized timberland conversion for cultivation-related purposes within APN 211-401-007. This total does not exceed the three-acre conversion exemption maximum.

## Limitations and Considerations for Timberland Conversion Activities

### Watercourses and Water Resources

14CCR 1104.1(a)(2)(F): "No timber operations are allowed within a watercourse and lake protection zone unless specifically approved by local permit (e.g., county, city)."

Humboldt County General Plan, Appendix G Housing Element, G-118: "The County maintains Streamside Management Areas (SMAs) to protect sensitive fish and wildlife habitats and to minimize erosion, runoff, and other conditions detrimental to water quality...The width of the SMA depends on whether or not the stream is perennial or intermittent and whether the area is inside or outside of Urban Development and Expansion Areas. In urban areas, the SMA width is 50 feet on each side of perennial streams and 25 feet for intermittent streams; outside of urban areas, the width is 100 feet for perennial streams and 50 feet for intermittent streams. Development within the SMAs is very restricted and is subject to implementation of numerous mitigation measures designed to protect the habitat quality of the SMA."

No timberland conversion areas exist within Watercourse and Lake Protection Zones (WLPZ) or Equipment Exclusion Zones (EEZs) on the property. Overall, no conversion activities appear to have impacted water resources.

### Slash, Woody Debris, and Refuse Treatment

14 CCR 914.5(b): "Non-biodegradable refuse, litter, trash, and debris resulting from timber operations, and other activity in connection with the operations shall be disposed of concurrently with the conduct of timber operations."

14CCR 1104.1(a)(2)(D) – "Treatment of Slash and Woody Debris

- 1) Unless otherwise required, slash greater than one inch in diameter and greater than two feet long, and woody debris, except pine, shall receive full treatment no later than April 1 of the year following its creation, or within one year from the date of acceptance of the conversion exemption by the Director, whichever comes first.
- 2) All pine slash three inches and greater in diameter and longer than four feet must receive initial treatment if it is still on the parcel, within 7 days of its creation.
- 3) All pine woody debris longer than four feet must receive an initial treatment prior to full treatment.
- 4) Initial treatment shall include limbing woody debris and cutting slash and woody debris into lengths of less than four feet, and leaving the pieces exposed to solar radiation to aid in rapid drying.
- 5) Full treatment of all pine slash and woody debris must be completed by March 1 of the year following its creation, or within one year from the date of acceptance of the conversion exemption by the Director, whichever comes first.
- 6) Full slash and woody debris treatment may include any of the following:
  - a) Burying;
  - b) Chipping and spreading;
  - c) Piling and burning; or
  - d) Removing slash and woody debris from the site for treatment in compliance with (a)-(b). Slash and woody debris may not be burned by open outdoor fires except under permit from the appropriate fire protection agency, if required, the local air pollution control district or air quality management district. The burning must occur on the property where the slash and woody debris originated.
- 7) Slash and woody debris, except for pine, which is cut up for firewood shall be cut to lengths 24 inches or less and set aside for drying by April 1 of the year following its creation. Pine slash and woody debris which is cut up for firewood shall be cut to lengths 24 inches or less and set aside for drying within seven days of its creation.
- 8) Any treatment which involves burning of slash or woody debris shall comply with all state and local fire and air quality rules."

Most slash and woody debris generated from the conversion activities has been effectively treated by the landowner; however, piles of slash and scattered woody debris still exist along the western and northwestern edges of the Cultivation Site 1 and along the western and southern edges of Cultivation Site 3 (see Photos 9, 10, & 11). All remaining slash shall be treated according to the FPRs (see Recommendation 1).

### Biological Resources and Forest Stand Health

14 CCR 1104.1 (2)(H): "No sites of rare, threatened or endangered plants or animals shall be disturbed, threatened or damaged and no timber operations shall occur within the buffer zone of a sensitive species as defined in 14 CCR 895.1"

14 CCR 1038 (I): "No tree that existed before 1800 AD and is greater than sixty (60) inches in diameter at stump height for Sierra or Coastal Redwoods, and forty-eight (48) inches in diameter at stump height for all other tree species shall be harvested unless done so under the conditions or criteria set forth in subsection 1038(h).

A query of the California Natural Diversity Database (CNDDDB) on April 10<sup>th</sup>, 2018 showed observations of five (5) sensitive, rare, threatened, or endangered species or species of special concern within a 0.7-mile radius biological assessment area (BAA) surrounding the cultivation sites and associated areas. No individuals of sensitive, rare, threatened, or endangered species or species of special concern were observed during the TRC field assessment of the project area, though potential habitat may exist on the property. See "Schackow Farms – CNDDDB Map (0.7 Mile Radius)" attached for more information.

## Limitations and Considerations for Timberland Conversion Activities cont'd

### Biological Resources and Forest Stand Health cont'd

A query of the CNDDDB revealed no (0) known Northern Spotted Owl (NSO) Activity Centers within a 0.7-mile radius BAA surrounding the cultivation sites and associated areas. No evidence of NSO individuals was observed during the TRC field assessment though habitat exists on the property. See "Schackow Farms – NSO Map (0.7 Mile Radius)" attached for more information.

No major forest health issues were observed during the field assessment. Though the property is located within Humboldt County, a Zone of Infestation (ZOI) for Sudden Oak Death (SOD), no definitive symptoms, signs, or evidence of oak mortality were observed (*Oak Mortality Disease Control*). According to UC Berkeley's Mobile SOD Map, between 2008 and 2014 more than 73 bay, oak, and tanoak trees have been sampled for SOD infection within a one-mile radius of the cultivation sites and associated areas. Approximately 50% of these trees tested positive for SOD infection. No risk assessment was made at the property. The conversion activities do not appear to have impacted forest health. No other major forest health issues were observed during the field assessment.

The conversion areas did not include late successional stands, late seral stage forests, or old growth trees. The conversion area did not include any trees that existed before 1800 A.D. and are greater than sixty (60) inches in diameter at stump height for Sierra or Coastal Redwoods, and forty-eight (48) inches in diameter at stump height for all other tree species.

### Cultural Resources

14 CCR 1104.1 (2)(I): "No timber operations are allowed on significant historical or archeological sites."

A professional archaeologist recently surveyed the property for prehistoric and historic sites. No sites were discovered during the survey. Additionally, no archeological sites were observed during the TRC field assessment. The RPF's designee conducted pre-field research for the project's geographic location and closely surveyed the converted sites and surrounding undisturbed areas for presence or evidence of prehistoric or historic sites. The archaeological survey was conducted by Brita Rustad, a certified archaeological surveyor with current CALFIRE Archeological Training (Archeological Training Course #161). The survey consisted of examining boot scrapes, rodent disturbances, natural and manmade areas of exposed soils, and road and cultivation site surface.

Per 14 CCR 1104.2(2)(I), all required Native American tribes and organizations have been notified of the project location and are encouraged to respond with any information regarding archaeological sites, cultural sites, and/or tribal cultural resources within or adjacent to the project area.

## Recommendations

In summary, a total of 1.50 acres of unauthorized timberland conversion has occurred within APN 211-401-007. This total does not exceed the three-acre conversion exemption maximum. The conversion activities conducted on the property do *not* comply with the standards set forth in the California Forest Practice Act and the California Forest Practice Rules. The RPF recommends the following measures for the converted areas:

- 1) Slash and Woody Debris Treatment: Nearby Cultivation Sites 1 and 3, treat all slash piles and woody debris as soon as possible (and during an appropriate time of year) using one of the following methods: burying, chipping and spreading, piling and burning, or removal from site.

Sincerely,



Chris Carroll, RPF #2628  
Timberland Resource Consultants  
165 South Fortuna Blvd, Suite 4  
Fortuna, CA 95540  
(707) 725-1897  
trc@timberlandresource.com

### Enclosures:

- General Location Map
- Overview Map
- DOQ Map
- WRPP Map
- "Multiple Occurrences Per Page" CNDDDB Report
- Schackow Farms – CNDDDB Map (0.7 Mile Radius)
- Schackow Farms – NSO Map (0.7 Miles Radius)
- Photos
- References

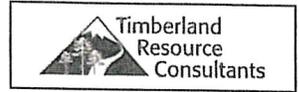
# Schackow Farms- Timberland Conversion Evaluation

## General Location Map

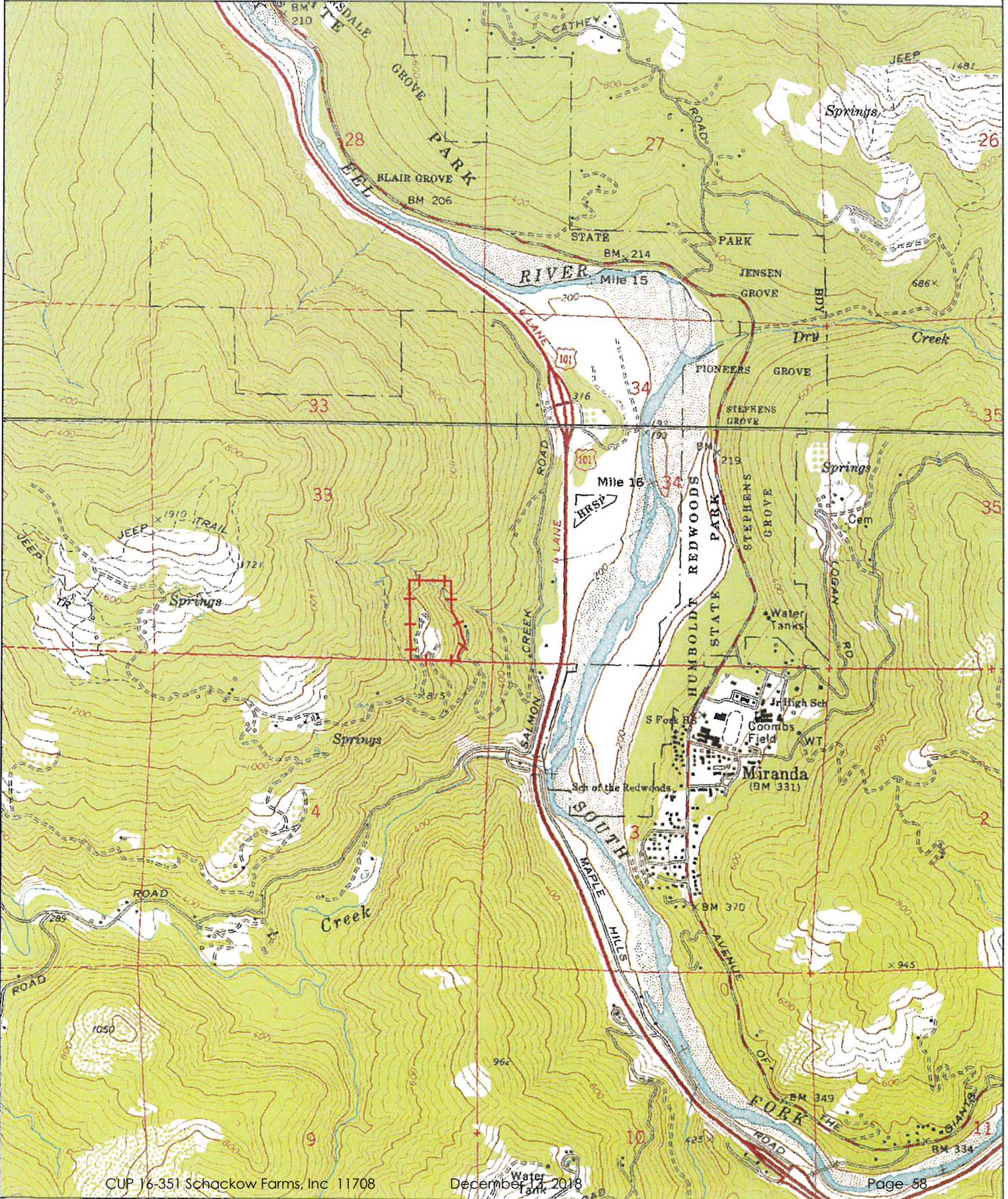
Portion of S. 1/4 of SE 1/4 of Sec. 33, T2S, R3E;  
HB&M, Humboldt County  
USGS 7.5' Quad: Miranda  
Map Scale: 1" = 2,000'

APN: 211-401-007

Revised: 04/10/18

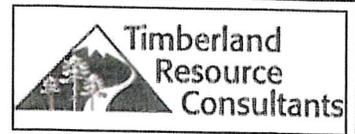


\*The property boundary depicted is adapted from the Humboldt County Assessor's Parcel Map and WRPP Map. This mapped boundary may not precisely align with the geographic boundary on the ground. The RPF is not responsible for surveying property boundaries.



# Schackow Farms - Timberland Conversion Evaluation Overview Map

APN: 211-401-007  
 Portion of SE 1/4 of SE 1/4 of Sec. 33, T2S, R3E;  
 HB&M, Humboldt County  
 USGS 7.5' Quad: Miranda  
 Revised: 04/18/18  
 Map Scale: 1" = 180'  
 Contour Intervals = 40'



## Property Feature

- Property Boundary\*
- Cultivation Sites & Associated Areas
- Powerlines
- Inspected Area\*\*

## Roads

- Permanent Rocked
- Seasonal Dirt
- Rocked ATV Trail
- Legacy Skid Trail
- Footpath

## Unstable Areas



## Watercourse

- Class II
- Class III
- Underground Drainage/Pond Overflow
- Spring
- Class IV Pond

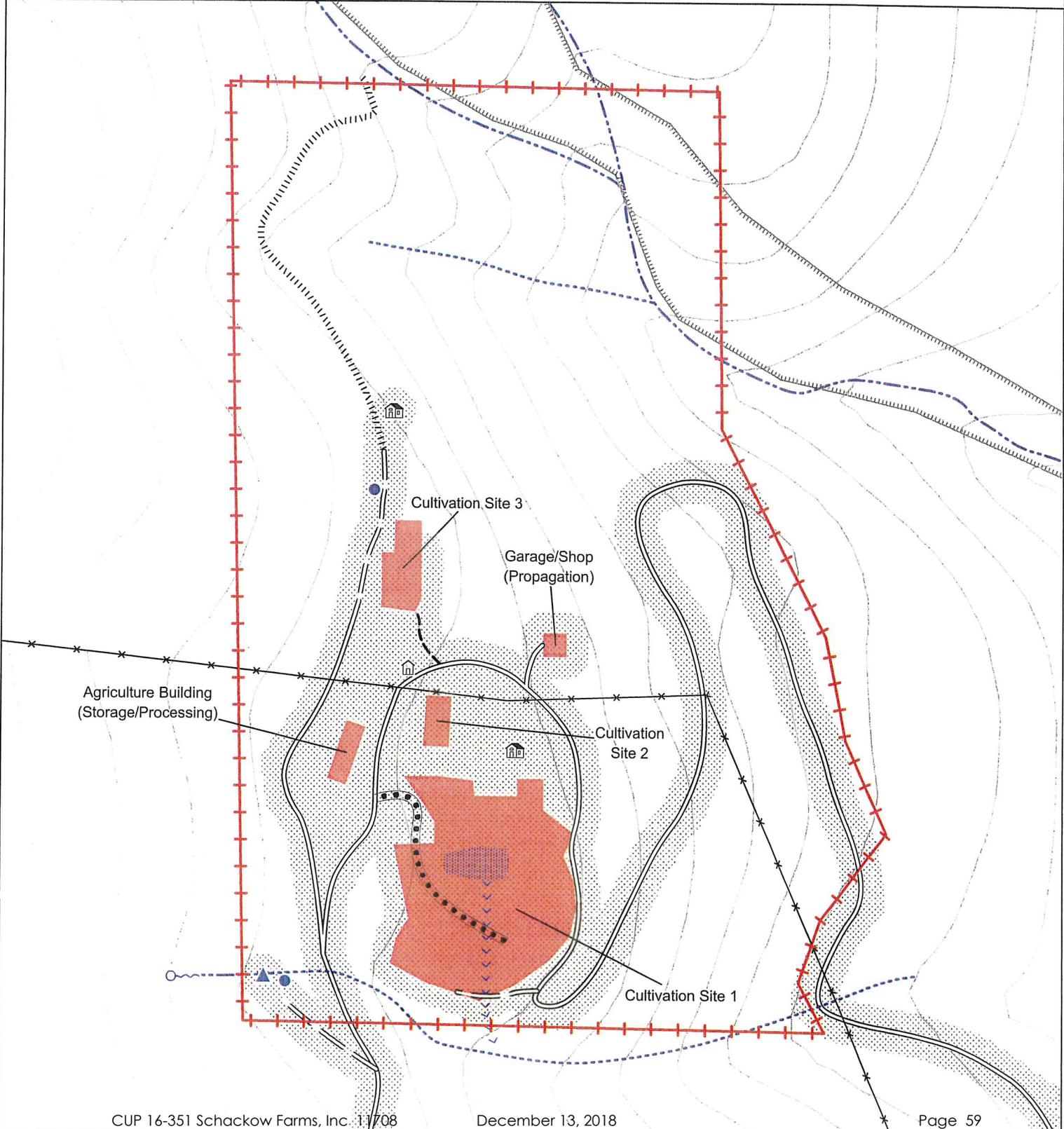
## Structures

- Residence
- Outbuilding
- Point of Diversion
- Water Storage Tank



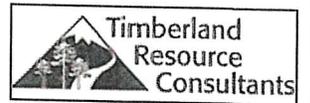
\*The property boundary depicted is adapted from the Humboldt County Assessor's parcel map and WRPP Map. This mapped boundary may not precisely align with the geographic boundary on the ground. The RPF is not responsible for surveying property boundaries.

\*\*The shaded area represents the extent of the inspected area. All watercourses and landscape features within the shaded area are mapped to the best of the RPF's ability. All features mapped outside of the inspected area are adapted from the Quadrangle and WRPP Map; accuracy may vary.



# Schackow Farms - Timberland Conversion Evaluation DOQ Map

APN: 211-401-007  
Portion of SE 1/4 of SE 1/4 of  
Sec. 33, T2S, R3E;  
HB&M, Humboldt County  
USGS 7.5' Quad: Miranda  
Map Scale: 1" = 300'



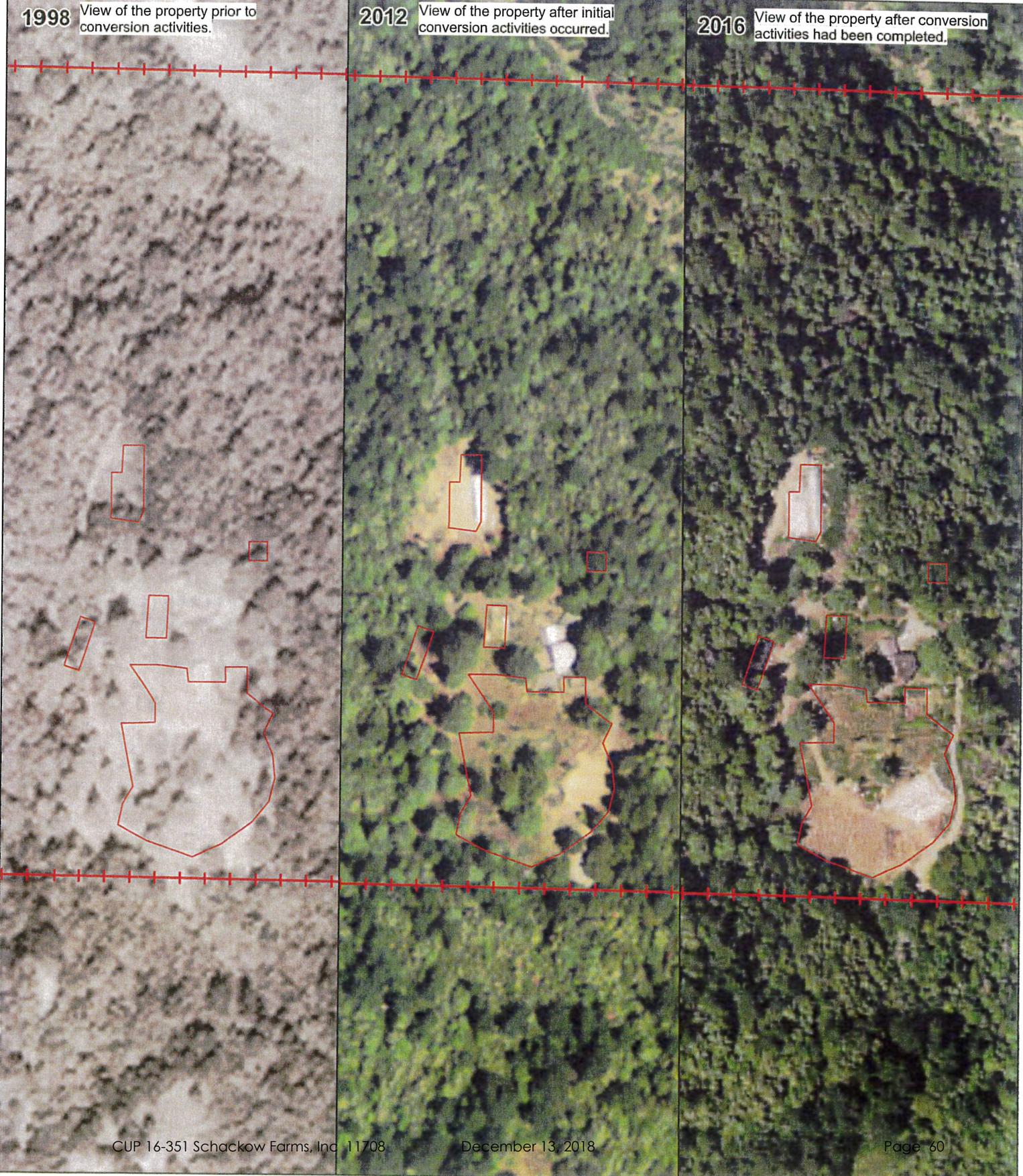
Revised: 04/19/18

\*The property boundary depicted is adapted from the Humboldt County Assessor's parcel map and the WRPP Map. This mapped boundary may not precisely align with the geographic boundary on the ground. The RPF is not responsible for surveying property boundaries.

**1998** View of the property prior to conversion activities.

**2012** View of the property after initial conversion activities occurred.

**2016** View of the property after conversion activities had been completed.



**Water Resource Protection Plan**  
**WRPP Map - WDID1B170405CHUM**

 Property Boundary

 Permanent Rocked Road  
 Seasonal Dirt Road  
 Rocked ATV Trail / Walkway  
 Old Logging Skidtrail (Not Used)

 Map Point  
 Developed Areas

 Unstable Area

 Class II Watercourse

 Class II Spring

 Class III Watercourse

 Point of Diversion (POD)

 Off-Stream Rain Catchment Pond

 12 inch Culverted Pond Overflow

 Pond Overflow Route

 Water Tank(s)

 Fertilizer Mixing Tank

 House

 Agriculture Building

 Out Building (OH=Outhouse, C=Cabin, G/S=Garage/Shop)

 Spoils Pile

 Green Waste Pile

 Powerline

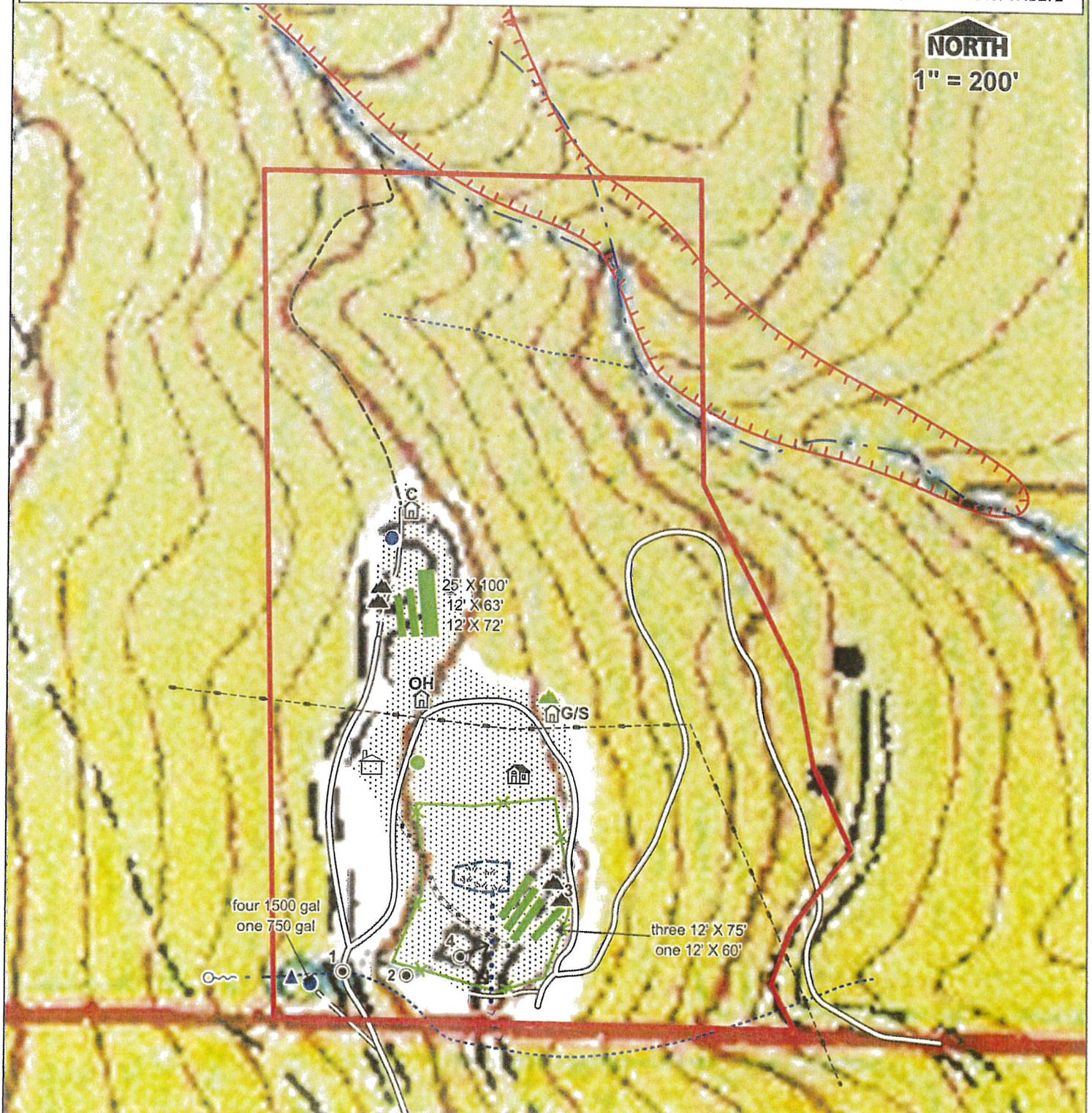
 Outdoor Cultivation Area

 Greenhouse

APN 211-401-007; Sec. 33, T2S-R3E, H.B.M.; 180101060407TRC272

**NORTH**

1" = 200'





**Multiple Occurrences per Page**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



Query Criteria: BIOS selection

<b><i>Falco peregrinus anatum</i></b>		<b>Element Code:</b> ABNKD06071	
American peregrine falcon			
<b>Listing Status:</b>	<b>Federal:</b> Delisted	<b>CNDDDB Element Ranks:</b>	<b>Global:</b> G4T4
	<b>State:</b> Delisted		<b>State:</b> S3S4
	<b>Other:</b> CDF_S-Sensitive, CDFW_FP-Fully Protected, USFWS_BCC-Birds of Conservation Concern		
<b>Habitat:</b>	<b>General:</b> NEAR WETLANDS, LAKES, RIVERS, OR OTHER WATER; ON CLIFFS, BANKS, DUNES, MOUNDS; ALSO, HUMAN-MADE STRUCTURES.		
	<b>Micro:</b> NEST CONSISTS OF A SCRAPE OR A DEPRESSION OR LEDGE IN AN OPEN SITE.		

**\* SENSITIVE \***

<b>Occurrence No.</b>	7	<b>Map Index:</b>	42993	<b>EO Index:</b>	42993	<b>Element Last Seen:</b>	1996-03-06
<b>Occ. Rank:</b>	Fair	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>		1996-03-06	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>		2000-05-22	

**Quad Summary:** Miranda (4012327)

**County Summary:** Humboldt

**Lat/Long:** Accuracy: 80 meters

**UTM:** Elevation (ft): 500

**PLSS:** Acres: 0.0

**Location:** \*SENSITIVE\* LOCATION INFORMATION SUPPRESSED.

**Detailed Location:** PLEASE CONTACT THE CALIFORNIA NATURAL DIVERSITY DATABASE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FOR MORE INFORMATION: (916) 322-2493

**Ecological:** EYRIE IS LOCATED IN A LOW SANDSTONE BLUFF WITH SMALL CAVES OR POTHOLES.

**General:**

**Owner/Manager:**



**Multiple Occurrences per Page**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



<b><i>Empidonax traillii brewsteri</i></b>		Element Code: ABPAE33041
little willow flycatcher		
<b>Listing Status:</b>	<b>Federal:</b> None	<b>CNDDDB Element Ranks:</b> <b>Global:</b> G5T3T4
	<b>State:</b> Endangered	<b>State:</b> S1S2
	<b>Other:</b> USFWS_BCC-Birds of Conservation Concern	
<b>Habitat:</b>	<b>General:</b> MOUNTAIN MEADOWS AND RIPARIAN HABITATS IN THE SIERRA NEVADA AND CASCADES.	
	<b>Micro:</b> NESTS NEAR THE EDGES OF VEGETATION CLUMPS AND NEAR STREAMS.	

<b>Occurrence No.</b>	1	<b>Map Index:</b> 76539	<b>EO Index:</b> 77483	<b>Element Last Seen:</b>	2000-06-30
<b>Occ. Rank:</b>	Excellent		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2000-06-30
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2009-09-14
<b>Quad Summary:</b>	Miranda (4012327)				
<b>County Summary:</b>	Humboldt				
<b>Lat/Long:</b>	40.24867 / -123.82831		<b>Accuracy:</b>	80 meters	
<b>UTM:</b>	Zone-10 N4455687 E429552		<b>Elevation (ft):</b>	210	
<b>PLSS:</b>	T02S, R03E, Sec. 34, NW (H)		<b>Acres:</b>	0.0	
<b>Location:</b>	0.1 MILE NW OF SOUTH FORK EEL RIVER MILE 16, ABOUT 1 MILE NNW OF MIRANDA, HUMBOLDT REDWOODS STATE PARK.				
<b>Detailed Location:</b>	SPECIFIC LOCATION PROVIDED ON MAP. REPORTED AS EMPIDONAX TRAILLII WITHOUT SUBSPECIES; SUBSPECIES DETERMINED BY CNDDDB BASED ON LOCATION, AS PER PUBLISHED RANGE INFO.				
<b>Ecological:</b>	DENSE WILLOW THICKET DOMINATED BY WILLOW, ALDER, OREGON ASH. UNDERSTORY: BLACKBERRY, STINGING NETTLE, Equisetum. TO WEST IS OPEN FIELD (FORMERLY AG) REPLANTED W/ REDWOODS BY PARK DISTRICT. 2ND GROWTH REDWOOD FOREST NEARBY.				
<b>General:</b>	1 INDIVIDUAL HEARD SINGING ON 2 VISITS (13 JUN AND 30 JUN 2000) AT SAME LOCATION; ASSUMED TERRITORIAL BASED ON DATES AS PER PROTOCOLS.				
<b>Owner/Manager:</b>	DPR-HUMBOLDT REDWOODS SP				



**Multiple Occurrences per Page**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



<b><i>Bombus occidentalis</i></b>		<b>Element Code:</b> IHHYM24250	
western bumble bee			
<b>Listing Status:</b>	<b>Federal:</b> None	<b>CNDDB Element Ranks:</b>	<b>Global:</b> G2G3
	<b>State:</b> None		<b>State:</b> S1
	<b>Other:</b> USFS_S-Sensitive, XERCES_IM-Imperiled		
<b>Habitat:</b>	<b>General:</b> ONCE COMMON & WIDESPREAD, SPECIES HAS DECLINED PRECIPITOUSLY FROM CENTRAL CA TO SOUTHERN B.C., PERHAPS FROM DISEASE.		
	<b>Micro:</b> <input type="checkbox"/>		

<b>Occurrence No.</b>	53	<b>Map Index:</b> 98134	<b>EO Index:</b> 99542	<b>Element Last Seen:</b>	1963-08-15
<b>Occ. Rank:</b>	Unknown		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	1963-08-15
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2015-11-09
<b>Quad Summary:</b>	Miranda (4012327)				
<b>County Summary:</b>	Humboldt				
<b>Lat/Long:</b>	40.23457 / -123.82363	<b>Accuracy:</b>	1 mile		
<b>UTM:</b>	Zone-10 N4454118 E429935	<b>Elevation (ft):</b>	400		
<b>PLSS:</b>	T03S, R03E, Sec. 03 (H)	<b>Acres:</b>	0.0		
<b>Location:</b>	MIRANDA.				
<b>Detailed Location:</b>	EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AT THE COMMUNITY OF MIRANDA, NEAR SOUTH FORK EEL RIVER.				
<b>Ecological:</b>					
<b>General:</b>	COLLECTIONS WERE MADE IN THIS VICINITY ON 15 AUG 1963.				
<b>Owner/Manager:</b>	UNKNOWN				

<b><i>Noyo intersessa</i></b>		<b>Element Code:</b> IMGASC5070	
Ten Mile shoulderband			
<b>Listing Status:</b>	<b>Federal:</b> None	<b>CNDDB Element Ranks:</b>	<b>Global:</b> G2
	<b>State:</b> None		<b>State:</b> S2
	<b>Other:</b>		
<b>Habitat:</b>	<b>General:</b> FOUND IN COASTAL DUNES, COASTAL SCRUB, AND RIPARIAN REDWOOD FOREST HABITATS.		
	<b>Micro:</b> <input type="checkbox"/>		

<b>Occurrence No.</b>	2	<b>Map Index:</b> 59776	<b>EO Index:</b> 59812	<b>Element Last Seen:</b>	1953-07-18
<b>Occ. Rank:</b>	Unknown		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	1953-07-18
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2015-05-07
<b>Quad Summary:</b>	Miranda (4012327), Myers Flat (4012337)				
<b>County Summary:</b>	Humboldt				
<b>Lat/Long:</b>	40.24789 / -123.81919	<b>Accuracy:</b>	3/5 mile		
<b>UTM:</b>	Zone-10 N4455593 E430326	<b>Elevation (ft):</b>	210		
<b>PLSS:</b>	T02S, R03E, Sec. 34 (H)	<b>Acres:</b>	0.0		
<b>Location:</b>	STEPHENS GROVE, ALONG SOUTH FORK OF THE EEL RIVER JUST NORTH OF MIRANDA.				
<b>Detailed Location:</b>					
<b>Ecological:</b>					
<b>General:</b>	LACM 114639, 3 SHELLS COLLECTED 17 JUL 1953. SBMNH 01713 (E.P. CHANCE COLLECTION) 10 SHELLS COLLECTED 17-18 JUL 1953.				
<b>Owner/Manager:</b>	DPR-HUMBOLDT REDWOODS SP				



**Multiple Occurrences per Page**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

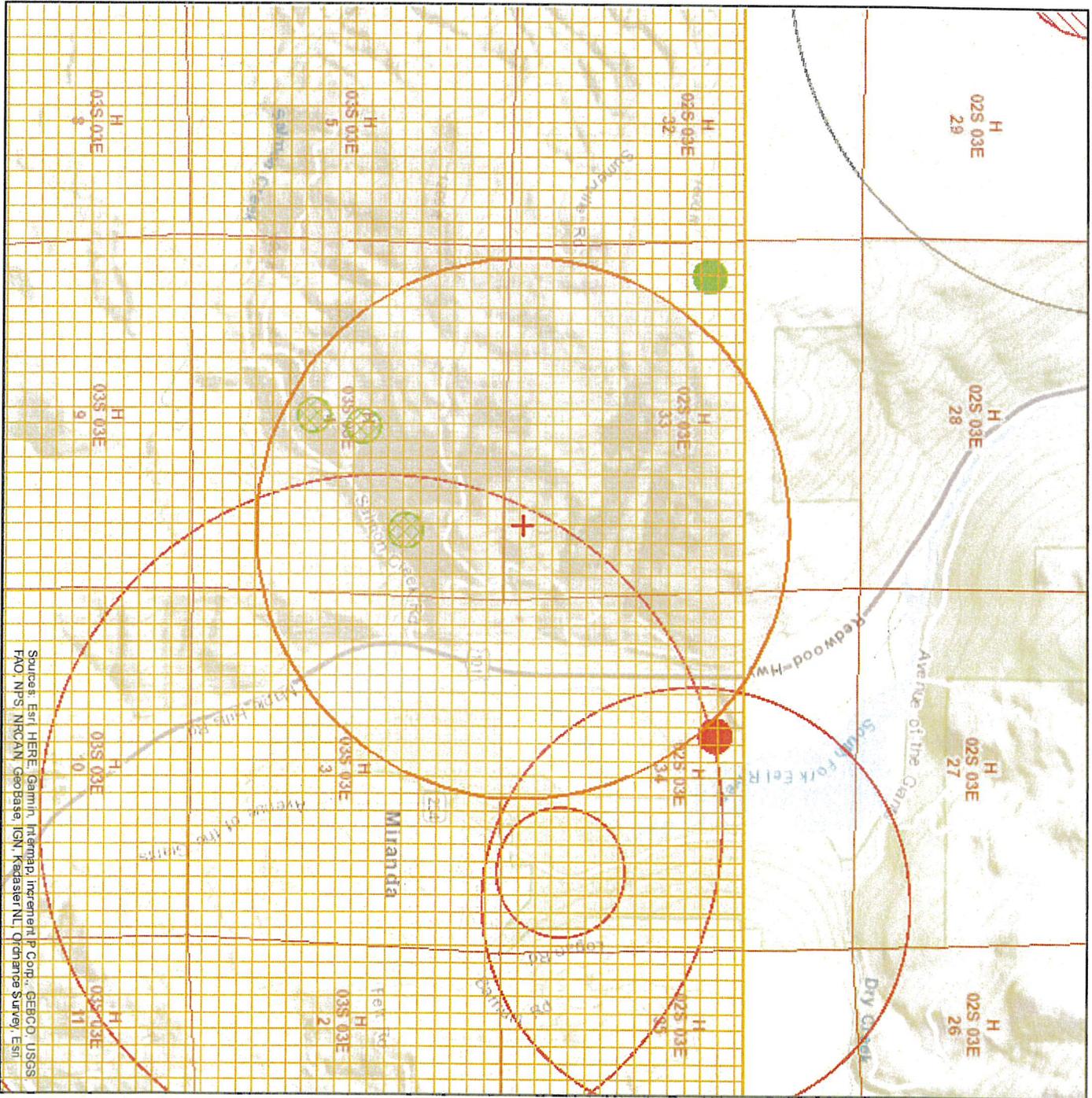
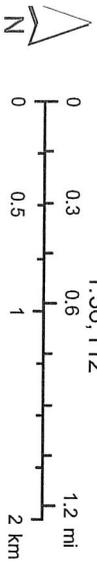


<b><i>Piperia candida</i></b>		<b>Element Code:</b> PMORC1X050	
white-flowered rein orchid			
<b>Listing Status:</b>	<b>Federal:</b> None	<b>CNDDB Element Ranks:</b>	<b>Global:</b> G3
	<b>State:</b> None		<b>State:</b> S3
	<b>Other:</b> Rare Plant Rank - 1B.2, BLM_S-Sensitive		
<b>Habitat:</b>	<b>General:</b> NORTH COAST CONIFEROUS FOREST, LOWER MONTANE CONIFEROUS FOREST, BROADLEAFED UPLAND FOREST.		
	<b>Micro:</b> SOMETIMES ON SERPENTINE. FOREST DUFF, MOSSY BANKS, ROCK OUTCROPS, AND MUSKEG. 45-1615 M.		
<b>Occurrence No.</b>	151	<b>Map Index:</b> A5756	<b>EO Index:</b> 107499
<b>Occ. Rank:</b>	Good	<b>Presence:</b> Presumed Extant	<b>Element Last Seen:</b> 2017-06-06
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b> Unknown	<b>Site Last Seen:</b> 2017-06-06
			<b>Record Last Updated:</b> 2017-08-07
<b>Quad Summary:</b>	Miranda (4012327)		
<b>County Summary:</b>	Humboldt		
<b>Lat/Long:</b>	40.23376 / -123.84421	<b>Accuracy:</b>	specific area
<b>UTM:</b>	Zone-10 N4454044 E428185	<b>Elevation (ft):</b>	600
<b>PLSS:</b>	T03S, R03E, Sec. 4 (H)	<b>Acres:</b>	15.0
<b>Location:</b>	NORTH OF SALMON CREEK, ABOUT 0.3 AIR MILE WEST TO 0.7 AIR MILE WSW OF CONFLUENCE WITH SOUTH FORK EEL RIVER.		
<b>Detailed Location:</b>	ABOVE HELICOPTER LANDING ON EASTERN SIDE, AND ALONG WESTERN PROPERTY BOUNDARY. MAPPED AS 3 POLYGONS.		
<b>Ecological:</b>	MIXED CONIFEROUS FOREST DOMINATED BY DOUGLAS-FIR AND TANOAK, WITH A FAIRLY OPEN UNDERSTORY. ALMOST ALL OF THE PLANTS WERE FOUND ALONG DEER TRAILS. SOUTH TO EAST FACING ASPECT. 5-10% SLOPE.		
<b>General:</b>	7 PLANTS SEEN IN SW-MOST POLYGON, 47 PLANTS SEEN IN NW-MOST POLYGON, AND 16 PLANTS SEEN IN E-MOST POLYGON IN 2017.		
<b>Owner/Manager:</b>	PVT		

# Schackow Farms - CNDDDB Map (0.7 Mile Radius)

California Natural Diversity  
Database (CNDDDB) Commercial  
[ds85]

- Plant (80m)
- Plant (specific)
- Plant (non-specific)
- Plant (circular)
- Animal (80m)
- Animal (specific)
- Animal (non-specific)
- Animal (circular)
- Terrestrial Comm. (80m)
- Terrestrial Comm. (specific)
- Terrestrial Comm. (non-specific)
- Terrestrial Comm. (circular)
- Aquatic Comm. (80m)
- Aquatic Comm. (specific)
- Aquatic Comm. (non-specific)
- Aquatic Comm. (circular)
- Multiple (80m)
- Multiple (specific)
- Multiple (non-specific)
- Multiple (circular)
- Sensitive EO's (Commercial only)



Source: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GEBCO, IGN, Keahler NL, Orange Survey, Esri

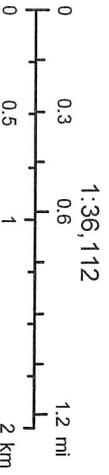
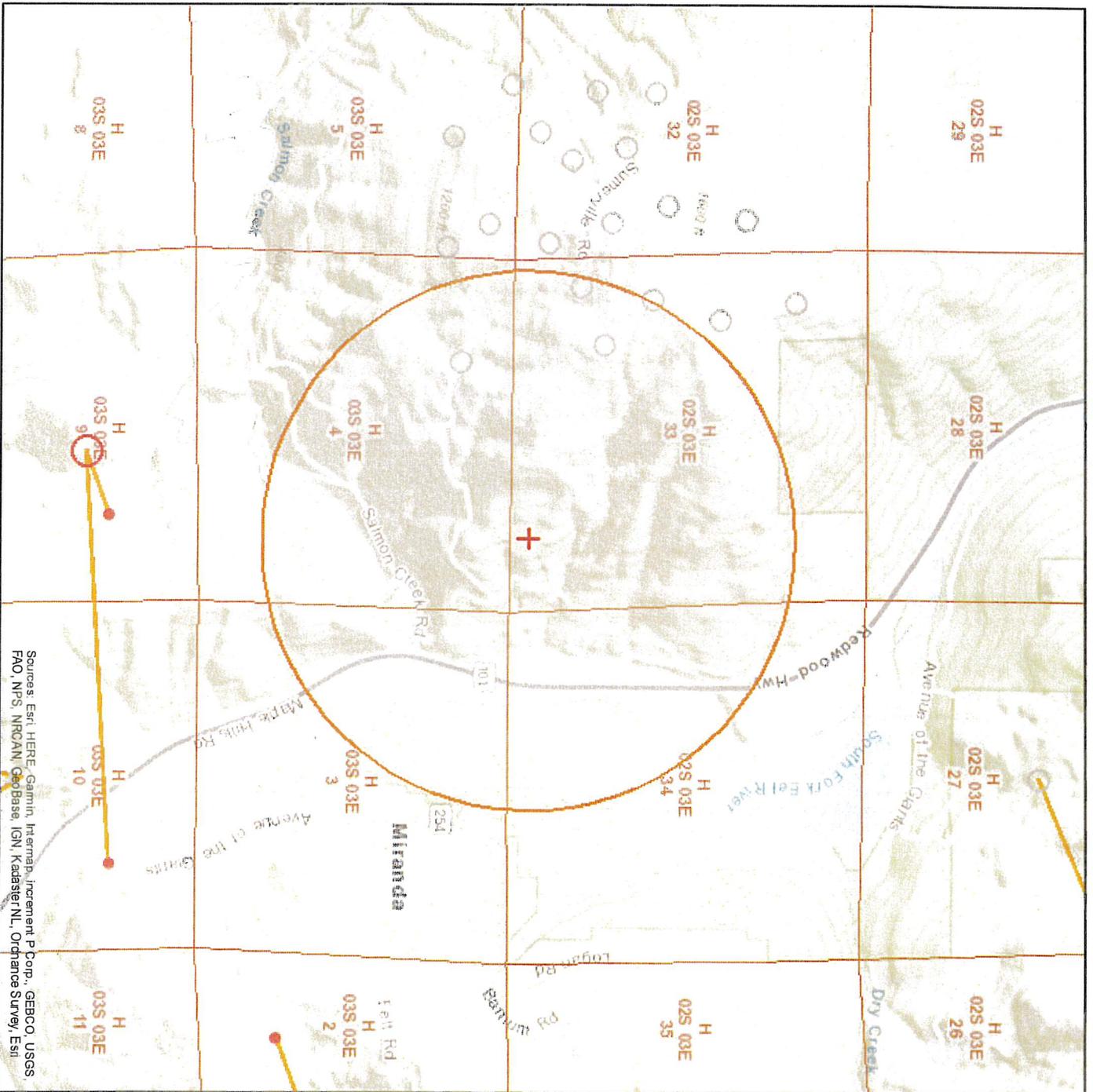
# Schackow Farms - NSO Map (0.7 Mile Radius)

Unprocessed Data from  
 CNDDb Online Field  
 Survey Form [ds1002]

- ▲ Animal
- ▲ Plant

Spotted Owl Observations  
 [ds7041]

- Positive Observation
- Negative Observation
- Activity Center
- Not Valid Activity Center
- ◇ Abandoned
- Spotted Owl Observations Spider Diagram [ds705]



April 10, 2018

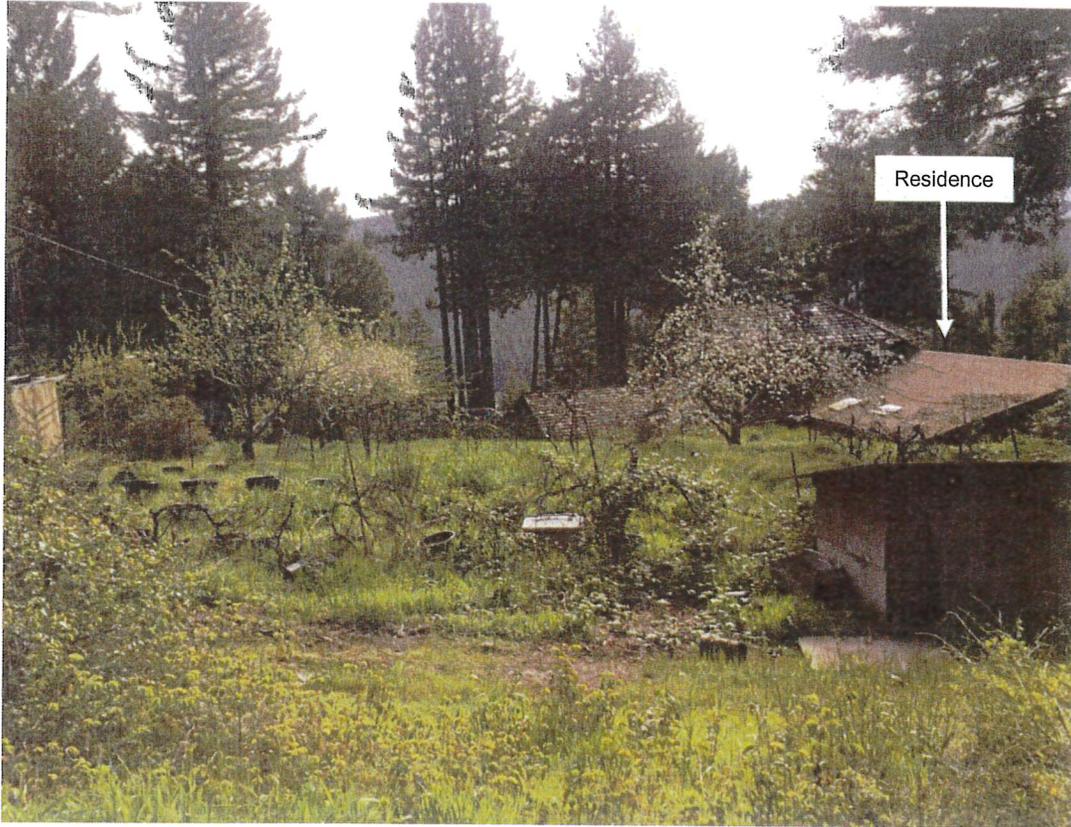
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri

## Photos

The following photos were taken by Brita Rustad of Timberland Resource Consultants at APN 211-401-007 during the field inspection on April 11<sup>th</sup>, 2018.



**Photos 1 & 2:** Views of main Cultivation Site 1, facing southeast and facing south. Notice the Douglas-fir and mixed hardwoods stand in the background of the following photos.



**Photo 3:** View of Cultivation Site 2, facing east. The residence just north of Cultivation Site 1, not associated with cultivation activities, is shown on the far right.



**Photo 4:** View of Cultivation Site 3, facing south.



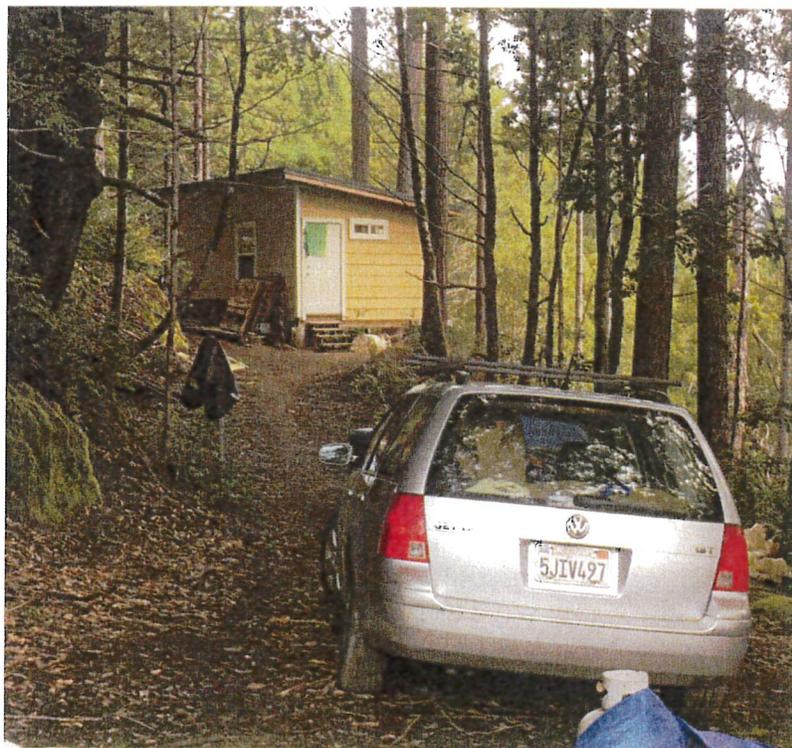
**Photo 5:** View of the Agriculture Building, facing west.



**Photo 6:** View of the Garage/Shop, facing northeast.



**Photo 7:** Example of scattered water storage tanks on the property that do not constitute timberland conversion.



**Photo 8:** View of the residence north of Cultivation Site 3, not associated with cultivation activities.



**Photos 9, 10, & 11:** Example of remnant slash from conversion activities.

## References

*California Forest Practice Rules 2017*. Sacramento: CAL FIRE, 2018. Print.

*California Natural Diversity Database*. California Department of Fish and Wildlife. Web.  
<https://www.wildlife.ca.gov/Data/CNDDDB>. Accessed 10 April 2018.

*Forest Practice Watershed Mapper v2*. CAL FIRE. Web. [http://egis.fire.ca.gov/watershed\\_mapper/](http://egis.fire.ca.gov/watershed_mapper/).  
Accessed 10 April 2018.

*Historic Aerial*. Netronline. 2017. Web. <https://www.historicaerials.com/viewer>. Accessed 10 April 2018.

*Humboldt County Web GIS*. County of Humboldt. Web. <http://webgis.co.humboldt.ca.us/HCEGIS2.0/>.  
Accessed 10 April 2018.

*Oak Mortality Disease Control*. Plant Quarantine Manual 3700. California Department of Food and  
Agriculture. Web. <http://pi.cdfa.ca.gov/pqm/manual/pdf/455.pdf>. Accessed 10 April 2018.

*Parcel Quest*. Web. <https://pqweb.parcelquest.com/#home>. Accessed 10 April 2018.

*SODMAP Mobile*. UC Berkeley Forest Pathology and Mycology Lab. Mobile Phone Application.  
[www.sodmapmobile.org](http://www.sodmapmobile.org). Accessed 10 April 2018.

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE  
REGION 1 – NORTHERN REGION  
619 Second Street  
Eureka, CA 95501



**STREAMBED ALTERATION AGREEMENT**  
NOTIFICATION NO. 1600-2017-0137-R1  
Unnamed Tributaries to the South Fork Eel River, tributary to the Eel  
River and the Pacific Ocean

Mr. Matthew Schackow  
Schackow Water Diversion and Stream Crossings Project  
4 Encroachments

This Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Wildlife (CDFW or the Department) and Mr. Matthew Schackow (Permittee).

## RECITALS

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, the Permittee initially notified CDFW on March 17, 2017, with revisions received on May 19, 2017, that the Permittee intends to complete the project described herein.

WHEREAS, pursuant to FGC section 1603, CDFW has determined that the project could substantially adversely affect existing fish or wildlife resources and has included measures in the Agreement necessary to protect those resources.

WHEREAS, the Permittee has reviewed the Agreement and accept its terms and conditions, including the measures to protect fish and wildlife resources.

NOW THEREFORE, the Permittee agrees to complete the project in accordance with the Agreement.

## PROJECT LOCATION

The project to be completed is located within the South Fork Eel River watershed, approximately 4.5 miles northwest of the town of Miranda, County of Humboldt, State of California. The project is located in Section 33, T2S, R3E, Humboldt Base and Meridian; in the Miranda U.S. Geological Survey 7.5-minute quadrangle; Assessor's Parcel Number 211-401-007; latitude 40.23992364 N and longitude -123.8402678 W at the point of diversion (POD).

## PROJECT DESCRIPTION

The project is limited to four (4) encroachments (Table 1). One encroachment is for water diversion from an Unnamed Tributary to the South Fork Eel River. Water is

diverted for domestic use only. Work for the water diversion will include excavation, removal, and replacement of an existing concrete cistern, and installation, use and maintenance of water diversion infrastructure. Two additional encroachments include improvement of existing road/stream crossings. Work for these encroachments will include excavation, removal of one undersized culvert and one dirt ford, and replacement with new properly sized culverts, backfilling and compaction of fill, and rock armoring as necessary to minimize erosion. The fourth encroachment includes a constructed channel hydrologically connected to an Unnamed Tributary to the Eel River. Work for this encroachment includes rock armoring as necessary to minimize sediment delivery to the stream.

Table 1. Project encroachments with description.

ID	Latitude/Longitude	Description
Crossing-1	40.023994793, - 123.8400228	Replace undersized 8" diameter culvert with minimum 18" diameter culvert.
Crossing-2 (Pond Culvert)	40.24026231, - 123.8392888	Replace the dirt ford located on the pond overflow drainage with a minimum 12" diameter culvert.
POD	40.23992364, - 123.8402678	Water diversion from a class II watercourse. Remove and replace with appropriate diversion intake structure.
Pond Overflow (Rock lined Ditch)	40.23972011- 123.8391580,	Size pond overflow ditch to accommodate pond expansion and line with 2-3 inches of rock.

**PROJECT IMPACTS**

Existing fish or wildlife resources the project could substantially adversely affect include: coastal tailed frog (*Ascaphus Truei*), Chinook salmon (*Oncorhynchus tshawytscha*), coho salmon (*O. kisutch*), steelhead trout (*O. mykiss*), and other amphibians, reptiles, aquatic invertebrates, mammals, birds, and other aquatic and riparian species.

The adverse effects the project could have on the fish or wildlife resources identified above include:

**Impacts to water quality:**

- increased water temperature;
- reduced instream flow;
- temporary increase in fine sediment transport;

**Impacts to bed, channel, or bank and direct effects on fish, wildlife, and their habitat:**

- loss or decline of riparian habitat;
- direct impacts on benthic organisms;

**Impacts to natural flow and effects on habitat structure and process:**

- cumulative effect when other diversions on the same stream are considered;
- diversion of flow from activity site;
- direct and/or incidental take;
- indirect impacts;

impediment of up- or down-stream migration;  
water quality degradation; and  
damage to aquatic habitat and function.

## **MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES**

### **1. Administrative Measures**

The Permittee shall meet each administrative requirement described below.

- 1.1 Documentation at Project Site. The Permittee shall make the Agreement, any extensions and amendments to the Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the project site at all times and shall be presented to CDFW personnel, or personnel from another state, federal, or local agency upon request.
- 1.2 Providing Agreement to Persons at Project Site. The Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on the project at the project site on behalf of the Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.
- 1.3 Adherence to Existing Authorizations. All water diversion facilities that the Permittee owns, operates, or controls shall be operated and maintained in accordance with current law and applicable water rights.
- 1.4 Change of Conditions and Need to Cease Operations. If conditions arise, or change, in such a manner as to be considered deleterious by CDFW to the stream or wildlife, operations shall cease until corrective measures approved by CDFW are taken. This includes new information becoming available that indicates that the bypass flows and diversion rates provided in this agreement are not providing adequate protection to keep aquatic life downstream in good condition or to avoid "take" or "incidental take" of federal or State listed species.
- 1.5 Notification of Conflicting Provisions. The Permittee shall notify CDFW if the Permittee determines or learns that a provision in the Agreement might conflict with a provision imposed on the project by another local, state, or federal agency. In that event, CDFW shall contact the Permittee to resolve any conflict.
- 1.6 Project Site Entry. The Permittee agrees to allow CDFW employees access to any property it owns and/or manages for the purpose of inspecting and/or monitoring the activities covered by this Agreement, provided CDFW: a) provides 24 hours advance notice; and b) allows the Permittee or representatives to participate in the inspection and/or monitoring. This condition does not apply to CDFW enforcement personnel.

- 1.7 CDFW Notification of Work Initiation and Completion. The Permittee shall contact CDFW within the 7-day period preceding the beginning of work permitted by this Agreement. Information to be disclosed shall include Agreement number, and the anticipated start date. Subsequently, the Permittee shall notify CDFW no later than seven (7) days after the project is fully completed.

## 2. Avoidance and Minimization Measures

To avoid or minimize adverse impacts to fish and wildlife resources identified above, the Permittee shall implement each measure listed below.

- 2.1 Permitted Project Activities. Except where otherwise stipulated in this Agreement, all work shall be in accordance with the Permittee Notification received on March 17, 2017, with revisions received on May 19, 2017, together with all maps, BMP's, photographs, drawings, and other supporting documents submitted with the Notification.
- 2.2 Bullfrog Management Plan. The Permittee shall comply with the **Bullfrog Monitoring and Management Plan** (Exhibit A). All reporting requirements shall be submitted no later than **December 31** of each year.
- 2.3 Maximum Diversion Rate. The maximum instantaneous diversion rate from the water intake shall **not exceed 3 gallons per minute (gpm)** at any time.
- 2.4 Bypass Flow. The Permittee shall pass 90% of the inlet flow at all times to keep all aquatic species including fish and other aquatic life in good condition below the point of diversion.
- 2.5 Seasonal Diversion Minimization. No more than **150 gallons** per day shall be diverted during the low flow season from **May 15 to October 15** of any year. Water shall be diverted only if the Permittee can adhere to conditions 2.2 and 2.3 of this Agreement.
- 2.6 Water Diversion Infrastructure/Facility.
- 2.6.1 Removal of Instream Structures. All unauthorized diversion infrastructure shall be removed and replaced with infrastructure reviewed and approved by CDFW. Permittee shall comply with all work restrictions (conditions 2.12 through 2.20).
- 2.6.2 Intake Structure. No polluting materials (e.g., particleboard, plastic sheeting, bentonite) shall be used to construct or screen, or cover the diversion intake structure.
- 2.6.3 Intake Screening. Screens shall be installed on intakes and in place, wherever water is diverted. Structure placement, approach velocity,

sweeping velocity, screen openings, and screen construction shall conform to criteria described in the California Salmonid Stream Habitat Restoration Manual, Appendix S. This document is available at: <http://www.dfg.ca.gov/fish/Resources/HabitatManual.asp>. The Permittee shall regularly inspect, clean, and maintain screens in good condition.

- 2.6.4 Intake Shall Not Impede Aquatic Species Passage. The water diversion structures shall be designed, constructed, and maintained such that they do not constitute a barrier to upstream or downstream movement of aquatic life.
- 2.6.5 Diversion Infrastructure Plan (DIP). The Permittee shall submit a DIP for CDFW review and approval prior to diverting water. The DIP shall include a narrative describing the different elements of the water diversion infrastructure, supporting photographs and/or diagrams, and justification of how compliance with the CDFW Fish Screen Criteria will be achieved under this Agreement.
- 2.7 Measurement of Diverted Flow. The Permittee shall install a device acceptable to CDFW for measuring the quantity of water diverted to and from the spring and well. This measurement shall begin as soon as this Agreement is signed by the Permittee. The Permittee **shall record the quantity of water** diverted on a weekly basis.
- 2.8 Water Management Plan. The Permittee shall submit a Water Management Plan no later than **July 30, 2017**, that describes how compliance will be achieved under this Agreement. The Water Management Plan shall include details on water storage, water conservation, or other relevant material to maintain water needs in coordination with forbearance and bypass flow requirements. The Water Management Plan shall include a brief narrative describing water use on the property, photographs to support the narrative, and water use calculations to ensure compliance with this Agreement. The Water Management Plan shall be submitted to CDFW at 619 Second Street, Eureka, CA 95501.
- 2.9 Water Conservation. The Permittee shall make best efforts to minimize water use, and to follow best practices for water conservation and management.
- 2.10 Water Storage Maintenance. Storage tanks shall have a float valve to shut off the diversion when tanks are full to prevent overflow from being diverted when not needed. The Permittee shall install any other measures necessary to prevent overflow of tanks resulting in more water being diverted than is used.
- 2.11 State Water Code. This Agreement does not constitute a valid water right. The Permittee shall comply with State Water Code sections 5100 and 1200 et seq. as appropriate for the water diversion and water storage. The application for this registration is found at:

[http://www.swrcb.ca.gov/waterrights/publications\\_forms/forms/docs/sdu\\_registration.pdf](http://www.swrcb.ca.gov/waterrights/publications_forms/forms/docs/sdu_registration.pdf).

## **Stream Crossings**

- 2.12 **Stream Protection.** No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete washings, oil or petroleum products, or other deleterious material from project activities shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into the stream. All project materials and debris shall be removed from the project site and properly disposed of off-site upon project completion.
- 2.13 **Stream Diversion.** When work in a flowing stream is unavoidable, Permittee shall divert the stream flow around or through the work area during construction operations.
- 2.14 **Cofferdams.** Prior to the start of construction, Permittee shall divert the stream around or through the work area and the work area shall be isolated from the flowing stream. To isolate the work area, water tight coffer dams shall be constructed upstream and downstream of the work area and water diverted, through a suitably sized pipe, from upstream of the upstream coffer dam and discharge downstream of the downstream coffer dam. Cofferdams shall be constructed of a non-erodible material, which does not contain soil or fine sediment. Cofferdams and the stream diversion system shall remain in place and functional throughout the construction period. Cofferdams or stream diversions that fail for any reason shall be repaired immediately.
- 2.15 **Equipment Maintenance.** Refueling of machinery or heavy equipment, or adding or draining oil, lubricants, coolants or hydraulic fluids shall not take place within streambed, channel and bank. All such fluids and containers shall be disposed of properly off-site. Heavy equipment used or stored within streambed, channel and bank shall use drip pans or other devices (e.g., absorbent blankets, sheet barriers or other materials) as needed to prevent soil and water contamination.
- 2.16 **Hazardous Spills.** Any material, which could be hazardous or toxic to aquatic life and enters a stream (i.e. a piece of equipment tipping-over in a stream and dumping oil, fuel or hydraulic fluid), the Permittee shall immediately notify the California Emergency Management Agency State Warning Center at 1-800-852-7550, and immediately initiate clean-up activities. CDFW shall be notified by the Permittee within 24 hours at 707-445-6493 and consulted regarding clean-up procedures.
- 2.17 **Work Period.** All work, including replacement of water diversion infrastructure, shall be confined to the period **June 15 through October 1** of each year. Work within the active channel of a stream shall be restricted to periods of **dry weather**. Precipitation forecasts and potential increases in stream flow shall be considered

when planning construction activities. Construction activities shall cease and all necessary erosion control measures shall be implemented prior to the onset of precipitation.

2.18 Excavated Fill. Excavated fill material shall be placed in upland locations where it cannot deliver to a watercourse. To minimize the potential for material to enter the watercourse during the winter period, all excavated and relocated fill material shall be tractor contoured (to drain water) and tractor compacted to effectively incorporate and stabilize loose material into existing road and/or landing features.

2.19 Runoff from Steep Areas. The Permittee shall make preparations so that runoff from steep, erodible surfaces will be diverted into stable areas with little erosion potential or contained behind erosion control structures. Erosion control structures such as straw bales and/or siltation control fencing shall be placed and maintained until the threat of erosion ceases. Frequent water checks shall be placed on dirt roads, cat tracks, or other work trails to control erosion.

2.20 Work Completion. The proposed work shall be completed by no later than **October 1, 2017**. A notice of completed work shall be submitted to CDFW within seven (7) days of project completion.

2.21 Culvert Installation.

2.21.1 Existing fill material in the crossing shall be excavated down vertically to the approximate original channel and outwards horizontally to the approximate crossing hinge points (transition between naturally occurring soil and remnant temporary crossing fill material) to remove any potential unstable debris and voids in the older fill prism.

2.21.2 Culvert shall be installed to grade, aligned with the natural stream channel, and extend lengthwise completely beyond the toe of fill. If culvert cannot be set to grade, it shall be oriented in the lower third of the fill face, and a downspout or energy dissipator (such as boulders, rip-rap, or rocks) shall be installed above or below the outfall as needed to effectively control stream bed, channel, or bank erosion (scouring, headcutting, or downcutting).

2.21.3 Culvert bed shall be composed of either compacted rock-free soil or crushed gravel. Bedding beneath the culvert shall provide for even distribution of the load over the length of the pipe, and allow for natural settling and compaction to help the pipe settle into a straight profile. The crossing backfill materials shall be free of rocks, limbs, or other debris that could allow water to seep around the pipe, and shall be compacted.

2.21.4 Culvert inlet, outlet (including the outfall area), and fill faces shall be armored where stream flow, road runoff, or rainfall energy is likely to erode fill material and the outfall area.

2.21.5 Permanent culverts shall be sized to accommodate the estimated 100-year flood flow (slightly larger than the bankfull channel width) including debris, culvert embedding, and sediment loads.

## 2.22 Rock Armor Placement.

2.22.1 No heavy equipment shall enter the wetted stream channel.

2.22.2 No fill material, other than clean rock, shall be placed in the stream channel.

2.22.3 Rock shall be sized to withstand washout from high stream flows, and extend above the ordinary high water level.

2.22.4 Rock armoring shall not constrict the natural stream channel width and shall be keyed into a footing trench with a depth sufficient to prevent instability.

2.23 Project Inspection. The Project shall be inspected by Timberland Resource Consultants or a licensed engineer to ensure that the stream crossings were installed as designed. A copy of the inspection report, including photographs of each site, shall be **submitted to CDFW within 90 days** of completion of this project.

## 3. Reporting Measures

3.1 Measurement of Diverted Flow. Copies of the **Water Diversion Records** (condition 2.6) shall be submitted to CDFW at 619 Second Street, Eureka, CA 95501 no later than **December 31** of each year beginning in **2017**.

3.2 Water Management Plan. The Permittee shall submit a **Water Management Plan** (condition 2.7) no later than **July 30, 2017**, that describes how compliance will be achieved under this Agreement. The Water Management Plan shall be submitted to CDFW at 619 Second Street, Eureka, CA 95501.

3.3 Bullfrog Management Plan. The Permittee shall submit all required documents described in the **Bullfrog Monitoring and Management Plan** (Exhibit A) no later than **December 31** of each year. The Bullfrog Management Plan shall be submitted to CDFW at 619 Second Street, Eureka, CA 95501.

3.4 Project Inspection. The Permittee shall submit the **Project Inspection Report** (condition 2.23) to CDFW, LSA Program at 619 Second Street, Eureka, CA 95501.

## **CONTACT INFORMATION**

Written communication that the Permittee or CDFW submits to the other shall be delivered to the address below unless the Permittee or CDFW specifies otherwise.

### To Permittee:

Mr. Matthew S. Schackow  
1880 Aspen Court  
McKinleyville, California 95519  
(707) 834-3036

### To CDFW:

Department of Fish and Wildlife  
Northern Region  
619 Second Street  
Eureka, California 95501  
Attn: Lake and Streambed Alteration Program  
Notification #1600-2017-0137-R1

## **LIABILITY**

The Permittee shall be solely liable for any violation of the Agreement, whether committed by the Permittee or any person acting on behalf of the Permittee, including its officers, employees, representatives, agents or contractors and subcontractors, to complete the project or any activity related to it that the Agreement authorizes.

This Agreement does not constitute CDFW's endorsement of, or require the Permittee to proceed with the project. The decision to proceed with the project is the Permittee's alone.

## **SUSPENSION AND REVOCATION**

CDFW may suspend or revoke in its entirety this Agreement if it determines that the Permittee or any person acting on behalf of the Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, is not in compliance with the Agreement.

Before CDFW suspends or revokes the Agreement, it shall provide the Permittee written notice by certified or registered mail that it intends to suspend or revoke. The notice shall state the reason(s) for the proposed suspension or revocation, provide the Permittee an opportunity to correct any deficiency before CDFW suspends or revokes the Agreement, and include instructions to the Permittee, if necessary, including but not

limited to a directive to immediately cease the specific activity or activities that caused CDFW to issue the notice.

## **ENFORCEMENT**

Nothing in the Agreement precludes CDFW from pursuing an enforcement action against the Permittee instead of, or in addition to, suspending or revoking the Agreement.

Nothing in the Agreement limits or otherwise affects CDFW's enforcement authority or that of its enforcement personnel.

## **OTHER LEGAL OBLIGATIONS**

This Agreement does not relieve the Permittee or any person acting on behalf of the Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from obtaining any other permits or authorizations that might be required under other federal, state, or local laws or regulations before beginning the project or an activity related to it.

This Agreement does not relieve the Permittee or any person acting on behalf of the Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with other applicable statutes in the FGC including, but not limited to, FGC sections 2050 *et seq.* (threatened and endangered species), 3503 (bird nests and eggs), 3503.5 (birds of prey), 5650 (water pollution), 5652 (refuse disposal into water), 5901 (fish passage), 5937 (sufficient water for fish), and 5948 (obstruction of stream).

Nothing in the Agreement authorizes the Permittee or any person acting on behalf of the Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, to trespass.

## **AMENDMENT**

CDFW may amend the Agreement at any time during its term if CDFW determines the amendment is necessary to protect an existing fish or wildlife resource.

The Permittee may amend the Agreement at any time during its term, provided the amendment is mutually agreed to in writing by CDFW and the Permittee. To request an amendment, the Permittee shall submit to CDFW a completed CDFW "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the corresponding amendment fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

## TRANSFER AND ASSIGNMENT

This Agreement may not be transferred or assigned to another entity, and any purported transfer or assignment of the Agreement to another entity shall not be valid or effective, unless the transfer or assignment is requested by the Permittee in writing, as specified below, and thereafter CDFW approves the transfer or assignment in writing.

The transfer or assignment of the Agreement to another entity shall constitute a minor amendment, and therefore to request a transfer or assignment, the Permittee shall submit to CDFW a completed CDFW "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the minor amendment fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

## EXTENSIONS

In accordance with FGC section 1605(b), the Permittee may request one extension of the Agreement, provided the request is made prior to the expiration of the Agreement's term. To request an extension, the Permittee shall submit to CDFW a completed CDFW "Request to Extend Lake or Streambed Alteration" form and include with the completed form payment of the extension fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). CDFW shall process the extension request in accordance with FGC 1605(b) through (e).

If the Permittee fails to submit a request to extend the Agreement prior to its expiration, the Permittee must submit a new notification and notification fee before beginning or continuing the project; the Agreement covers (FGC section 1605(f)).

## EFFECTIVE DATE

The Agreement becomes effective on the date of CDFW's signature, which shall be: 1) after the Permittee signature; 2) after CDFW complies with all applicable requirements under the California Environmental Quality Act (CEQA); and 3) after payment of the applicable FGC section 711.4 filing fee listed at [http://www.wildlife.ca.gov/habcon/ceqa/ceqa\\_changes.html](http://www.wildlife.ca.gov/habcon/ceqa/ceqa_changes.html).

## TERM

This Agreement shall **expire five years** from date of execution, unless it is terminated or extended before then. All provisions in the Agreement shall remain in force throughout its term. The Permittee shall remain responsible for implementing any provisions specified herein to protect fish and wildlife resources after the Agreement expires or is terminated, as FGC section 1605(a)(2) requires.

**AUTHORITY**

If the person signing the Agreement (signatory) is doing so as a representative of the Permittee, the signatory hereby acknowledges that he or she is doing so on the Permittee's behalf and represents and warrants that he or she has the authority to legally bind the Permittee to the provisions herein.

**AUTHORIZATION**

This Agreement authorizes only the project described herein. If the Permittee begins or completes a project different from the project the Agreement authorizes, the Permittee may be subject to civil or criminal prosecution for failing to notify CDFW in accordance with FGC section 1602.

**CONCURRENCE**

The undersigned accepts and agrees to comply with all provisions contained herein.

**FOR Mr. Matthew Schackow**

*M. Schackow*

Matthew Schackow

*7-6-17*

Date

**FOR DEPARTMENT OF FISH AND WILDLIFE**

*Scott Bauer*

Scott Bauer

Senior Environmental Scientist Supervisor

*7/14/17*

Date

Prepared by: Kalyb Bocast, Environmental Scientist, June 12, 2017

## **EXHIBIT A.**

### **BULLFROG MONITORING AND MANAGEMENT PLAN FOR 1600-2017-0137-R1**

#### **GENERAL BULLFROG INFORMATION**

The American bullfrog (*Lithobates catesbeianus* = *Rana catesbeiana*); hereafter bullfrog, is an invasive non-native species in California and poses a significant threat to California's native fish and wildlife resources. Bullfrogs were introduced in California over 100 years ago from eastern parts of the United States as a food supply, but have since caused substantial ecological consequences. Bullfrogs are considered highly invasive and are well documented to be prey upon a variety of fish and wildlife species, including some that are rare, threatened, and endangered. Human modifications to the environment provide favorable condition to bullfrogs such as artificially created agricultural ponds, canals and ditches where warm still water occurs. As a result bullfrogs have spread throughout California.

Efforts to control bullfrogs have been met with varying degrees of success because: 1) bullfrogs can be difficult to detect and go dormant from fall through winter, 2) bullfrogs often take cover in difficult areas to manage (e.g. dense vegetation), 3) they can travel long distances to colonize and re-colonize areas, 4) they have high reproductive output, 5) they are weary and readily flee perceived threats, and 6) they can survive physical trauma remarkably well. CDFW scientific staff recognizes there is an urgent and immediate need to develop improved bullfrog management strategies to protect California's diverse fish, wildlife, and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public. Public support and implementation of bullfrog control in California is an important conservation strategy that will help protect natural resources for future generations.

#### **MONITORING**

The Project reservoir(s) shall be monitored for bullfrog presence on an annual basis with a minimum of five total surveys, no less than two weeks apart, throughout the months of May-July

- All pond survey effort must be made by a person knowledgeable in bullfrog identification (see Appendix A for reference photos);
- Survey efforts shall include listening for bullfrog calls and slowly walking the complete perimeter of the pond at night\* (dusk or later) while shining a flashlight to detect movement and eye-shine

If bullfrogs are not detected upon completion of five total surveys, or at any other time of the year incidentally, removal efforts are not required that year.

\*Day time monitoring can also be conducted to aid detection but is not required under this plan.

#### **SUCCESS CRITERIA**

The level of effort needed to successfully manage bullfrog populations varies with infestation levels. This plan shall be considered successfully implemented if sufficient effort is provided to prevent adult bullfrogs from reproducing in the reservoir(s) each year, and no bullfrog life-stages can be detected. Bullfrogs are capable of traveling long distances over-land, and on-going

efforts will be required to ensure dispersing bullfrogs do not colonize the reservoir(s) at a future time.

## OPTIONS FOR MANAGEMENT

Two removal methods may be employed for controlling bullfrogs under this plan and include:

- Manual direct removal
- Reservoir de-watering (Hydro-modification)

Implementing both reservoir de-watering and manual direct removal is currently believed to be the most effective method of managing bullfrog infestations. For reservoirs that are heavily infested with juvenile bullfrogs and/or tadpoles, reservoir dewatering may be necessary to break the bullfrog's life cycle and prevent on-going reproduction. Prior to conducting reservoir dewatering activities, please coordinate with CDFW Environmental Scientist Kalyn Bocast by phone at (707) 441-2077 or via email at [kalyn.bocast@wildlife.ca.gov](mailto:kalyn.bocast@wildlife.ca.gov).

### Direct Removal

All direct removal efforts must be made by a person knowledgeable in bullfrog identification.

- Removal efforts must occur during, but are not be limited to the active/breeding season, occurring May – July;
- A minimum of **five** efforts throughout the season are considered necessary;
- Direct removal efforts are typically most effective when conducted at night with use of lights but can also be conducted during the day;
- Direct removal must include working the entire perimeter of the reservoir;
- A rubber raft or small boat may be necessary to successfully remove some individuals;
- A team of two individuals or more is often helpful, one person for shining lights and/or operating a boat and the other person to perform removal efforts;
- Bullfrog tadpoles must be removed and dispatched and must not be relocated or kept as pets.

### Management Authorization

Take of bullfrogs is specifically allowed in the California Code of Regulations (CCR), Title 14 (T-14) section 5.05(a)(28), under the authority of a sport fishing license. There is no daily bag limit, possession limit or hour restriction, but bullfrogs can only be taken by hand, hand-held dip net, hook and line, lights, spears, gigs, grabs, paddles, bow and arrow or fish tackle.

Alternatively, FGC Section 5501 allows CDFW, as limited by the commission, to issue a permit to destroy fish that are harmful to other wildlife. The regulations have addressed this under Section CCR T-14 226.5 Issuance of Permits to Destroy Harmful Species of Fish in Private Waters for Management Purposes. This allows the CDFW to issue free permits to destroy harmful aquatic species by seining and draining.

### **Pond Dewatering**

Pond dewatering may be appropriate if the reservoir can be successfully dewatered without adversely affecting stream resources. Careful planning and coordination with CDFW, is necessary to ensure potential impacts to stream resources can be addressed, prior to commencing with pond draining. Discharge of polluted water to waters of the state may require permitting from other agencies with permitting authority, such as the Regional Water Quality Control Board.

In general, bullfrog tadpoles require two years to develop into frogs, whereas native amphibians only require one year. Therefore, draining a reservoir every two years (or less) is intended to interrupt bullfrog tadpole development, dramatically decrease bullfrog populations and allow for reduced efforts as a measure of adaptive management. Typically in Northern California, reservoir draining should occur in September through October to avoid impacts to sensitive native amphibian and fishery resources. While draining occurs, direct removal efforts should be employed as described above if possible.

### **REPORTING**

A written log shall be kept of monitoring and management efforts and shall be provided to CDFW **each year** by December 31. The written log shall include: 1) date and time of each monitoring and management effort, 2) approximate number of each bullfrog life stage detected and/or removed per effort, and 3) amount of time spent for each monitoring and management effort.

### **APPENDIX A. BULLFROG REFERENCE PHOTOS**



This is a photo of a Bullfrog tadpole. (Photo taken by Mike van Hattem).



The photos shown in this Appendix demonstrate a medium sized adult bullfrog that was removed from Ten Mile Creek, Mendocino County. Note the bullfrog has a large tympanum, (circular ear drum shown with an arrow) and **does not** have distinct ridges along its back (dorsolateral folds). Photo taken by Wes Stokes.



The bullfrog has somewhat distinct mottling and **the underside of the bullfrogs hind legs are not shaded pink or red.**

**FILE COPY**

**Water Resource Protection Plan  
For  
WDID 1B170405CHUM**



*Submitted to:*

Matthew Schackow

*Prepared by:*

Timberland Resource Consultants  
165 South Fortuna Blvd  
Fortuna, CA 95540

9-15-2017

### **Purpose**

This Water Resource Protection Plan (WRPP) has been prepared on behalf of the discharger, by agreement and in response to the California Water Code Section 13260(a), which requires that any person discharging waste or proposing to discharge waste within any region that could affect the quality of the waters of the state, other than into a community sewer system, shall file with the appropriate regional water board a Report of Waste Discharge (ROWD) containing such information and data as may be required by the Regional Water Board. The Regional Water Board may waive the requirements of Water Code section 13260 for specific types of discharges if the waiver is consistent with the Basin Plan and in the public interest. Any waiver is conditional and may be terminated at any time. A waiver should include monitoring requirements to verify the adequacy and effectiveness of the waiver's conditions. Order R1-2015-0023 conditionally waives the requirement to file a ROWD for discharges and associated activities described in finding 4.

### **Scope of Report**

Order No. R1-2015-0023 states that "Tier 2 Dischargers and Tier 3 Dischargers who intend to cultivate cannabis before, during, or following site cleanup activities shall develop and implement a water resource protection plan that contains the elements listed and addressed below. Dischargers must keep this plan on site, and produce it upon request by Regional Water Board staff. Management practices shall be properly designed and installed, and assessed periodically for effectiveness. If a management measure is found to be ineffective, the plan must be adapted and implemented to incorporate new or additional management practices to meet standard conditions. Dischargers shall certify annually to the Regional Water Board individually or through an approved third party program that the plan is being implemented and is effectively protecting water quality, and report on progress in implementing site improvements intended to bring the site into compliance with all conditions of this Order."

### **Methods**

The methods used to develop this WRPP include both field and office components. The office component consisted of reviewing available CGS Geomorphic Features Maps, Geology Maps, and historic aerial photos. The field component included identifying and accurately mapping all watercourses, wet areas, and wetlands located downstream of the cultivation areas, associated facilities, and all appurtenant roads accessing such areas. An accurate location of the Waters of the State is necessary to make an assessment of whether potential and existing erosion sites/pollution sites have the potential to discharge waste to an area that could affect waters of the State (including groundwater). Next, all cultivation areas, associated facilities, and all appurtenant roads accessing such areas were assessed for discharges and related controllable water quality factors from the activities listed in Order R1-2015-0023, Finding 4a-j. The field assessment also included an evaluation and determination of compliance with the Standard Conditions per Provision I.B of Order No. R1-2015-0023. The water resource protection plans required under Tier 2 are meant to describe the specific measures a discharger implements to achieve compliance with standard conditions. Therefore, all required components of the water resource protection plan per Provision I.B of Order No. R1-2015-0023 were physically inspected and evaluated. A comprehensive summary of each Standard Condition as it relates to the subject property is appended.

**Summary of Standard Conditions Compliance**

1. Site maintenance, erosion control, and drainage features Y☒/N☐
2. Stream crossing maintenance Y☒/N☐
3. Riparian and wetland protection and management Y☐/N☒
4. Spoils management Y☒/N☐
5. Water storage and use Y☒/N☐
6. Irrigation runoff Y☒/N☐
7. Fertilizers and soil amendments Y☒/N☐
8. Pesticides and herbicides? Y☒/N☐
9. Petroleum products and other chemicals Y☒/N☐
10. Cultivation-related wastes Y☒/N☐
11. Refuse and human waste Y☐/N☒

**Identified Sites Requiring Remediation (See Standard Conditions Assessment)**

Unique Map Point(s)	Map Point Description	Associated Standard Condition	Temporary BMP	Permanent BMP	Priority for Action	Time Schedule for completion of Permanent BMP	Completion Date
Roads and ATV Trails	Surface drainage of roads and ATV trails.	A(1)(a)	N/A	Maintain or reconstruct worn down water breaks, rolling dips, and drainage "outs" as needed to prevent surface erosion on all roads and trails shown on the WRPP Map, prior to 11/15/17.	2	11/15/17	
Map Point 2	Cultivation Area within 50 of Class III watercourse.	A(3)	N/A	Beginning in 2018, relocate cultivation to outside of 50 ft from the Class III watercourse. Refrain from expansion towards the Class III watercourse. Allow bare soils within 50 feet of the Class III watercourse to revegetate with grass. Refrain from activities that would result in bare soils at Map Point 2. Take care to ensure that soil or plant waste is contained and not being directed or discharged towards the watercourse.	3	1/1/18	

**Identified Sites Requiring Remediation (See Standard Conditions Assessment)**

Unique Map Point(s)	Map Point Description	Associated Standard Condition	Temporary BMP	Permanent BMP	Priority for Action	Time Schedule for completion of Permanent BMP	Completion Date
Map Point 3	Cultivation spoils with the potential to migrate below cultivation areas.	A(4)	N/A	Remove the part of the pile that is leaning up against the fence and install straw wattles as necessary to keep spoils contained to the developed cultivation area.	2	11/15/17	
Map Point 4	Segment of Pond Overflow Route not yet culverted.	A(5)	N/A	Complete installation of the middle section of the Culverted Pond Overflow.	2	11/15/17	
House, Outhouse, Cabin	Sewage disposal associated with these structures.	A(11)	N/A	Septic systems on the property need to meet applicable County health standards, local agency management plans and ordinances, and/or the Regional Water Board's Onsite Wastewater Treatment System (OWTS) policy.	4	Prior to expiration of the Order, 2020	

Treat Priority: Treatment Priority (1) indicates a very high priority with treatment being planned to occur immediately, (2) indicates a high priority site with treatment to occur prior to the start of the winter period (Nov. 15), (3) indicates a moderate priority with treatment being planned to occur within one year, or prior to the winter period (Nov. 15) of the 2<sup>nd</sup> season of operations, and (4) indicates a low priority with treatment being planned to occur in the shortest time possible, but no later than the expiration of this Order (five years).

## Monitoring Plan

Tier 2 Dischargers shall include a monitoring element in the water resource protection plan that at a minimum provides for periodic inspection of the site, checklist to confirm placement and efficacy of management measures, and document progress on any plan elements subject to a time schedule. Tier 2 Dischargers shall submit an annual report (Appendix C) by March 31 of each year that documents implementation and effectiveness of management measures during the previous year. Tier 2 annual reporting is a function that may be provided through an approved third party program.

Monitoring of the site includes visual inspection and photographic documentation of each feature of interest listed on the site map, with new photographic documentation recorded with any notable changes to the feature of interest. At a minimum, all site features must be monitored annually, to provide the basis for completion of the annual re-certification process. Additionally, sites shall be monitored at the following times to ensure timely identification of changed site conditions and to determine whether implementation of additional management measures is necessary to iteratively prevent, minimize, and mitigate discharges of waste to surface water: 1) just prior to October 15 to evaluate site preparedness for storm events and storm water runoff, 2) by December 15 and, 3) following any rainfall event with an intensity of 3" precipitation in 24 hours. Precipitation data can be obtained from the National Weather Service Forecast Office (e.g. by entering the zip code of the parcel location at <http://www.srh.noaa.gov/forecast>).

### Inspection Personnel Contact Information:

Ron Pelletier  
Timberland Resource Consultants  
165 South Fortuna Blvd, Fortuna CA 95540  
707-725-1897

## Monitoring Plan Reporting Requirements

Order No. R1-2015-0023, Appendix C must be submitted to the Regional Water Board or approved third party program upon initial enrollment in the Order (NOI) and annually thereafter by March 31. Forms submitted to the Regional Water Board shall be submitted electronically to [northcoast@waterboards.ca.gov](mailto:northcoast@waterboards.ca.gov). If electronic submission is infeasible, hard copies can be submitted to: North Coast Regional Water Quality Control Board, 5550 Skylane Boulevard, Suite A, Santa Rosa, CA 95403.

## STATEMENT OF CONTINGENT AND LIMITING CONDITIONS CONCERNING THE PREPARATION AND USE OF WATER RESOURCE PROTECTION PLAN

Prepared by Timberland Resource Consultants

1. This Water Resource Protection Plan has been prepared for the property within (Humboldt County) APN 211-401-007 at the request of the discharger.
2. Timberland Resource Consultants does not assume any liability for the use or misuse of the information in this Water Resource Protection Plan.
3. The information is based upon conditions apparent to Timberland Resource Consultants at the time the inspection was conducted, and as disclosed to Timberland Resource Consultants by the landowner and / or the Discharger. Changes due to land use activities or environmental factors occurring after this inspection, have not been considered in this Water Resource Protection Plan.
4. Maps, photos, and any other graphical information presented in this report are for illustrative purposes. Their scales are approximate, and they are not to be used for locating and establishing boundary lines.
5. The conditions presented in this Water Resource Protection Plan may differ from those made by others or from changes on the property occurring after the inspection was conducted. Timberland Resource Consultants does not guarantee this work against such differences.
6. Timberland Resource Consultants did not conduct an investigation on a legal survey of the property.
7. Persons using this Water Resource Protection Plan are advised to contact Timberland Resource Consultants prior to such use.
8. Timberland Resource Consultants will not discuss this report or reproduce it for anyone other than the Client named in this report without authorization from the Client.



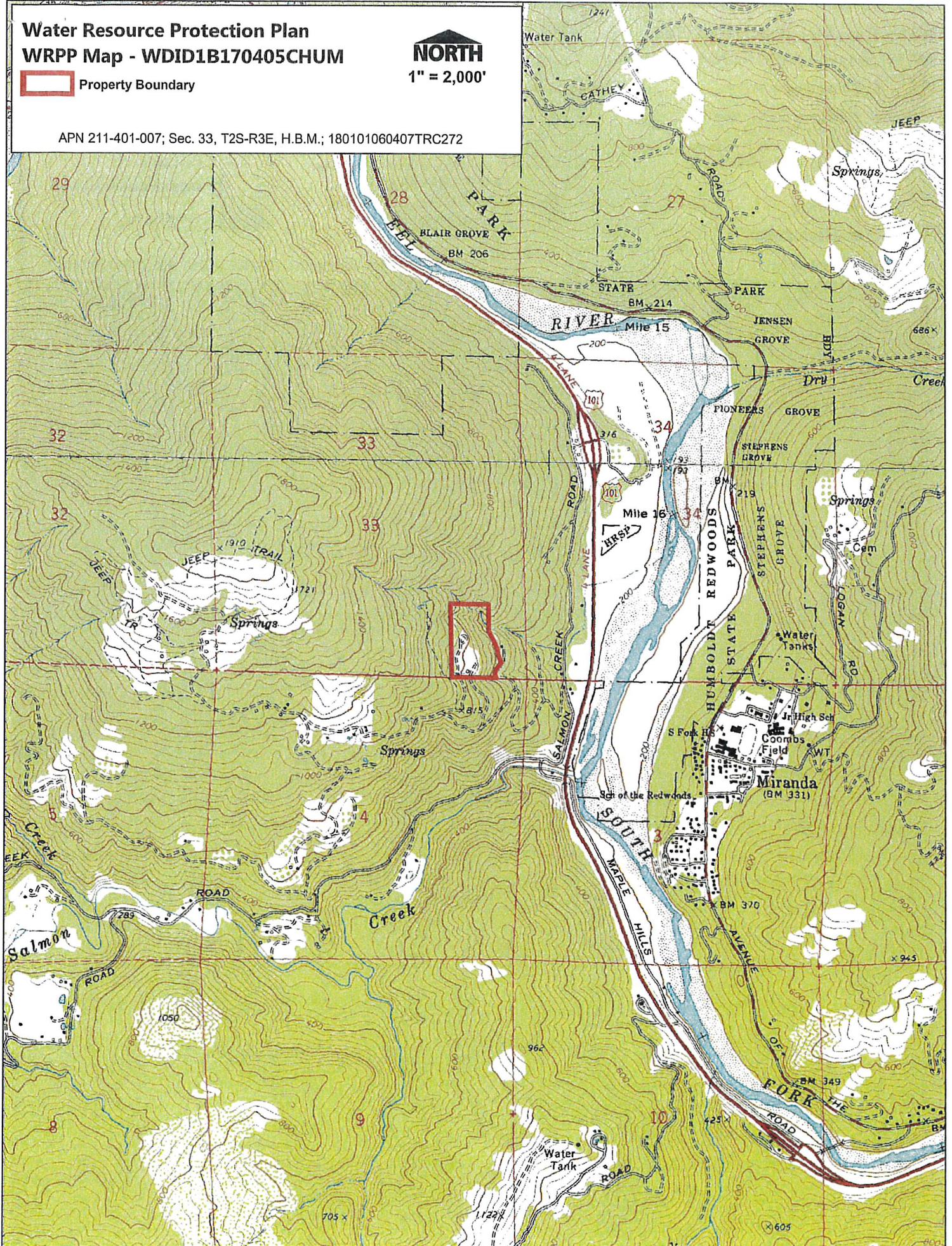
Ron Pelletier  
Timberland Resource Consultants

**Water Resource Protection Plan**  
**WRPP Map - WDID1B170405CHUM**

 Property Boundary

**NORTH**  
1" = 2,000'

APN 211-401-007; Sec. 33, T2S-R3E, H.B.M.; 180101060407TRC272



# Water Resource Protection Plan

## WRPP Map - WDID1B170405CHUM

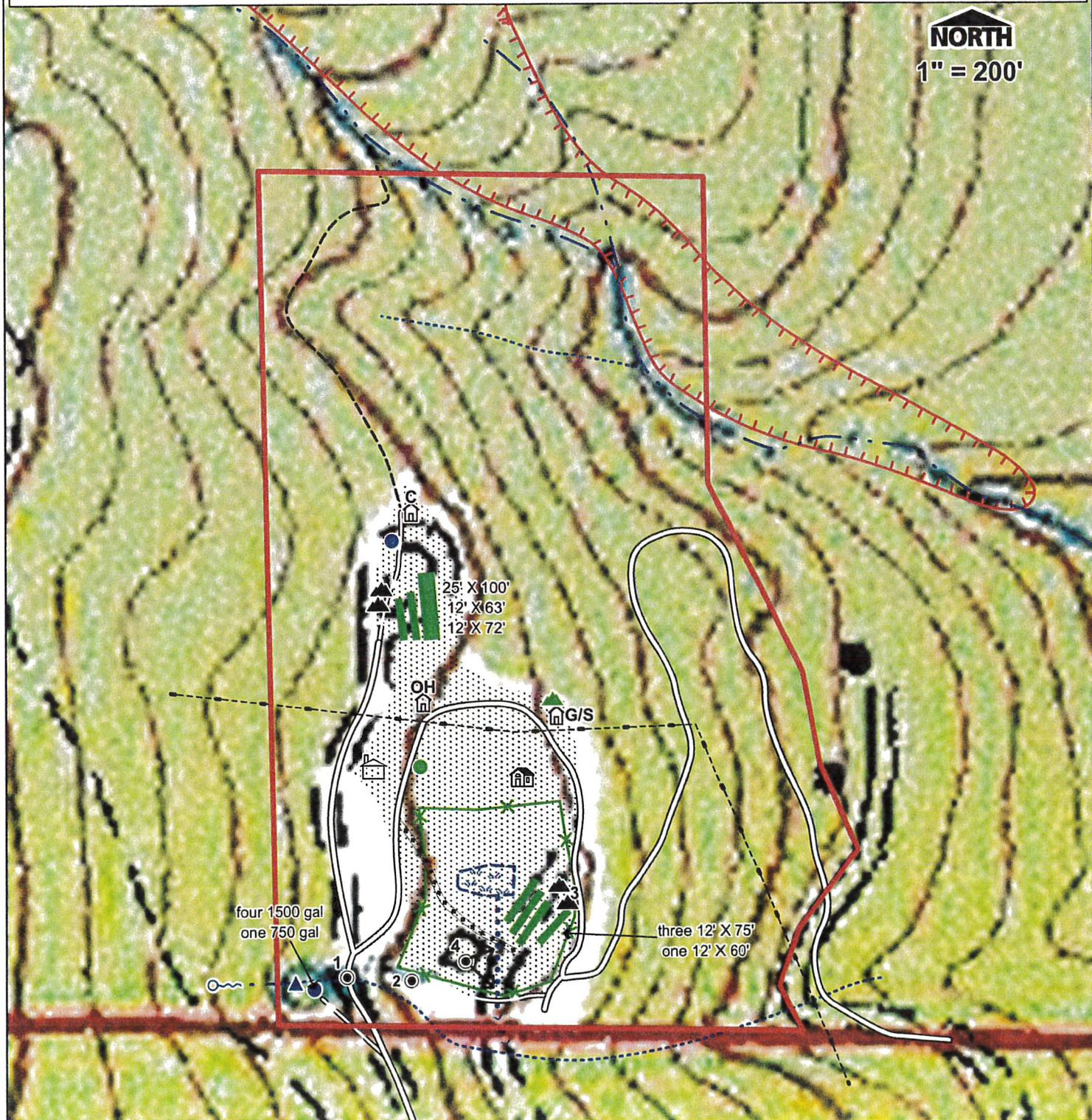
-  Property Boundary
-  Permanent Rocked Road
-  Seasonal Dirt Road
-  Rocked ATV Trail / Walkway
-  Old Logging Skidtrail (Not Used)

-  Map Point
-  Developed Areas
-  Unstable Area

-  Class II Watercourse
-  Class II Spring
-  Class III Watercourse
-  Point of Diversion (POD)
-  Off-Stream Rain Catchment Pond
-  12 inch Culverted Pond Overflow
-  Pond Overflow Route
-  Water Tank(s)
-  Fertilizer Mixing Tank

-  House
-  Agriculture Building
-  Out Building (OH=Outhouse, C=Cabin, G/S=Garage/Shop)
-  Spoils Pile
-  Green Waste Pile
-  Powerline
-  Outdoor Cultivation Area
-  Greenhouse

APN 211-401-007; Sec. 33, T2S-R3E, H.B.M.; 180101060407TRC272



# Water Resource Protection Plan

## WRPP Map - WDID1B170405CHUM

 Property Boundary

 Permanent Rocked Road  
 Seasonal Dirt Road  
 Rocked ATV Trail / Walkway  
 Old Logging Skidtrail (Not Used)

 Map Point

 Developed Areas

 Unstable Area

 Class II Watercourse

 Class II Spring

 Class III Watercourse

 Point of Diversion (POD)

 Off-Stream Rain Catchment Pond

 12 inch Culverted Pond Overflow

 Pond Overflow Route

 Water Tank(s)

 Fertilizer Mixing Tank

 House

 Agriculture Building

 Out Building (OH=Outhouse, C=Cabin, G/S=Garage/Shop)

 Spoils Pile

 Green Waste Pile

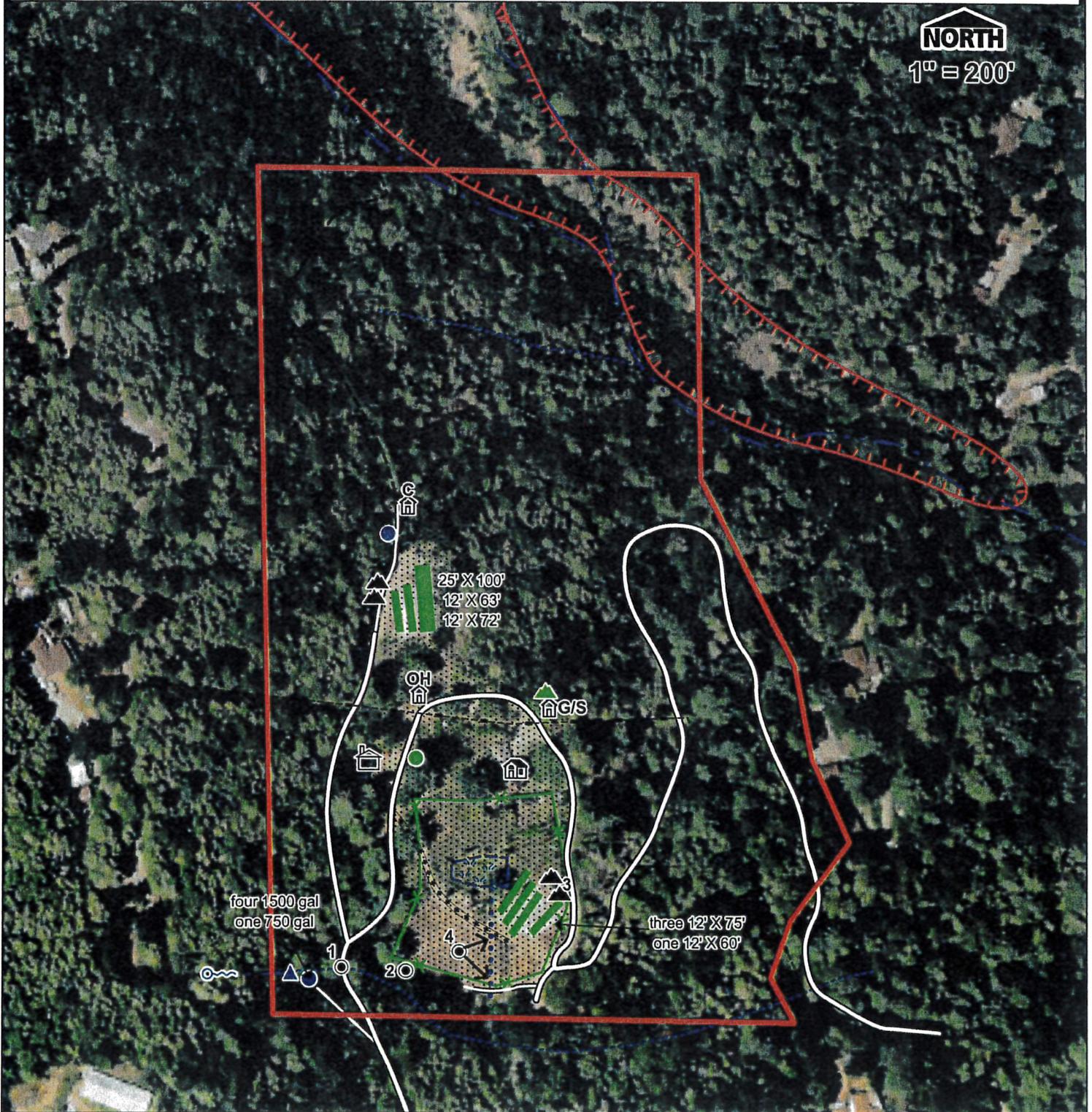
 Powerline

 Outdoor Cultivation Area

 Greenhouse

APN 211-401-007; Sec. 33, T2S-R3E, H.B.M.; 180101060407TRC272

  
 NORTH  
 1" = 200'



## Water Resource Protection Plan

### Assessment of Standard Conditions for APN 211-401-007 -- WDID 1B170405CHUM

#### A. Standard Conditions, Applicable to All Dischargers

1. Site maintenance, erosion control and drainage features: **In compliance?** Y /N

- a. Roads shall be maintained as appropriate (with adequate surfacing and drainage features) to avoid developing surface ruts, gullies, or surface erosion that results in sediment delivery to surface waters.

**The permanent and seasonal access roads on the property are outsloped with numerous water breaks and drainage "out" locations. Road rocking and surface drainage improvements had recently taken place along most of the roads on the property. The Discharger shall maintain or reconstruct worn down water breaks, rolling dips, and drainage outs as needed to prevent surface erosion on all roads and trails shown on the WRPP Map, prior to 11/15/17.**

- b. Roads, driveways, trails, and other defined corridors for foot or vehicle traffic of any kind shall have adequate ditch relief drains or rolling dips and/or other measures to prevent or minimize erosion along the flow paths and at their respective outlets.

**The Roads and ATV Trail / Walkways on the property are outsloped and drained with numerous rolling dips and drainage outs. No erosion was occurring at drainage outlet locations. Maintenance of these roads and trails has been addressed in (a) above.**

- c. Roads and other features shall be maintained so that surface runoff drains away from potentially unstable slopes or earthen fills. Where road runoff cannot be drained away from an unstable feature, an engineered structure or system shall be installed to ensure that surface flows will not cause slope failure.

**The area encompassing this parcel as well as adjacent parcels is mapped as a large Dormant Translational / Rotational Slide on the Geomorphic Features Related to Landsliding Map, Miranda 7.5' Quad. This map also shows a debris slide located through the northeast corner of this parcel. The Geology Map, Miranda 7.5' Quad. shows the parcel and surrounding area as the Yager Formation. An examination of available historic aerial photos did not give an indication of the Dormant Translational / Rotational Slide. Aerial photos from 1998 through the 2000's show numerous roads, and development though this area. Quadrangle Maps dating back to 1951 show a road and structures in the Dormant Translational / Rotational Slide Feature. The debris slide near the northeast corner of the property is visible on aerial photos and is shown as Unstable Area on the WRPP Map.**

**Physical reconnaissance of the property revealed no unstable areas per 14CCR 895.1 within or nearby any of the developed areas of the property. Developed areas, cultivation areas, and roads are located on the gentle slopes, natural benches, and ridgetops that did not require deep cuts and fills. Steeper slopes on the property are undeveloped and are heavily timbered. Runoff from roads and developed areas on the property are not being directed towards unstable slopes or earthen fills.**

- d. Roads, clearings, fill prisms, and terraced areas (cleared/developed areas with the potential for sediment erosion and transport) shall be maintained so that they are hydrologically disconnected<sup>1</sup>, as feasible, from surface waters, including wetlands, ephemeral, intermittent and perennial streams.

<sup>1</sup> Connected roads are road segments that deliver road surface runoff, via the ditch or road surface, to a stream crossing or to a connected drain that occurs within the high delivery potential portion of the active road network. A connected drain is defined as any cross-drain culvert, water bar, rolling dip, or ditch-out that appears to deliver runoff to a defined channel. A drain is considered connected if there is evidence of surface flow connection from the road to a defined channel or if the outlet has eroded a channel that extends from the road to a defined channel. ([http://www.forestsandfish.com/documents/Road\\_Mgmt\\_Survey.pdf](http://www.forestsandfish.com/documents/Road_Mgmt_Survey.pdf) )

**Cultivation areas and roads on the property are hydrologically disconnected from watercourses. Roads, cultivation areas, and developed areas on the property are not located near watercourses. The Off-Stream Pond and its Overflow are located in the middle of the developed, outdoor cultivation area. It was specifically designed and constructed so that it would not receive runoff from the surrounding cultivation areas and therefore resulting in no direct connection of the cultivation areas to the Class III watercourse downslope. Roads are outsloped and well drained with adequate rolling dips and drainage outs. There are no lengthy undrained inside ditches leading to watercourses. The Discharger shall maintain or reconstruct as needed, rolling dips, and drainage outs to keep runoff dispersed and from becoming connected to watercourses.**

- e. Ditch relief drains, rolling dip outlets, and road pad or terrace surfaces shall be maintained to promote infiltration/dispersal of outflows and have no apparent erosion or evidence of soil transport to receiving waters.

**As stated above, there are numerous rolling dip outlets along roads, and cultivation areas appeared to be well drained. The roads, the cultivation areas, and the developed areas on the property are routinely maintained to promote drainage, infiltration, and dispersal of flows and have no apparent sediment transport to receiving waters. The Discharger shall maintain or reconstruct worn down water breaks, rolling dips, and drainage outs as needed on all roads and trails shown on the WRPP Map, prior to 11/15/17.**

- f. Stockpiled construction materials are stored in a location and manner so as to prevent their transport to receiving waters.

**In compliance at this time. In the future, all construction materials will be stored to prevent their transport to receiving waters.**

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2. Stream Crossing Maintenance: **In compliance?** Y /N 

- a. Culverts and stream crossings shall be sized to pass the expected 100-year peak streamflow.
- b. Culverts and stream crossings shall be designed and maintained to address debris associated with the expected 100-year peak streamflow.
- c. Culverts and stream crossings shall allow passage of all life stages of fish on fish-bearing or restorable streams, and allow passage of aquatic organisms on perennial or intermittent streams.
- d. Stream crossings shall be maintained so as to prevent or minimize erosion from exposed surfaces adjacent to, and in the channel and on the banks.
- e. Culverts shall align with the stream grade and natural stream channel at the inlet and outlet where feasible.<sup>2</sup>
- f. Stream crossings shall be maintained so as to prevent stream diversion in the event that the culvert/crossing is plugged, and critical dips shall be employed with all crossing installations where feasible.<sup>3</sup>

<sup>2</sup>At a minimum, the culvert shall be aligned at the inlet. If infeasible to align the culvert outlet with the stream grade or channel, outlet armoring or equivalently effective means may be applied.

<sup>3</sup>If infeasible to install a critical dip, an alternative solution may be chosen.

**There is one watercourse crossings on the property shown as Map Point 1. It is in compliance with all of the standard conditions listed in 2. a.-f. above. It is an 18" diameter plastic culvert crossing of a Class III watercourse. An 18" culvert at 0.67 of its full capacity can pass 4.4 cfs. The calculated 100 year peak streamflow for the drainage basin above the culvert location is estimated to be approximately 3.7 cfs. It is armored with rock at the inlet and the outlet extends far beyond the road fill. It is aligned with the natural channel, and there is a low diversion potential. There is no erosion occurring at this site. The Discharger shall monitor this crossing and ensure that the pipe is maintained and kept functioning during winter. The Discharger resides on the property, approximately 300 feet past this crossing.**

3. Riparian and Wetland Protection and Management: **In compliance?** Y /N 

- a. For Tier 1 Dischargers, cultivation areas or associated facilities shall not be located within 200 feet of surface waters. While 200 foot buffers are preferred for Tier 2 sites, at a minimum, cultivation areas and associated facilities shall not be located or occur within 100 feet of any Class I or II watercourse or within 50 feet of any Class III watercourse or wetlands. The Regional Water Board or its Executive Officer may apply additional or alternative<sup>4</sup> conditions on enrollment, including site-specific riparian buffers and other BMPs beyond those identified in water resource protection plans to ensure water quality protection.
- b. Buffers shall be maintained at natural slope with native vegetation.
- c. Buffers shall be of sufficient width to filter wastes from runoff discharging from production lands and associated facilities to all wetlands, streams, drainage ditches, or other conveyances.

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- d. Riparian and wetland areas shall be protected in a manner that maintains their essential functions, including temperature and microclimate control, filtration of sediment and other pollutants, nutrient cycling, woody debris recruitment, groundwater recharge, streambank stabilization, and flood peak attenuation and flood water storage.

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<sup>4</sup>Alternative site-specific riparian buffers that are equally protective of water quality may be necessary to accommodate existing permanent structures or other types of structures that cannot be relocated.

**The nearest Class II watercourse is over 400 feet from the nearest cultivation area on the property. The southwest corner of the fenced, outdoor cultivation area is slightly within the 50 foot wide buffer of the Class III watercourse. It is shown as Map Point 2 on the WRPP Map. It is 33 feet from the Class III watercourse to the fence that surrounds the cultivation area, and it is approximately 43 to 45 feet to the nearest potted plant inside the fence. The 33 feet that separates the fenced cultivation area from the Class III watercourse has slopes that are nearly flat and heavily vegetated. There is a slight hydrologic divide between the watercourse and the cultivation area. At this location, slopes do not drain directly towards the watercourse and there was no sign of erosion. Immediately downslope, the watercourse and the cultivation area trend away from each other and quickly become separated by more than 50 feet.**

Because of the gentle slopes and drainage direction, the vegetation buffer between the fenced cultivation area and the small Class III watercourse, and the lack of a direct flow path from the outdoor cultivation area, there was little threat of erosion or pollution occurring because of the of the small corner of the cultivation area that is slightly within the 50 foot Class III watercourse buffer. At Map Point 2, within 50 feet of the watercourse, the Discharger may continue to operate this outdoor cultivation area for the remainder of 2017. At Map Point 2 beginning in 2018, the Discharger shall relocate cultivation to outside of the 50 foot buffer from the Class III watercourse. Refrain from any further expansion towards the Class III watercourse and allow any bare soils within 50 feet of the Class III watercourse to revegetate with grass. Refrain from activities that would result in bare soils at Map Point 2. Take care to ensure that soil or plant waste is contained and not being directed or discharged towards the watercourse.

4. Spoils Management: In compliance? /N

- a. Spoils<sup>5</sup> shall not be stored or placed in or where they can enter any surface water.  
 b. Spoils shall be adequately contained or stabilized to prevent sediment delivery to surface waters.  
 c. Spoils generated through development or maintenance of roads, driveways, earthen fill pads, or other cleared or filled areas shall not be sidecast in any location where they can enter or be transported to surface waters.

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<sup>5</sup> Spoils are waste earthen or organic materials generated through grading or excavation, or waste plant growth media or soil amendments. Spoils include but are not limited to soils, slash, bark, sawdust, potting soils, rock, and fertilizers.

**The property is in compliance with this Standard Condition. Soils are amended and reused each year. They are mostly contained within planter boxes under cover of greenhouses or within outdoor pots. Two spoils piles are mapped and shown on the WRPP Map. Both piles are made up of five to ten gallon pots located on the immediate cultivation areas. There was no sign of cultivation soils being transported off of the developed cultivation areas, capable of being delivered to surface waters. At Map Point 3, part of the pile is built up and leaning against the wire fence that surrounds the cultivation area. To ensure that spoils remain on the cultivation area and does not leave the**

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straw wattles as necessary to keep spoils contained to the developed portion of the cultivation areas. There are no road or site development related spoils being stored or placed on the property, or perched where they have access to a watercourse.

5. Water Storage and Use: In compliance? Y/N

- a. Size and scope of an operation shall be such that the amount of water used shall not adversely impact water quality and/or beneficial uses, including and in consideration with other water use by operations, instream flow requirements and/or needs in the watershed, defined at the scale of a HUC-12<sup>6</sup> watershed or at a smaller hydrologic watershed as determined necessary by the Regional Water Board Executive Officer.
- b. Water conservation measures shall be implemented. Examples include use of rainwater catchment systems or watering plants with a drip irrigation system rather than with a hose or sprinkler system.
- c. For Tier 2 Dischargers, if possible, develop off-stream storage facilities to minimize surface water diversion during low flow periods.
- d. Water is applied using no more than agronomic rates.<sup>7</sup>
- e. Diversion and/or storage of water from a stream should be conducted pursuant to a valid water right and in compliance with reporting requirements under Water Code section 5101.
- f. Water storage features, such as ponds, tanks, and other vessels shall be selected, sited, designed, and maintained so as to insure integrity and to prevent release into waters of the state in the event of a containment failure.

<sup>6</sup>See definition and link to maps at: <http://water.usgs.gov/GIS/huc.html>

<sup>7</sup>"Agronomic rates" is defined as the rates of fertilizer and irrigation water that a plant needs to enhance soil productivity and provide the crop or forage growth with needed nutrients for optimum health and growth, without having any excess water or nutrient percolate beyond the root zone.

**Water Storage and Use:** There is one surface diversion (POD) on the property. It is a ¾ inch waterline that is located beneath a standard concrete cylinder that captures surface water from a spring located above. Diverted water gravity flows via the 3/4-inch poly pipe to a series of water tanks located nearby. The Discharger has a signed CDFW Streambed Alteration Agreement (No. 1600-2017-0137-R1) that allows for no more than 150 gallons of water per day to be diverted from the spring between May 15 to October 15. The Discharger is applying for a 43,560 ft<sup>2</sup> outdoor cultivation permit from Humboldt County. The Discharger's projected water use for this amount of cultivation is approximately 528,000 gallons. The Discharger main irrigation source is a 600,000 gallon + rain catchment pond on the property.

**Standard Conditions 5, a. – f.:** (a) The Discharger uses the diversion from a spring (POD) as permitted in the CDFW Streambed Alteration Agreement (No. 1600-2017-0137-R1). Also, the Discharger has increased water storage on the property in the form of an expanded, lined rain catchment pond. The capacity is 600,000 gallons + and is expected to be filled by rainfall and from rooftop rain catchment prior to the 2018 cultivation season.

(b) Water conservation measures being implemented on this property is planned in the form of irrigating from the 600,000 gallon + rain catchment pond next year. The pond is expected to fill from rainfall and rooftop / rain gutter catchment plumbed to the pond. The Discharger closely monitors irrigation to ensure that over watering does not take place and to ensure that any possible malfunction would be corrected quickly.

- (c) As stated above, offstream storage has recently been increased to a 600,000 gallon + rain catchment pond.
- (d) The Discharger irrigates at an agronomic rate. Irrigation is closely monitored to ensure that over watering does not occur.
- (e) An Initial Statement of Water Diversion and Use has been filed for the diversion from the spring.
- (f) The water storage tanks and the rain catchment pond are situated on stable constructed flats on gentle slopes. There is a very low possibility of a containment failure.

The rain catchment pond and its overflow drainage are located in the middle of the fenced cultivation area. So as not to be a source of sediment or nutrient pollution to the Class III watercourse, the pond was constructed with a 1 to 2 foot high berm surrounding it so that it cannot receive runoff from the adjacent cultivation. The pond overflow drainage is also located through the center of the cultivation area. To keep the pond overflow drainage from receiving runoff from the adjacent cultivation area, the entire length of the pond overflow is planned to be a 12 inch diameter culvert for approximately 160 feet long until it exits the cultivation area. At the outlet of the 12 inch culvert, a rocked settling basin and a length of rocked ditch has been installed to extend out beyond the cultivation area. This rocked ditch has also been cut off as much as feasible from runoff from the cultivation area. The middle section, approximately 60 feet in length, of the planned culverted pond spillway has yet to be completed. The section of culvert yet to be installed is shown as Map Point 4. Prior to 11/15/17, the Discharger shall complete the installation of the middle section of the culverted pond spillway.

6. Irrigation Runoff: In compliance? Y  / N

Implementing water conservation measures, irrigating at agronomic rates, applying fertilizers at agronomic rates and applying chemicals according to the label specifications, and maintaining stable soil and growth media should serve to minimize the amount of runoff and the concentration of chemicals in that water. In the event that irrigation runoff occurs, measures shall be in place to treat/control/contain the runoff to minimize the pollutant loads in the discharge. Irrigation runoff shall be managed so that any entrained constituents, such as fertilizers, fine sediment and suspended organic particles, and other oxygen consuming materials are not discharged to nearby watercourses. Management practices include, but are not limited to, modifications to irrigation systems that reuse tailwater by constructing off-stream retention basins, and active (pumping) and or passive (gravity) tailwater recapture/redistribution systems. Care shall be taken to ensure that irrigation tailwater is not discharged towards or impounded over unstable features or landslides.

**In compliance at this time. The Discharger irrigates at an agronomic rate that does not result in over watering or runoff. This combined with the gentle slopes, distance to watercourses, and grass surrounding the cultivation areas, ensures there is little to no chance for any irrigation runoff to reach surface waters.**

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7. Fertilizers and Soil Amendments: **In compliance?** Y /N

- a. Fertilizers, potting soils, compost, and other soils and soil amendments shall be stored in locations and in a manner in which they cannot enter or be transported into surface waters and such that nutrients or other pollutants cannot be leached into groundwater.
- b. Fertilizers and soil amendments shall be applied and used per packaging instructions and/or at proper agronomic rates.
- c. Cultivation areas shall be maintained so as to prevent nutrients from leaving the site during the growing season and post-harvest.

**In compliance at this time. In order to remain in compliance with Standard Condition 7, the Discharger shall continue to store all fertilizers, potting soils, composts, and soil amendments in the mapped Agriculture Building as well as other structures on the property, or tarped in a manner in which they cannot be transported to surface waters or such that nutrients or other pollutants cannot be leached into groundwater. The Discharger has storage sheds on site that are secure and protected from the elements. Spent growth spoils remain on or near the immediate cultivation areas in pots and planter boxes and are amended with organic ingredients for reuse at the beginning of the growing season. Fertilizers and soil amendments are applied per packaging instructions and at agronomic rates. Fertilizing at agronomic rates will help to prevent nutrients from leaving the site during, and after the growing season. Present pond construction and the planned completion of the culverted pond overflow will keep nutrients from leaving the site. When cultivation areas are active, soils are contained in planter boxes, pots, or in rows in the ground. No cultivation soils, fertilizers, or soil amendments are leaving the site in runoff.**

8. Pesticides/Herbicides: **In compliance?** Y /N

At the present time, there are no pesticides or herbicides registered specifically for use directly on cannabis and the use of pesticides on cannabis plants has not been reviewed for safety, human health effects, or environmental impacts. Under California law, the only pesticide products not illegal to use on cannabis are those that contain an active ingredient that is exempt from residue tolerance requirements and either registered and labeled for a broad enough use to include use on cannabis or exempt from registration requirements as a minimum risk pesticide under FIFRA section 25(b) and California Code of Regulations, title 3, section 6147. For the purpose of compliance with conditions of this Order, any uses of pesticide products shall be consistent with product labeling and any products on the site shall be placed, used, and stored in a manner that ensures that they will not enter or be released into surface or ground waters.

**The Discharger uses organic pesticides and herbicides as necessary. If needed in the future, chemical pesticide or herbicide use on the property will follow product labelling. Storage of these types of products will be in enclosed sheds for protection against the elements to ensure that they will not enter or be released into surface or ground waters.**

9. Petroleum products and other chemicals: **In compliance?** Y /N 

- a. Petroleum products and other liquid chemicals, including but not limited to diesel, biodiesel, gasoline, and oils shall be stored so as to prevent their spillage, discharge, or seepage into receiving waters. Storage tanks and containers must be of suitable material and construction to be compatible with the substance(s) stored and conditions of storage such as pressure and temperature.
- b. Above ground storage tanks and containers shall be provided with a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation.
- c. Dischargers shall ensure that diked areas are sufficiently impervious to contain discharged chemicals.
- d. Discharger(s) shall implement spill prevention, control, and countermeasures (SPCC) and have appropriate cleanup materials available onsite.
- e. Underground storage tanks 110 gallons and larger shall be registered with the appropriate County Health Department and comply with State and local requirements for leak detection, spill overflow, corrosion protection, and insurance coverage.

**In compliance at this time. There are no large permanent gasoline or diesel fuel storage tanks on the property. Electricity to the property is supplied by P G & E. Gasoline powered equipment such as power tools and small generators are sometimes used on the property. There is an Agriculture Building located on the property and other suitable structures for storage of small gasoline cans and power equipment. To remain in compliance with this order, portable gas cans or chemical containers shall be stored under cover in a secure location that does not have access to a watercourse, when not in use. Items 123-136 in Appendix B of the Order lists measures to prevent spillage and discharge of petroleum and other chemicals to surface or ground waters.**

10. Cultivation-related wastes: **In compliance?** Y /N 

Cultivation-related wastes including, but not limited to, empty soil/soil amendment/ fertilizer/pesticide bags and containers, empty plant pots or containers, dead or harvested plant waste, and spent growth medium shall, for as long as they remain on the site, be stored<sup>8</sup> at locations where they will not enter or be blown into surface waters, and in a manner that ensures that residues and pollutants within those materials do not migrate or leach into surface water or groundwaters.

<sup>8</sup>Plant waste may also be composted, subject to the same restrictions cited above for cultivation-related waste storage.

**The property is in compliance with this Standard Condition. Cultivation wastes such empty bags and containers are stored appropriately short term and periodically taken to the nearest waste disposal location. Dead and harvested plant waste is composted or piled to decay near the cultivation areas and do not have access to watercourses. One pile of green waste was noted and is shown on the WRPP Map. In order to remain in compliance with Standard Condition 10 above, all cultivation-related waste in the form of empty bags, containers, pots, and dead or harvested plant waste and spent growth medium shall be stored where they will not enter or be blown into surface waters, or removed from the site and disposed of properly. Cultivation-related wastes that contain residues or pollutants shall be stored under cover of sheds or tarps to ensure that those materials do not leach into surface water or groundwaters. This can be achieved by following Items 137 and 139 in Appendix B of the Order.**

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11. Refuse and human waste: **In compliance?** Y /N

- a. Disposal of domestic sewage shall meet applicable County health standards, local agency management plans and ordinances, and/or the Regional Water Board's Onsite Wastewater Treatment System (OWTS) policy, and shall not represent a threat to surface water or groundwater.
- b. Refuse and garbage shall be stored in a location and manner that prevents its discharge to receiving waters and prevents any leachate or contact water from entering or percolating to receiving waters.
- c. Garbage and refuse shall be disposed of at an appropriate waste disposal location.

**Sewage disposal on the property is a functioning septic system connected to the house on the property as shown on the WRPP Map. There is also a Cabin with a composting toilet and an Outhouse on the property. These structures are all shown on the WRPP Map. The Discharger stated that the septic system attached to the house is functioning. There was no apparent nuisance or obvious threat to water quality identified with any of these facilities. The Discharger has plans on construction of a permitted septic system to be attached to the Agriculture Building to replace the Outhouse. In order to be in full compliance with Standard Condition 11.a., domestic sewage disposal on the property shall meet applicable County health standards, local agency management plans and ordinances, and/or the Regional Water Board's Onsite Wastewater Treatment System (OWTS) policy. See Appendix B. Item 142 of the Order.**

**The Discharger stores garbage in sealed bags or covered garbage cans with lids and it is taken to the dump on a regular basis. In order to be in compliance with Standard Condition 11. b. and c. above, refuse and garbage shall be stored in a location and manner that prevents its discharge to receiving waters and prevents any leachate or contact water from entering or percolating to receiving waters. This can be accomplished by storing garbage in covered containers, under coverage of a roof, or under tarps during rain. Garbage and refuse shall be disposed of at an appropriate waste disposal location. See Appendix B. Item 141 of the Order.**

12. Remediation/Cleanup/Restoration Remediation/cleanup/restoration activities may include, but are not limited to, removal of fill from watercourses, stream restoration, riparian vegetation planting and maintenance, soil stabilization, erosion control, upgrading stream crossings, road outsloping and rolling dip installation where safe and suitable, installing ditch relief culverts and overside drains, removing berms, stabilizing unstable areas, reshaping cutbanks, and rocking native-surfaced roads. Restoration and cleanup conditions and provisions generally apply to Tier 3 sites, however owners/operators of Tier 1 or 2 sites may identify or propose water resource improvement or enhancement projects such as stream restoration or riparian planting with native vegetation and, for such projects, these conditions apply similarly. Appendix B accompanying this Order includes environmental protection and mitigation measures that apply to cleanup activities such as: temporal limitations on construction; limitations on earthmoving and construction equipment; guidelines for removal of plants and revegetation; conditions for erosion control, limitations on work in streams, riparian and wetland areas; and other measures.

**Mitigation measures are listed in the Water Resource Protection Plan and also noted above in this document.**

### Pictures



**Pictures 1 and 2: The picture on the left shows the inlet and the picture on the right shows the outlet of the Class III watercourse crossing at Map Point 1. Photo date 9/6/17.**

## Pictures



**Picture 3: This picture shows the spoils pile at Map Point 3. Out of frame to the right is where spoils have been piled up against the wire fence adjacent to the road. To ensure that spoils remain on the cultivation area and does not leave the site, the Discharger shall remove the part of the pile that is leaning up against the fence and install straw wattles as necessary to keep spoils contained to the developed portion of the cultivation area. Photo date 9/6/17.**

## Pictures



**Picture 4: This picture shows the rain catchment pond. The pond is bermed up around the outside so that it cut off from overland runoff. In the right corner of the pictured pond, the inlet of the overflow culvert can be seen. Photo date 9/6/17.**

## Pictures

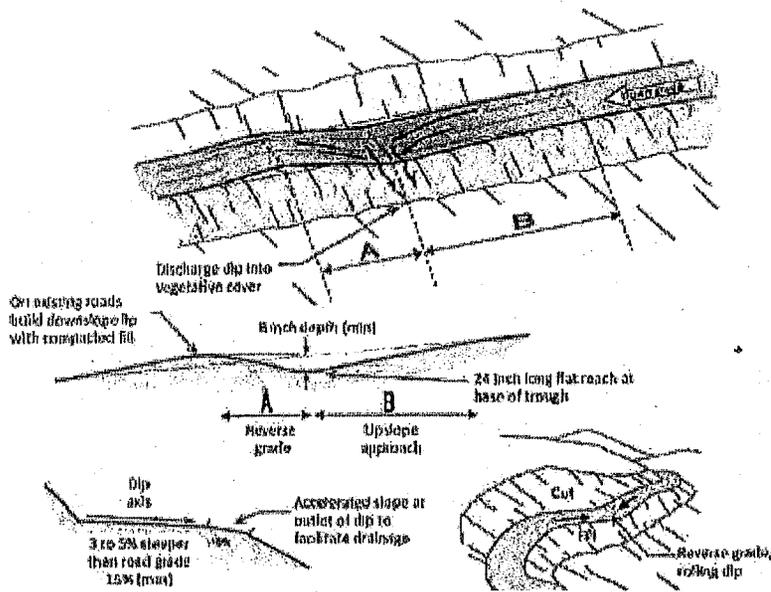


**Picture 5: This picture shows the rocky ditch that extends below the outlet of the culverted pond overflow. Photo date 9/6/17.**

## Pictures



**Pictures 6 and 7: These pictures show the segment of the pond overflow that is yet to be culverted (Map Point 4). The picture on the left shows the segment looking from north to south, with the rocky outlet in the distance. The picture on the right shows the segment looking from south to north, with the pond in the distance. Photo date 9/6/17.**

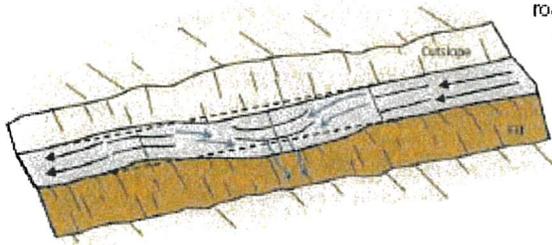


**FIGURE 34.** A classic Type I rolling dip, where the excavated up-road approach (B) to the rolling dip is several percent steeper than the approaching road and extends for 60 to 80 feet to the dip axis. The lower side of the structure reverses grade (A) over approximately 15 feet or more, and then falls down to rejoin the original road grade. The dip must be deep enough that it is not obliterated by normal grading, but not so deep that it is difficult to negotiate or a hazard to normal traffic. The outward cross-slope of the dip axis should be 3% to 5% greater than the up-road grade (B) so it will drain properly. The dip axis should be out-sloped sufficiently to be self-cleaning, without triggering excessive downcutting or sediment deposition in the dip axis (Modified from: Best, 2013).

HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

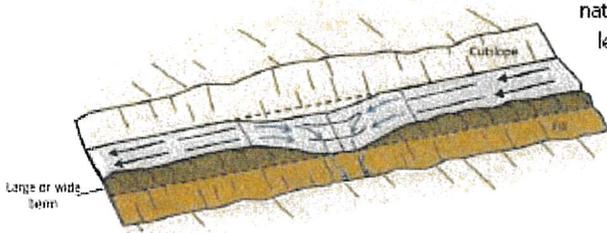
Type 1 Rolling Dip  
(Standard)

Type 1 rolling dips are used where road grades are less than about 12-14% and road runoff is not confined by a large through cut or berm. The axis of the dip should be perpendicular to the road alignment and sloped at 3-4% across the road tread. Steep roads will have longer and more abrupt dip dimensions to develop reverse grade through the dip axis. The road tread and/or the dip outlet can be rocked to protect against erosion, if needed.



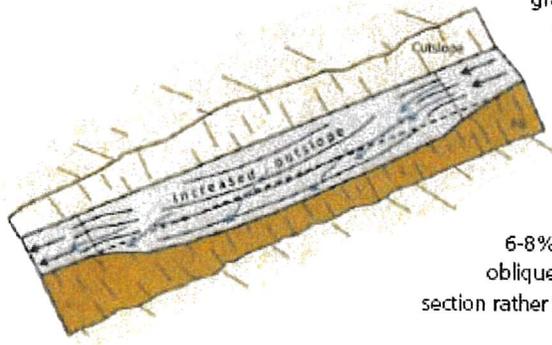
Type 2 Rolling Dip  
(Through-cut or thick berm road reaches)

Type 2 rolling dips are constructed on roads up to 12-14% grade where there is a through cut up to 3 feet tall, or a wide or tall berm that otherwise blocks road drainage. The berm or native through cut material should be removed for the length of the dip, or at least through the axis of the dip, to the extent needed to provide for uninterrupted drainage onto the adjacent slope. The berm and slope material can be excavated and endhauled, or the material can be sidecast onto native slopes up to 45%, provided it will not enter a stream.



Type 3 Rolling Dip  
(Steep road grade)

Type 3 rolling dips are utilized where road grades are steeper than about 12% and it is not feasible to develop a reverse grade that will also allow passage of the design vehicle (steep road grades require more abrupt grade reversals that some vehicles may not be able to traverse without bottoming out).



Instead of relying on the dip's grade reversal to turn runoff off the roadbed, the road is built with an exaggerated outslope of 6-8% across the dip axis. Road runoff is deflected obliquely across the dip axis and is shed off the outsloped section rather than continuing down the steep road grade.

FIGURE 36. Rolling dip types

HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

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**BMP: Rocked Rolling Dip**

- Rocked rolling dips are drainage structures designed to carry surface water across roads.
- The truck road shall dip into and out of the rocked rolling dip to minimize diversion potential.
- The rocked rolling dip shall be constructed with clean native rock that is large enough to remain in place during peak flows. Rock size shall vary relative to the size of the watercourse; however an average 6" sized rock shall be used.
- The rocked rolling dips inlet and outlet shall be armored to resist downcutting and erosion.
- The entire width of the rocked rolling dip shall be rock armored to a minimum of 5-feet from the centerline of the dip.
- If a keyway is necessary, the rocked rolling dip keyway at the base of the dip shall be of sufficient size, depth and length to support materials used in the rocked rolling dip construction back up to the road crossing interface.
- Do not discharge rolling dips into swales that show signs of instability or active landsliding.
- If the rolling dip is designed to divert both road surface and ditch runoff, block the down-road ditch with compacted fill.
- The rolling dip must be drivable and not significantly inhibit traffic and road use.

**BMP: Rolling Dip**

- Rolling dips are drainage structures designed to carry surface water across roads.
- The truck road shall dip into and out of the rolling dip to minimize diversion potential.
- The rolling dip shall be constructed with clean native materials.
- The rolling dips outlet may be armored to resist downcutting and erosion.
- Do not discharge rolling dips into swales that show signs of instability or active landsliding.
- If the rolling dip is designed to divert both road surface and ditch runoff, block the down-road ditch with compacted fill.
- The rolling dip must be drivable and not significantly inhibit traffic and road use.

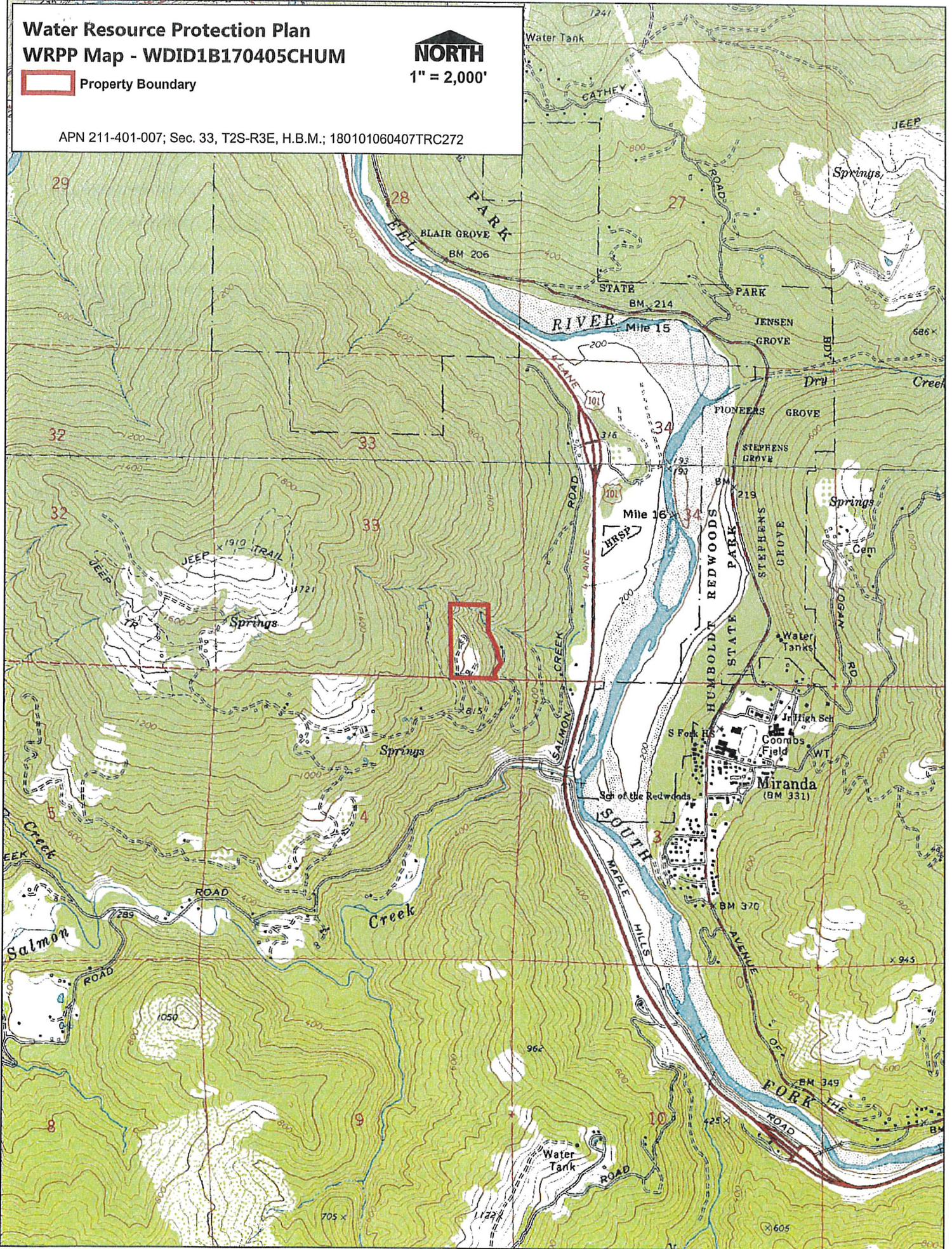
Water Resource Protection Plan  
WRPP Map - WDID1B170405CHUM



1" = 2,000'

 Property Boundary

APN 211-401-007; Sec. 33, T2S-R3E, H.B.M.; 180101060407TRC272



# Water Resource Protection Plan

## WRPP Map - WDID1B170405CHUM

Property Boundary

Permanent Rocked Road

Seasonal Dirt Road

Rocked ATV Trail / Walkway

Old Logging Skidtrail (Not Used)

Map Point

Developed Areas

Unstable Area

Class II Watercourse

Class II Spring

Class III Watercourse

Point of Diversion (POD)

Off-Stream Rain Catchment Pond

12 inch Culverted Pond Overflow

Pond Overflow Route

Water Tank(s)

Fertilizer Mixing Tank

House

Agriculture Building

Out Building (OH=Outhouse, C=Cabin, G/S=Garage/Shop)

Spoils Pile

Green Waste Pile

Powerline

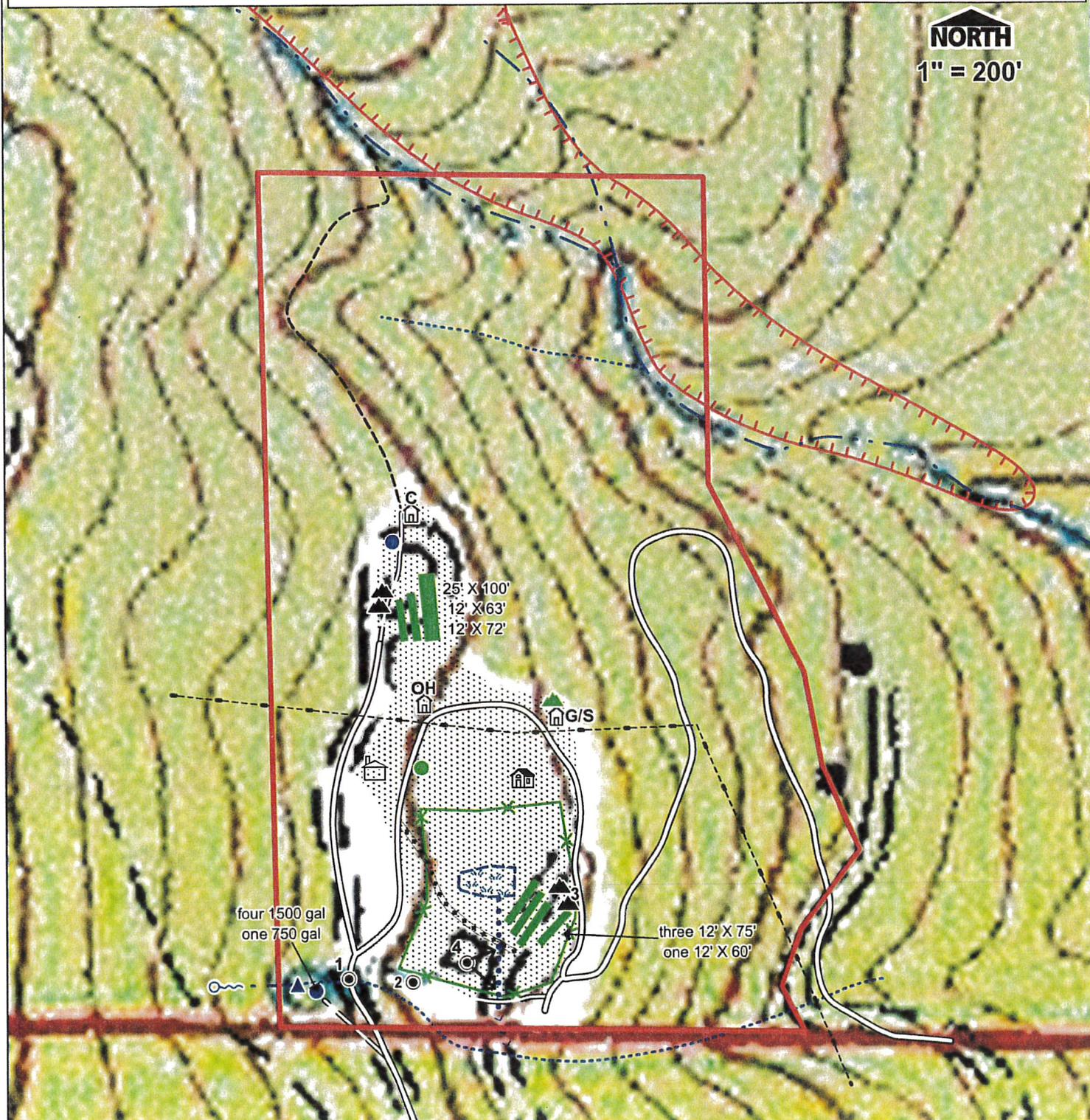
Outdoor Cultivation Area

Greenhouse

APN 211-401-007; Sec. 33, T2S-R3E, H.B.M.; 180101060407TRC272

**NORTH**

1" = 200'



# Water Resource Protection Plan

## WRPP Map - WDID1B170405CHUM

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 Outdoor Cultivation Area

 Greenhouse

APN 211-401-007; Sec. 33, T2S-R3E, H.B.M.; 180101060407TRC272

**NORTH**  
1" = 200'



**FILE COPY**

1  
RODNEY

**Water Resource Protection Plan  
For  
WDID 1B170405CHUM**

*Submitted to:*

Matthew Schackow

*Prepared by:*

Timberland Resource Consultants  
165 South Fortuna Blvd  
Fortuna, CA 95540



9-15-2017

- Clarifications included. MK  
11/09/2018

2 plants HAD TO BE RELOCATED - THE REMAINING CULTIVATION WAS OUTSIDE THE 50' BUFFER ZONE

- d. Riparian and wetland areas shall be protected in a manner that maintains their essential functions, including temperature and microclimate control, filtration of sediment and other pollutants, nutrient cycling, woody debris recruitment, groundwater recharge, streambank stabilization, and flood peak attenuation and flood water storage.

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<sup>4</sup>Alternative site-specific riparian buffers that are equally protective of water quality may be necessary to accommodate existing permanent structures or other types of structures that cannot be relocated.

The nearest Class II watercourse is over 400 feet from the nearest cultivation area on the property. **The southwest corner of the fenced, outdoor cultivation area is slightly within the 50 foot wide buffer of the Class III watercourse. It is shown as Map Point 2 on the WRPP Map. It is 33 feet from the Class III watercourse to the fence that surrounds the cultivation area, and it is approximately 43 to 45 feet to the nearest potted plant inside the fence.** The 33 feet that separates the fenced cultivation area from the Class III watercourse has slopes that are nearly flat and heavily vegetated. There is a slight hydrologic divide between the watercourse and the cultivation area. At this location, slopes do not drain directly towards the watercourse and there was no sign of erosion. Immediately downslope, the watercourse and the cultivation area trend away from each other and quickly become separated by more than 50 feet.

Because of the gentle slopes and drainage direction, the vegetation buffer between the fenced cultivation area and the small Class III watercourse, and the lack of a direct flow path from the outdoor cultivation area, **there was little threat of erosion or pollution occurring because of the of the small corner of the cultivation area that is slightly within the 50 foot Class III watercourse buffer.** At Map Point 2, **within 50 feet of the watercourse,** the Discharger may continue to operate this outdoor cultivation area for the remainder of 2017. At Map Point 2 beginning in 2018, the Discharger shall **relocate cultivation to outside of the 50 foot buffer from the Class III watercourse.** Refrain from any further expansion towards the Class III watercourse and allow any bare soils within 50 feet of the Class III watercourse to revegetate with grass. Refrain from activities that would result in bare soils at Map Point 2. Take care to ensure that soil or plant waste is contained and not being directed or discharged towards the watercourse.

4. Spoils Management: **In compliance?** Y  / N

- a. Spoils<sup>5</sup> shall not be stored or placed in or where they can enter any surface water.
- b. Spoils shall be adequately contained or stabilized to prevent sediment delivery to surface waters.
- c. Spoils generated through development or maintenance of roads, driveways, earthen fill pads, or other cleared or filled areas shall not be sidecast in any location where they can enter or be transported to surface waters.

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<sup>5</sup> Spoils are waste earthen or organic materials generated through grading or excavation, or waste plant growth media or soil amendments. Spoils include but are not limited to soils, slash, bark, sawdust, potting soils, rock, and fertilizers.

**The property is in compliance with this Standard Condition. Soils are amended and reused each year. They are mostly contained within planter boxes under cover of greenhouses or within outdoor pots. Two spoils piles are mapped and shown on the WRPP Map. Both piles are made up of five to ten gallon pots located on the immediate cultivation areas. There was no sign of cultivation soils being transported off of the developed cultivation areas, capable of being delivered to surface waters. At Map Point 3, part of the pile is built up and leaning against the wire fence that surrounds the cultivation area. To ensure that spoils remain on the cultivation area and does not leave the**

# Water Resource Protection Plan

## WRPP Map - WDID1B170405CHUM

Property Boundary

Permanent Rocked Road

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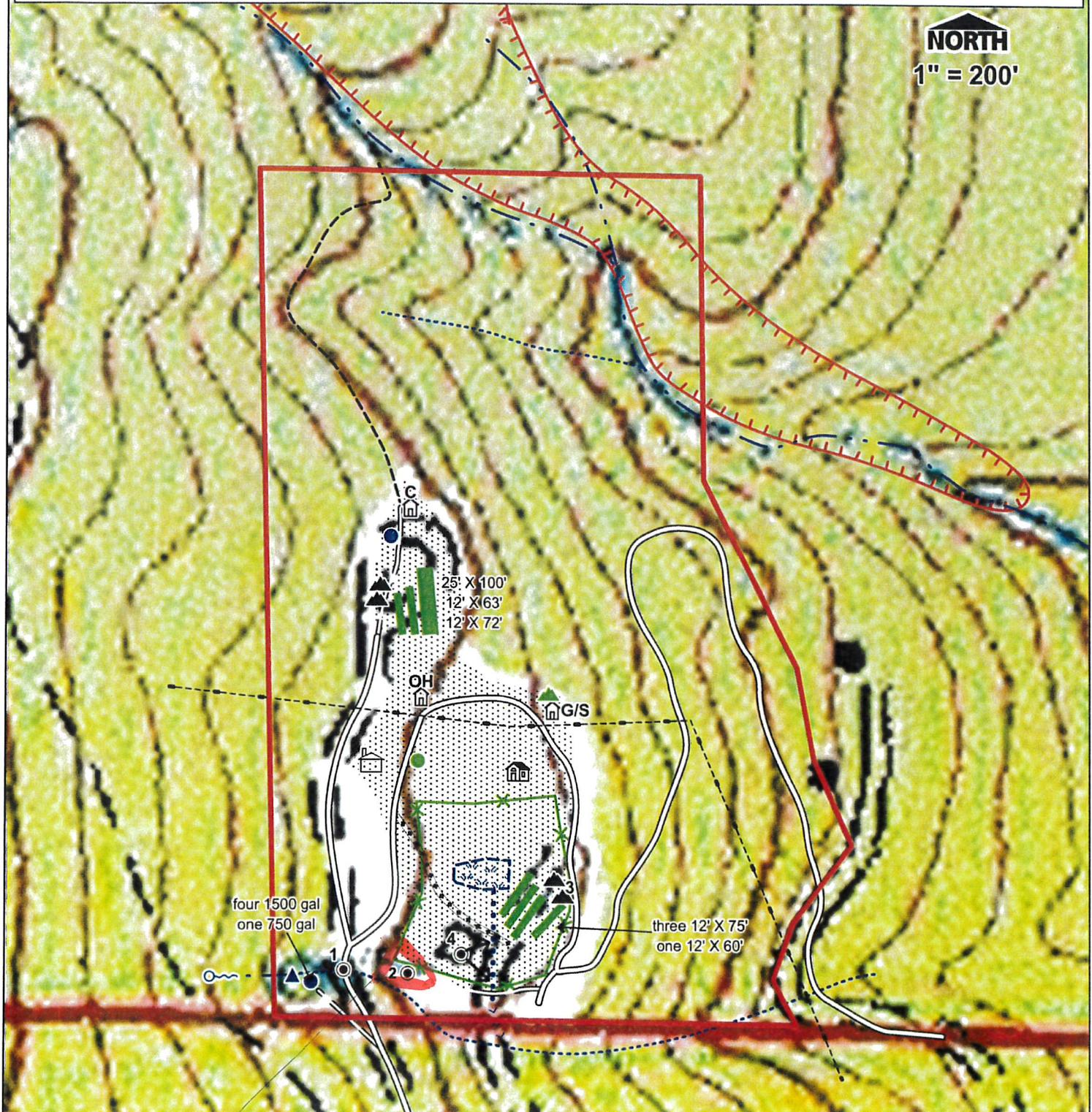
Powerline

Outdoor Cultivation Area

Greenhouse

APN 211-401-007; Sec. 33, T2S-R3E, H.B.M.; 180101060407TRC272

**NORTH**  
1" = 200'



ONLY CORNER OF CULTIVATION WITHIN 50' BUFFER ZONE  
RELOCATED - IT WAS 2 PLANTS

**Summary of Standard Conditions Compliance**

1. Site maintenance, erosion control, and drainage features Y☒/N☐
2. Stream crossing maintenance Y☒/N☐
3. Riparian and wetland protection and management Y☐/N☒
4. Spoils management Y☒/N☐
5. Water storage and use Y☒/N☐
6. Irrigation runoff Y☒/N☐
7. Fertilizers and soil amendments Y☒/N☐
8. Pesticides and herbicides? Y☒/N☐
9. Petroleum products and other chemicals Y☒/N☐
10. Cultivation-related wastes Y☒/N☐
11. Refuse and human waste Y☐/N☒

**Identified Sites Requiring Remediation (See Standard Conditions Assessment)**

Unique Map Point(s)	Map Point Description	Associated Standard Condition	Temporary BMP	Permanent BMP	Priority for Action	Time Schedule for completion of Permanent BMP	Completion Date
Roads and ATV Trails	Surface drainage of roads and ATV trails.	A(1)(a)	N/A	Maintain or reconstruct worn down water breaks, rolling dips, and drainage "outs" as needed to prevent surface erosion on all roads and trails shown on the WRPP Map, prior to 11/15/17.	2	11/15/17	
Map Point 2	Cultivation Area within 50 of Class III watercourse.	A(3)	N/A	Beginning in 2018, relocate cultivation to outside of 50 ft from the Class III watercourse. Refrain from expansion towards the Class III watercourse. Allow bare soils within 50 feet of the Class III watercourse to revegetate with grass. Refrain from activities that would result in bare soils at Map Point 2. Take care to ensure that soil or plant waste is contained and not being directed or discharged towards the watercourse.	3	1/1/18	

ONLY  
2 PLANTS WERE NOT OUTSIDE THE 50ft BUFFER ZONE

HUMBOLDT COUNTY DEPARTMENT OF PUBLIC WORKS  
ROAD EVALUATION REPORT



**PART A:** *Part A may be completed by the applicant*

Applicant Name: Matthew S. Schackow APN: 211-401-007

Planning & Building Department Case/File No.: 11708

Road Name: Private Drive (complete a separate form for each road)

From Road (Cross street): Somerville RD

To Road (Cross street): Property entrance

Length of road segment: .1 miles Date Inspected: 11/29/17

Road is maintained by:  County  Other Private  
(State, Forest Service, National Park, State Park, BLM, Private, Tribal, etc)

Check one of the following:

**Box 1**  The entire road segment is developed to Category 4 road standards (20 feet wide) or better. If checked, then the road is adequate for the proposed use without further review by the applicant.

**Box 2**  The entire road segment is developed to the equivalent of a road category 4 standard. If checked, then the road is adequate for the proposed use without further review by the applicant.

*An equivalent road category 4 standard is defined as a roadway that is generally 20 feet in width, but has pinch points which narrow the road. Pinch points include, but are not limited to, one-lane bridges, trees, large rock outcroppings, culverts, etc. Pinch points must provide visibility where a driver can see oncoming vehicles through the pinch point which allows the oncoming vehicle to stop and wait in a 20 foot wide section of the road for the other vehicle to pass.*

**Box 3**  The entire road segment is not developed to the equivalent of road category 4 or better. The road may or may not be able to accommodate the proposed use and further evaluation is necessary. Part B is to be completed by a Civil Engineer licensed by the State of California.

The statements in PART A are true and correct and have been made by me after personally inspecting and measuring the road. A map showing the location and limits of the road being evaluated in PART A is attached.

M. Schackow  
Signature

11/30/17  
Date

Matthew S. Schackow  
Name Printed

**Important: Read the instructions before using this form. If you have questions, please call the Dept. of Public Works Land Use Division at 707.445.7205.**

**PART A: Part A may be completed by the applicant**

Applicant Name: Matthew S. Schackow APN: 211-401-007

Planning & Building Department Case/File No.: 11708

Road Name: Somerville RD (complete a separate form for each road)



From Road (Cross street): SALMON CREEK RD

To Road (Cross street): Private Drive

Length of road segment: .8 miles miles Date Inspected: 11/29/17

Road is maintained by:  County  Other Private  
(State, Forest Service, National Park, State Park, BLM, Private, Tribal, etc)

Check one of the following:

**Box 1**  The entire road segment is developed to Category 4 road standards (20 feet wide) or better. If checked, then the road is adequate for the proposed use without further review by the applicant.

**Box 2**  The entire road segment is developed to the equivalent of a road category 4 standard. If checked, then the road is adequate for the proposed use without further review by the applicant.

*An equivalent road category 4 standard is defined as a roadway that is generally 20 feet in width, but has pinch points which narrow the road. Pinch points include, but are not limited to, one-lane bridges, trees, large rock outcroppings, culverts, etc. Pinch points must provide visibility where a driver can see oncoming vehicles through the pinch point which allows the oncoming vehicle to stop and wait in a 20 foot wide section of the road for the other vehicle to pass.*

**Box 3**  The entire road segment is not developed to the equivalent of road category 4 or better. The road may or may not be able to accommodate the proposed use and further evaluation is necessary. Part B is to be completed by a Civil Engineer licensed by the State of California.

The statements in PART A are true and correct and have been made by me after personally inspecting and measuring the road. A map showing the location and limits of the road being evaluated in PART A is attached.

M. Schackow  
Signature

11/30/17  
Date

Matthew S. Schackow  
Name Printed

**Important: Read the instructions before using this form. If you have questions, please call the Dept. of Public Works Land Use Division at 707.445.7205.**

Road Name: \_\_\_\_\_ Date Inspected: \_\_\_\_\_ APN: \_\_\_\_\_  
From Road: \_\_\_\_\_ (Post Mile \_\_\_\_\_) Planning & Building  
To Road: \_\_\_\_\_ (Post Mile \_\_\_\_\_) Department Case/File No.: \_\_\_\_\_

1. What is the Average Daily Traffic (ADT) of the road (including other known cannabis projects)?

Number of other known cannabis projects included in ADT calculations: \_\_\_\_\_  
(Contact the Planning & Building Department for information on other nearby projects.) \_\_\_\_\_

ADT: \_\_\_\_\_ Date(s) measured: \_\_\_\_\_

Method used to measure ADT:  Counters  Estimated using ITE Trip Generation Book

Is the ADT of the road less than 400?  Yes  No

If YES, then the road is considered very low volume and shall comply with the design standards outlined in the American Association of State Highway and Transportation Officials (AASHTO) *Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT ≤ 400)*. Complete sections 2 and 3 below.

If NO, then the road shall be reviewed per the applicable policies for the design of local roads and streets presented in AASHTO *A Policy on Geometric Design of Highways and Streets*, commonly known as the "Green Book". Complete section 3 below.

2. Identify site specific safety problems with the road that include, but are not limited to: (Refer to Chapter 3 in AASHTO *Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT ≤ 400)* for guidance.)

A. Pattern of curve related crashes.

Check one:  No.  Yes, see attached sheet for Post Mile (PM) locations.

B. Physical evidence of curve problems such as skid marks, scarred trees, or scarred utility poles

Check one:  No.  Yes, see attached sheet for PM locations.

C. Substantial edge rutting or encroachment.

Check one:  No.  Yes, see attached sheet for PM locations.

D. History of complaints from residents or law enforcement.

Check one:  No.  Yes ( check if written documentation is attached)

E. Measured or known speed substantially higher than the design speed of the road (20+ MPH higher)

Check one:  No.  Yes.

F. Need for turn-outs.

Check one:  No.  Yes, see attached sheet for PM locations.

3. Conclusions/Recommendations per AASHTO. Check one:

The roadway can accommodate the cumulative increased traffic from this project and all known cannabis projects identified above.

The roadway can accommodate the cumulative increased traffic from this project and all known cannabis projects identified above, if the recommendations on the attached report are done. ( check if a *Neighborhood Traffic Management Plan* is also required and is attached.)

The roadway cannot accommodate increased traffic from the proposed use. It is not possible to address increased traffic.

A map showing the location and limits of the road being evaluated in PART B is attached. The statements in PART B are true and correct and have been made by me after personally evaluating the road.

(SFAL)

Signature of Civil Engineer \_\_\_\_\_

Date \_\_\_\_\_

Important: Read the instructions before using this form. If you have questions, please call the Dept. of Public Works Land Use Division at 707.445.7205.

HUMBOLDT COUNTY DEPARTMENT OF PUBLIC WORKS  
ROAD EVALUATION REPORT



**PART A:** Part A may be completed by the applicant

Applicant Name: Matthew S. Schackow APN: 211-401-007

Planning & Building Department Case/File No.: 11708

Road Name: Salmon Creek RD (complete a separate form for each road)

From Road (Cross street): Highway 101

To Road (Cross street): Somerville RD

Length of road segment: 0.7 miles Date Inspected: 11/29/17

Road is maintained by:  County  Other \_\_\_\_\_  
(State, Forest Service, National Park, State Park, BLM, Private, Tribal, etc)

Check one of the following:

**Box 1**  The entire road segment is developed to Category 4 road standards (20 feet wide) or better. If checked, then the road is adequate for the proposed use without further review by the applicant.

**Box 2**  The entire road segment is developed to the equivalent of a road category 4 standard. If checked, then the road is adequate for the proposed use without further review by the applicant.

*An equivalent road category 4 standard is defined as a roadway that is generally 20 feet in width, but has pinch points which narrow the road. Pinch points include, but are not limited to, one-lane bridges, trees, large rock outcroppings, culverts, etc. Pinch points must provide visibility where a driver can see oncoming vehicles through the pinch point which allows the oncoming vehicle to stop and wait in a 20 foot wide section of the road for the other vehicle to pass.*

**Box 3**  The entire road segment is not developed to the equivalent of road category 4 or better. The road may or may not be able to accommodate the proposed use and further evaluation is necessary. Part B is to be completed by a Civil Engineer licensed by the State of California.

The statements in PART A are true and correct and have been made by me after personally inspecting and measuring the road. A map showing the location and limits of the road being evaluated in PART A is attached.

M. Schackow  
Signature

11/30/17  
Date

Matthew S. Schackow  
Name Printed

**Important: Read the instructions before using this form. If you have questions, please call the Dept. of Public Works Land Use Division at 707.445.7205.**



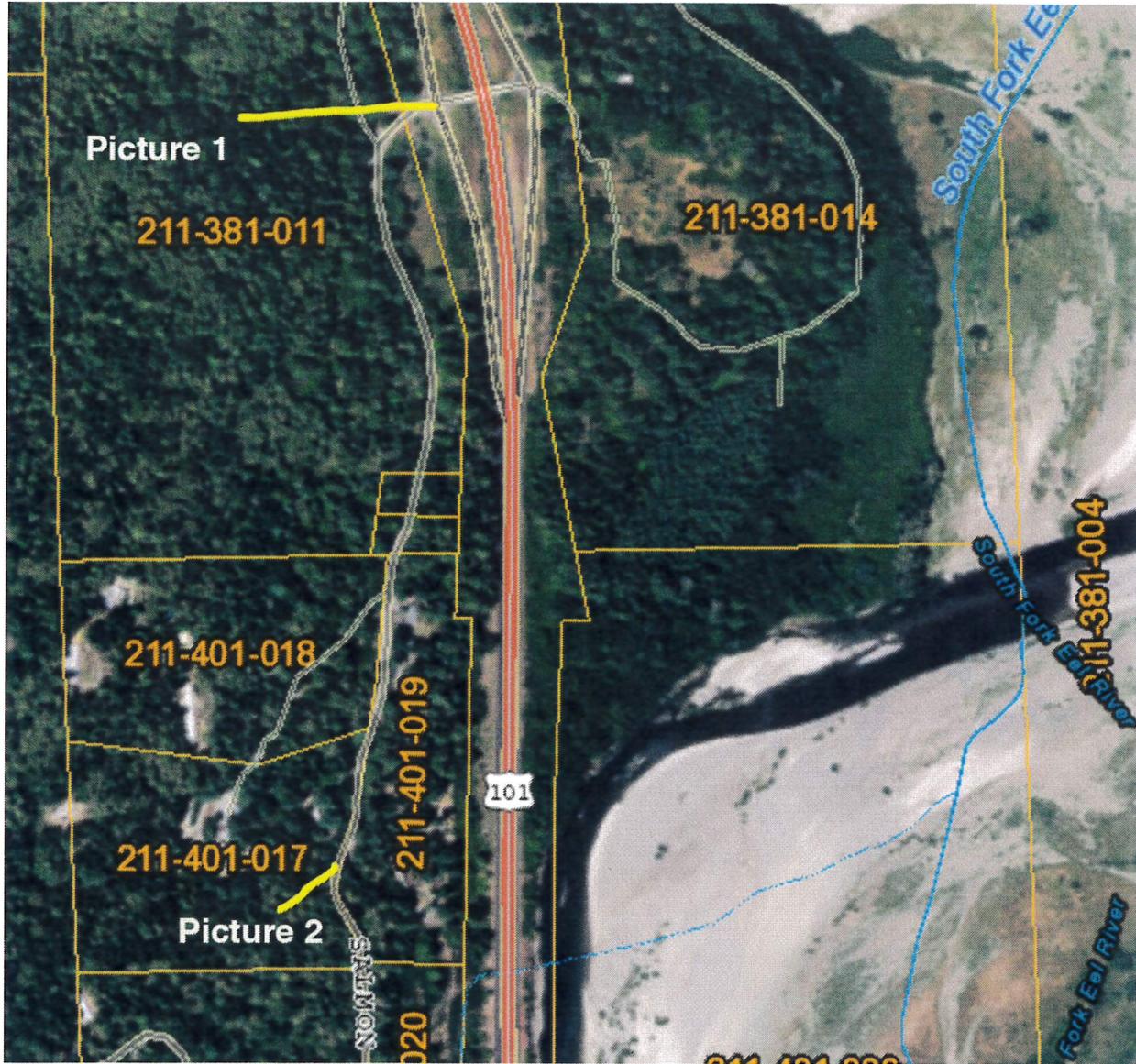
## Roads Assessment

Schackow Farms

APPS number 11708

Prepared and submitted by Matthew Schackow

ATTN Kimley-Horn





Picture 1  
Exit from highway 101 onto salmon creek road.



Picture 2

.5 miles from the intersection of highway 101 and salmon creek road. On salmon creek road.



Picture 3

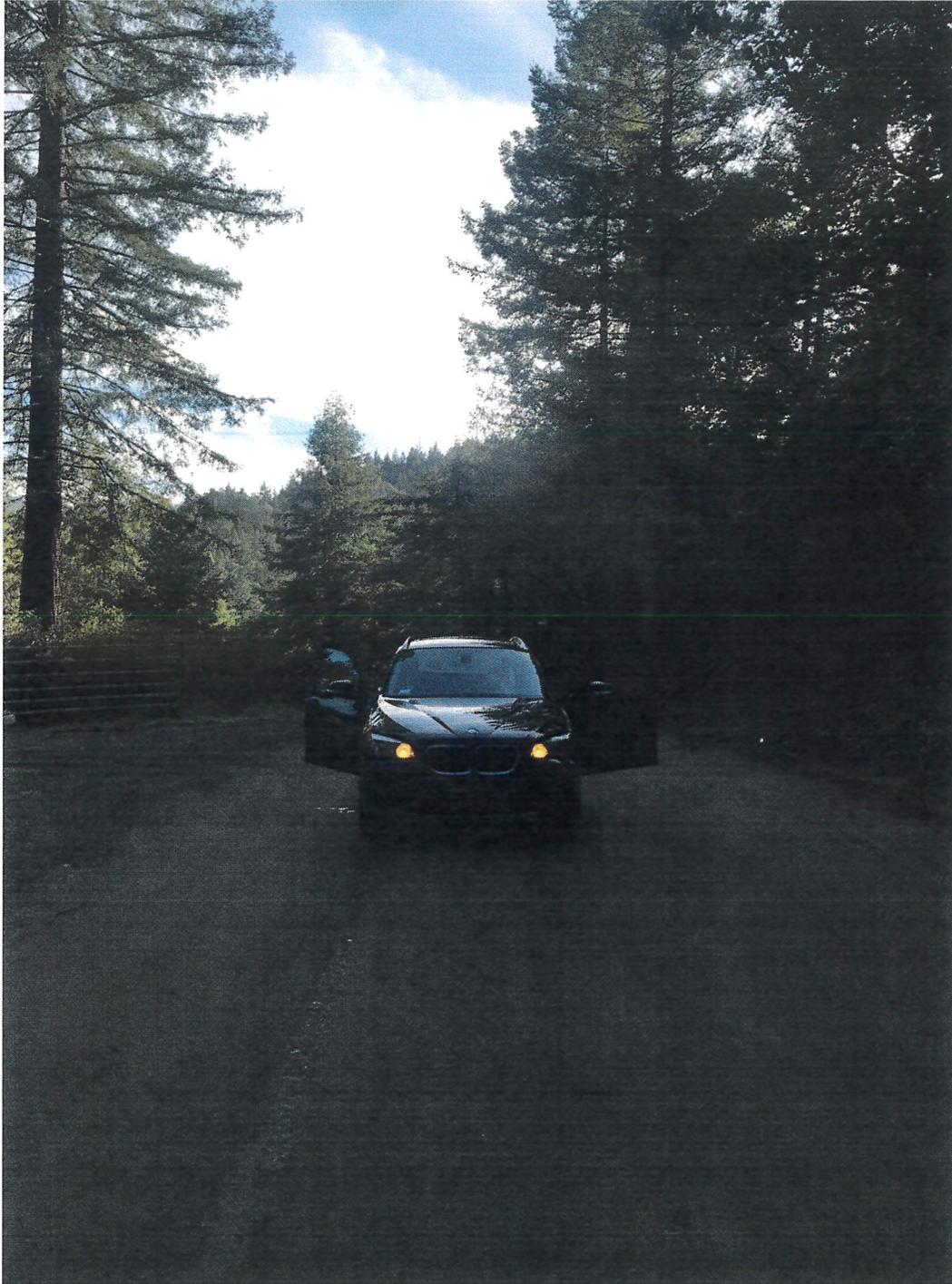
The intersection of salmon creek road and Somerville road. .7 miles down Salmon Creek road from the intersection of highway 101 and Salmon Creek road.



Picture 4

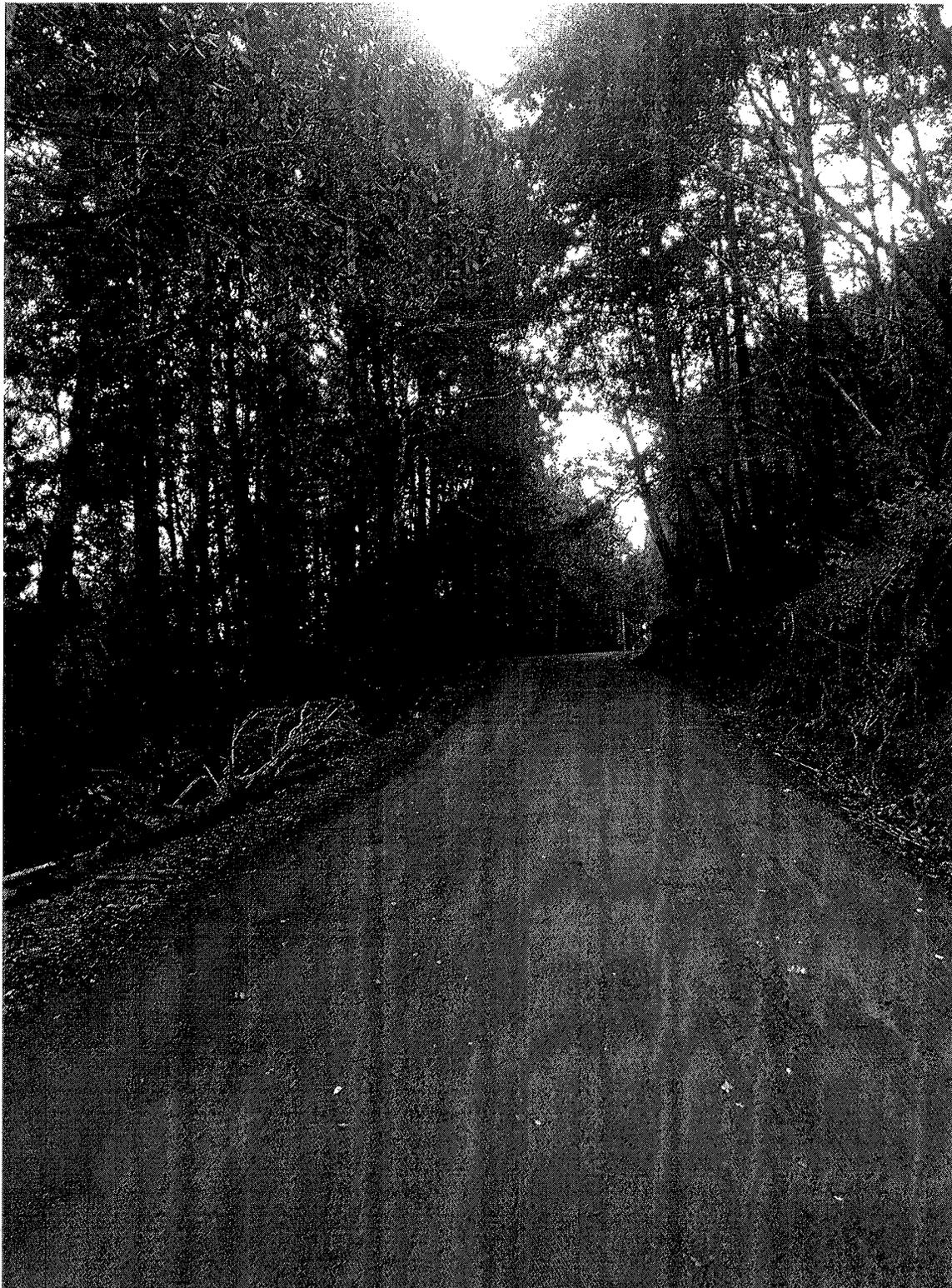
This picture shows the average width of Somerville road.

Car measures 11.5 ft wide with doors open.



Picture 5

This picture shows Somerville road .5 miles from the intersection of Somerville road and Salmon Creek road.



Picture 6

This picture shows the intersection of Private drive and Somerville road .8 miles from the intersection of Salmon Creek road and Somerville road.



Picture 7

Shows Private Drive entering the property .1 miles from the intersection of Private drive and Somerville road.



## ATTACHMENT 4

### REFERRAL AGENCY COMMENTS AND RECOMMENDATIONS

The project was referred to the following referral agencies for review and comment. Those agencies that provided written comments are checked off.

<b>Referral Agency</b>	<b>Response</b>	<b>Recommendation</b>	<b>Location</b>
Building Inspection Division	✓	Conditional approval	Attached
CALFIRE	✓	Comments	Attached
Health and Human Services Environmental Health Division	✓	Conditional approval	Attached
Land Use Division	✓	Conditional approval	Attached
NWIC	✓	Further study	On file with Planning
Bear River Band of the Rohnerville Rancheria	✓	Conditional approval	On file with Planning
Sinkyone Intertribal Wilderness Council		No response	
Department of Fish & Wildlife		Comments	Attached
California State Parks	✓	Approval	Attached
RWQCB		No response	
Humboldt County Sheriff		No response	
Humboldt County District Attorney		No response	
Humboldt County Agricultural Commissioner		No response	
South Humboldt Joint Unified School District		No response	



**HUMBOLDT COUNTY  
PLANNING AND BUILDING DEPARTMENT  
CURRENT PLANNING DIVISION  
3015 H STREET, EUREKA, CA 95501 ~ PHONE (707) 445-7541**

8/28



211-401-007

**8/14/2017**

**PROJECT REFERRAL TO: Building Inspection Division**

**Project Referred To The Following Agencies:**

Building Inspection Division, Public Works Land Use Division, Health and Human Services Environmental Health Division, County Counsel, CalFire, California Department of Fish And Wildlife, Northwest Information Center, Bear River Band Rohnerville Rancheria, Regional Water Quality Control Board, Humboldt County District Attorney, Humboldt County Agriculture Commissioner, South Humboldt Joint Unified School District School District, Humboldt County Sheriff, Sinkyone

**Applicant Name** Schackow Farms **Key Parcel Number** 211-401-007-000

**Application (APPS#)** 11708 **Assigned Planner** Cannabis Planner (CPOD) (707) 445-7541 **Case Number(s)** CUP16-351

Please review the above project and provide comments with any recommended conditions of approval. To help us log your response accurately, please include a copy of this form with your correspondence.

Questions concerning this project may be directed to the assigned planner for this project between 8:30am and 5:30pm Monday through Friday.

County Zoning Ordinance allows up to 15 calendar days for a response. If no response or extension request is received by the response date, processing will proceed as proposed.

If this box is checked, please return large format maps with your response.

**Return Response No Later Than 8/29/2017**

Planning Commission Clerk  
County of Humboldt Planning and Building Department  
3015 H Street  
Eureka, CA 95501  
**E-mail:** PlanningClerk@co.humboldt.ca.us **Fax:** (707) 268-3792

**We have reviewed the above application and recommend the following (please check one):**

Recommend Approval. The Department has no comment at this time.

Recommend Conditional Approval. Suggested Conditions Attached.

Applicant needs to submit additional information. List of items attached.

Recommend Denial. Attach reasons for recommended denial.

Other Comments: see attached Referral Comments

DATE: 8-29-17

PRINT NAME: Patrick Metzger



COUNTY OF HUMBOLDT  
PLANNING AND BUILDING DEPARTMENT  
BUILDING DIVISION

3015 H STREET EUREKA CA 95501  
PHONE: (707) 445-7245 FAX: (707) 445-7446

Building Division's Referral Comments for Cannabis Operations:

Application No.: 441129  
Parcel No.: 2M-401-007-000  
Case No.: CUP 16-351

The following comments apply to the proposed project, (check all that apply).

- Site/plot plan appears to be accurate.
- Submit revised site/plot plan showing all of the following items: all grading including ponds and roads, location of any water course including springs, all structure including size and use and all setbacks from the above stated to each other and property lines.
- Existing operation appears to have expanded, see comments: \_\_\_\_\_  
\_\_\_\_\_
- Existing structures used in the cannabis operation shall not to be used/occupied until all required permits have been obtained.
- Proposed new operation has already started.
- Recommend approval based on the condition that all required grading, building, plumbing electrical and mechanical permits and or Agricultural Exemption are obtained.
- Other Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name: Patricia METO

Date: 8-29-17

Note: Remember to take photographs and then save them to the Planning's case number. File location J, Current Planning, Projects,(CUP, SP, ZCC) Case number.

**Zander, AnaCena**

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**From:** HUU CEQA@CALFIRE <HUUCEQA@fire.ca.gov>  
**Sent:** Monday, September 04, 2017 5:45 PM  
**To:** Planning Clerk  
**Subject:** FW: 211-401-007

**From:** Meyers, Tim@CALFIRE  
**Sent:** Thursday, August 24, 2017 10:32 AM  
**To:** HUU CEQA@CALFIRE <HUUCEQA@fire.ca.gov>  
**Subject:** 211-401-007

CAL FIRE can not support this project. Forest Practice violations have occurred on this property based off Imagery. No conversion permits are on file with CAL FIRE for tree removal. The landowner must seek advice from a Registered Professional Forester or contact CAL FIRE to mitigate the environmental violations. File passed to B1212 on 08/24/2017.

Tim Meyers

Forester I, RPF #2813

Department of Forestry and Fire Protection

***CAL FIRE***

Weott Resource Management

Humboldt-Del Norte Unit

Office (707) 946-2204

Cellular (707) 599-6433

[tim.meyers@fire.ca.gov](mailto:tim.meyers@fire.ca.gov)

Every Californian should conserve water. Find out how at:

[SaveOurWater.com](http://SaveOurWater.com) - [Drought.CA.gov](http://Drought.CA.gov)



HUMBOLDT COUNTY  
PLANNING AND BUILDING DEPARTMENT  
CURRENT PLANNING DIVISION  
3015 H STREET, EUREKA, CA 95501 ~ PHONE (707) 445-7541



**PROJECT REFERRAL TO:** Health and Human Services Environmental Health Division

DEH received  
8-14-17

**Project Referred To The Following Agencies:**

17/18-0346

Building Inspection Division, Public Works Land Use Division, Health and Human Services Environmental Health Division, County Counsel, CalFire, California Department of Fish And Wildlife, Northwest Information Center, Bear River Band Rohnerville Rancheria, Regional Water Quality Control Board, Humboldt County District Attorney, Humboldt County Agriculture Commissioner, South Humboldt Joint Unified School District School District, Humboldt County Sheriff, Sinkyone

**Applicant Name** Schackow Farms, Inc **Key Parcel Number** 211-401-007-000

**Application (APPS#)** 11708 **Assigned Planner** Cannabis Planner (CPOD) (707) 445-7541 **Case Number(s)** CUP16-351

Please review the above project and provide comments with any recommended conditions of approval. To help us log your response accurately, please include a copy of this form with your correspondence.

Questions concerning this project may be directed to the assigned planner for this project between 8:30am and 5:30pm Monday through Friday.

County Zoning Ordinance allows up to 15 calendar days for a response. If no response or extension request is received by the response date, processing will proceed as proposed.

If this box is checked, please return large format maps with your response.

**Return Response No Later Than**

Planning Commission Clerk  
County of Humboldt Planning and Building Department  
3015 H Street  
Eureka, CA 95501  
**E-mail:** PlanningClerk@co.humboldt.ca.us **Fax:** (707) 268-3792

**We have reviewed the above application and recommend the following:**

Conditional Approval

DISTRIBUTED  
1-29-18

**Comments:**

Prior to renewal of permit the operator is required to submit to DEH receipts, or copy of contract confirming sufficient use of portable toilets to serve staff for duration of first year or provide written assessment from a qualified septic consultant confirming a Tier 0 status for the existing onsite waste treatment systems serving the dwellings.

\*This review and recommendation is for the Land Use aspects of the planning project and does not include or imply compliance with all DEH programs. Although DEH recommends the approval of the Planning project, Solid Waste and HazMat Program requirements need to be addressed directly with staff from those programs.

**Response Date:** 1/24/2018 **Recommendation By:** Benjamin Dolf



FROM: Kenneth M. Freed, Assistant Engineer *KA*

DATE: 1-18-2018

RE:

Applicant Name	SCHACKOW FARMS
APN	211-401-007
APPS#	11708

The Department has reviewed the above project and has the following comments:

- The Department's recommended conditions of approval are attached as **Exhibit "A"**.
- Additional information identified on **Exhibit "B"** is required before the Department can review the project. **Please re-refer the project to the Department when all of the requested information has been provided.**
- Additional review is required by Planning & Building staff for the items on **Exhibit "C"**. **No re-refer is required.**
- Road Evaluation Reports(s)* are required; See **Exhibit "D"**. **No re-refer is required.**

\*Note: Exhibits are attached as necessary.

Additional comments/notes:

Review Item #4 on Exhibit "C"

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// END //

wishes to resolve these issues prior to approval of the Planning & Building permit for this project, the applicant should contact the Department to discuss how to modify the site plan for conformance with County Code and or Department of Public Works policies. Notes:

**COUNTY ROADS- DRIVEWAY (PART 2):**

Any existing or proposed driveways that will serve as access for the proposed project that connect to a county maintained road shall be improved to current standards for a commercial driveway. An encroachment permit shall be issued by the Department of Public Works prior to commencement of any work in the County maintained right of way. This also includes installing or replacing driveway culverts; minimum size is typically 18 inches.

- If the County road has a paved surface at the location of the driveway, the driveway apron shall be paved for a minimum width of 18 feet and a length of 50 feet.
- If the County road has a gravel surface at the location of the driveway, the driveway apron shall be rocked for a minimum width of 18 feet and a length of 50 feet.
- If the County road is an urban road, frontage improvements (curb, gutter, and sidewalk) shall also be constructed to the satisfaction of the Department. Any existing curb, gutter or sidewalk that is damaged shall be replaced.

The exact location and quantity of driveways shall be approved by the Department at the time the applicant applies to the Department of Public Works for an Encroachment Permit.

This condition shall be completed to the satisfaction of the Department of Public Works prior to commencing operations, final sign-off for a building permit, or Public Works approval for a business license.

**COUNTY ROADS- DRIVEWAY (PART 3):**

The existing driveway will require substantial modification in order to comply with County Code. The applicant may wish to consider relocating the driveway apron if a more suitable location is available.

**COUNTY ROADS-PARKING LOT- STORM WATER RUNOFF:**

Surfaced parking lots shall have an oil-water filtration system prior to discharge into any County maintained facility.

This condition shall be completed to the satisfaction of the Department of Public Works prior to commencing operations, final sign-off for a building permit, or Public Works approval for a business license.

**COUNTY ROADS- DRIVEWAY & PRIVATE ROAD INTERSECTION VISIBILITY:**

All driveways and private road intersections onto the County Road shall be maintained in accordance with County Code Section 341-1 (Sight Visibility Ordinance).

This condition shall be completed to the satisfaction of the Department of Public Works prior to commencing operations, final sign-off for a building permit, or Public Works approval for a business license.

**COUNTY ROADS- PRIVATE ROAD INTERSECTION:**

Any existing or proposed non-county maintained access roads that will serve as access for the proposed project that connect to a county maintained road shall be improved to current standards for a commercial driveway. An encroachment permit shall be issued by the Department of Public Works prior to commencement of any work in the County maintained right of way.

- If the County road has a paved surface at the location of the access road, the access road shall be paved for a minimum width of 20 feet and a length of 50 feet where it intersects the County road.
- If the County road has a gravel surface at the location of the access road, the access road shall be rocked for a minimum width of 20 feet and a length of 50 feet where it intersects the County road.

This condition shall be completed to the satisfaction of the Department of Public Works prior to commencing operations, final sign-off for a building permit, or Public Works approval for a business license.

**COUNTY ROADS- ROAD EVALUATION REPORT(S):**

All recommendations in the *Road Evaluation Report(s)* for County maintained road(s) shall be constructed/implemented to the satisfaction of the Public Works Department prior to commencing operations, final sign-off for a building permit, or approval for a business license. An encroachment permit shall be issued by the Department of Public Works prior to commencement of any work in the County maintained right of way.

// END //

If YES, the project does not need to be referred to the Department. Include the following requirement:

**All recommendations in the Road Evaluation Report(s) for non-county maintained road(s) shall be constructed/implemented to the satisfaction of the Planning & Building Department prior to commencing operations, final sign-off for a building permit, or approval for a business license. A grading permit may be required; check with the Building Division of the Planning and Building Department for any permit requirements.**

2. **ROADS – PART 2.** Does the project takes access from a series of non-county maintained roads that connect directly to a Caltrans State Highway, US Forest Service Road, BLM Road, or a City road?

YES  NO

If YES, the Department recommends that prior to the project presented to the Planning Commission or Zoning Administrator, that the project should be referred to the affected road agency(ies).

3. **ROADS – PART 3.** Does the project take access or use a county maintained road that does not have a centerline stripe or is not on the "approved list" of known category 4 roads?  YES  NO

If YES, a *Road Evaluation Report* must be done for the County road(s) that do not have a centerline stripe or are not on the "approved" list. The project along with the road evaluation report(s) for the County maintained road(s) must be referred to Public Works for review to ensure that the Department supports the findings in the report. If the road is on the "not approved" list, then Part B of the *Road Evaluation Report* form must be completed.

4. **Deferred Subdivision Improvements.** Does the project have deferred subdivision improvements?  YES  NO

*How to check:* Method 1: Planning and Building Department staff review the legal description for the subject property in the deed. If the deed reads similar to "Parcel \_\_ of Parcel Map No. \_\_\_" then there may be deferred subdivision improvements; further research will be needed. Method 2: Planning and Building Department staff need to review the title report(s) for the subject property(ies) to see if a "Notice of Construction Requirements" document is listed. If the document is listed, then there are deferred subdivision improvements.

If YES then the subject property has deferred subdivision improvements. The project cannot be presented to the Zoning Administrator or the Planning Commission until the deferred subdivision improvements are completed. The applicant should be directed to the Department of Public Works regarding the deferred subdivision improvements.

5. **AIRPORT- PART 1 (ALUCP).** Is the project located within Airport Land Use Compatibility Plan (ALUCP) Zone A, B, B1, B2, or B3 as shown on the ALUCP GIS layer?  YES  NO

If YES, include the following requirement:

**The applicant shall cause to be dedicated to the County of Humboldt an Avigation Easement. The avigation easement shall be on the form prescribed by the Department of Public Works. This condition shall be completed to the satisfaction of the Department of Public Works prior to commencing operations, final sign-off for a building permit, or Public Works approval for a business license.**

7. **AIRPORT – PART 3 (Height Restrictions).** Planning & Building Staff shall review the completed *Airspace Certification Form* as follows:

- If Box 1 is checked **NO**, the applicant shall either modify the project to comply with County Code Section 333-4 or the applicant shall request a variance pursuant to County Code Section 333-8. The project shall not be presented to the Zoning Administrator or the Planning Commission for approval until the variance is approved by the Board of Supervisors, or the project was modified to comply with County Code Section 333-4.
- If Box 2 is checked **YES**, the applicant shall submit form FAA 7460-1 to the FAA for review and comment. The project shall not be presented to the Zoning Administrator or the Planning Commission for approval until the FAA supports the project.
- If Box 3 is checked **YES**, then the project cannot be permitted and must be modified to conform to the easement. As an alternative, the applicant may wish to seek approval from both the County and the FAA to quitclaim a portion of the easement to allow the project to be permitted.
- If Box 1 is checked **YES** and Box 2 is checked **NO** and Box 3 checked **NO or NA**, then Planning & Building staff shall signoff on the project in the "county use only" section of the form. In the "pre-construction" right of way (or "post construction" right of way if the building exists), check the approval box; date and initial your work.

Note that if the proposed structure is close to the imaginary surface (within 5 feet), then require a post construction certificate to be filed. By including the following requirement:

**Applicant shall file a post construction *Airspace Certification Form* to ensure that the proposed structures are in compliance with County Code 333-3. This shall be completed within 90 days of completion of construction or prior to building final, whichever occurs first.**

Submit a copy of all processed *Airspace Certification Forms* to the Land Use Division.

8. **MS4/ASBS Areas.** Is the project located within MS4 Permit Area as shown on the GIS layer?  YES  NO

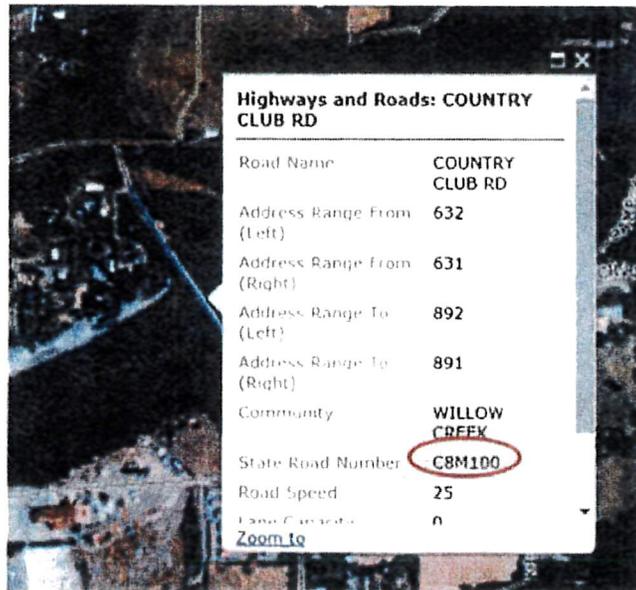
If **YES**, include the following requirement:

**The applicant shall demonstrate to the satisfaction of the Planning & Building Department that the project is in compliance with MS4/ASBS requirements.**

// END //

centerline stripe, then the roads leading from the nearest publicly maintained road with a paved centerline stripe (or a known category 4 road) must be evaluated. A separate *Road Evaluation Report* form is needed for each road. This applies to all roads regardless if they are publicly or privately maintained. The Department has prepared a "approved list" of known County maintained roads that are category 4 (or are equivalent to category 4) standards for cannabis projects. The Department has also prepared a list of roads that are known to not meet road category 4 or equivalent. Both of these lists will be updated as the County information regarding the County maintained roads becomes available.

The *Road Evaluation Report* form needs to be provided to applicants to complete. It is important that Planning and Building Department staff provide the applicant with a map that has the roads to be evaluated highlighted. This will most likely include a combination of County maintained roads and non-County maintained roads. This will give the applicant clear direction on which roads need to be evaluated.



Above: screenshot from the WebGIS showing County Road Number circled in **RED**.

A County maintained road will have a 5 or 6 character identifier. The general format is **ABCDDD** where:

- A** is an optional identifier for the functionality of the road (A=Arterial, C=Collector, F=Federal Aid)
- B** is a grid identifier number for the X-axis of a "battleship" style grid that was drawn on a county map to divide the county into a series of squares.
- C** is a grid identifier letter for the Y-axis for the grid.
- DDD** is a three digit road identification number within a particular grid. Each grid can have up to 999 roads in them

Examples:

**ABCDDD**  
**A 3 M 0 2 0** Murray Road  
**F 6 B 1 6 5** Alderpoint Road  
**6 C 0 4 0** Thomas Road

**DEPARTMENT OF FORESTRY AND FIRE PROTECTION**

Humboldt – Del Norte Unit  
 118 Fortuna Blvd.  
 Fortuna, CA 95540  
 Website: www.fire.ca.gov  
 (707) 726-1272



Ref: 7100 Planning  
 Date: August 17, 2017

John Ford, Director  
 Humboldt County Planning and Building Department – Planning Division  
 3015 H Street  
 Eureka, CA 95501

**Attention:** Cannabis Planner (CPOD)  
**Applicant:** Schackow Farms  
**APN:** 211-401-007-000  
**Area:** Miranda  
**Case Numbers:** CUP16-351

**Humboldt County Application #:** 11708  
**Type of Application:** Conditional Use Permit  
**Date Received:** 8/15/2017  
**Due Date:** 8/29/2017

**Project Description:** A Conditional Use Permit for 43,560 square feet of existing outdoor cannabis cultivation. Water is sourced from a cistern and through rain catchment. Water storage capacity on-site is 632,750 gallons, distributed amongst six (6) hard tanks and the rain catchment pond. The Applicant estimates that the annual water usage is 528,000 gallons. Processing, including drying and trimming, will be done in an existing on-site building. Three (3) permanent employees and up to fifteen (15) additional seasonal employees are needed for operations. Electricity is provided by an on-site generator.

Mr. Ford,

The California Department of Forestry and Fire Protection (CALFIRE) provides these standard project review comments on the above noted project for the following subject matter:

- Fire Safe
- Resource Management
- Cannabis

The following pages address these concerns directly.

If CALFIRE staff develops additional comment on this project, it will be forwarded in an additional response letter.

By: Planning Battalion  
 CALFIRE Humboldt – Del Norte Unit

For **Hugh Scanlon**, Unit Chief

## FIRE SAFE

### **General:**

CALFIRE has responsibility for enforcement of Fire Safe Standards as required by Public Resources Code (PRC) 4290 and 4291. However CALFIRE is not the lead agency in planning development and project permitting. CALFIRE provides input as a contributing agency, generally limited to plan review, and is not the approving agency for these projects.

### **Local Responsibility Areas:**

Should this project include Local Responsibility Area (LRA) lands, CALFIRE has no direct fire safe input on those parcels. However, in those areas with LRA parcels adjacent to State Responsibility Area (SRA) land, CALFIRE recommends that local standards be applied that are consistent with those CALFIRE makes for SRA lands.

### **State Responsibility Areas:**

Should this project include State Responsibility Area (SRA) lands, the following are CALFIRE's Fire Safe minimum input and recommendation for any and all development.

1. In Humboldt County, developments must meet minimum fire safe standards by constructing the project in conformance with County Fire Safe Ordinance 1952, which the California Board of Forestry and Fire Protection has accepted as functionally equivalent to PRC 4290. The County Fire Safe Ordinance provides specific standards for roads providing ingress and egress, signing of streets and buildings, minimum water supply requirements, and setback distances for maintaining defensible space.
2. New buildings located in any Fire Hazard Severity Zone within State Responsibility Areas shall comply with the 2007 California Building Code (CBC) Section 701A.3.2. This requires roofing assemblies, attic and eave ventilation, exterior siding, decking and deck enclosure, windows and exterior doors, and exposed under floor areas that are approved "ignition resistive" in design.
3. All development, especially commercial or industrial development, should be designed to comply with the most current versions of the following standards:
  - a) California Fire Code (CFC) — for overall design standards
  - b) Public Utilities Commission (PUC) General Order 103 — for design of water systems
  - c) National Fire Protection Association Standards (NFPA) for fire flow minimums and other design questions not specifically covered by CFC and PUC
  - d) Housing and Community Development Codes and Standards —for mobile home parks and recreational camps
4. For Department of Real Estate reporting purposes, fire protection coverage in SRA is generally described as follows:

During the declared fire season (usually June through October) CALFIRE responds to all types of fires and emergencies in SRA.

During the remainder of the year (winter period), CALFIRE responds to emergency requests with the closest available fire engine, if a response can reasonably be expected to arrive in time to be effective. A fire engine is usually available somewhere in the Unit, but may have an extended response time.

There are many hazards confronting fire protection agencies in most subdivisions on SRA lands. Steep terrain and heavy wildland fuels contribute to fire intensity and spread. The distances from fire stations and road grades encountered usually create an excessive response time for effective structure fire suppression purposes.

Subdivisions increase fire risks from additional people and increase probable dollar losses in the event of fire due to added structures and improvements.
5. If the project expects to produce densities consistent with a major subdivision, the impacts on all infrastructures should be mitigated. Local government more appropriately provides the responsibility for high-density area protection and services. Annexation or inclusion into Local Responsibility Area should be studied as well.

6. CALFIRE does not support development in areas where there is no local agency fire service for structure fires and emergency medical response. Fire services should be extended into service gap areas as a condition of development. New development can adversely impact existing fire services. Careful consideration must be given where development may overload the local fire service's ability to respond.

## RESOURCE MANAGEMENT

CALFIRE has enforcement responsibility for requirements of the Z'berg—Nejedly Forest Practice Act of 1973. CALFIRE is also the lead agency for those parts of projects involving the scope of the Forest Practice Act. The following basic input will cover the majority of projects. Each project will be reviewed with additional input sent at a later date, if needed.

The following comments reflect the basic Resource Management policies of the Board of Forestry and Fire Protection and CALFIRE on CEQA review requests. These policies apply to both Local and State Responsibility Areas.

1. If this project reduces the amount of timberland, by policy, the Board of Forestry and CALFIRE cannot support any project that will reduce the timberland base of California. "Timberland" means land which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees regardless of current zoning (PRC 4526). However, if the zoning and intended use are consistent with the county's general plan; and if no land other than timberland can be identified to site the project; then CALFIRE may choose not to oppose the project.
2. If **any** commercial timber operations are involved with a project, the timber operations cannot be conducted without a CAL FIRE permit. Commercial timber operations include the cutting or removal of trees offered for sale, barter, exchange, or trade or the conversion of timberlands to land uses other than the growing of timber (PRC 4527). Contact your nearest CAL FIRE Resource Management office for guidance on obtaining the necessary permits.
3. If **any** timberlands are being converted to a non-timber growing use by this project, the conversion operations cannot be conducted without a CAL FIRE permit (PRC 4621). Conversion of timberland takes place when trees are removed and the land use changes, even without the sale, barter, exchange, or trade of the trees. Contact your nearest CAL FIRE Resource Management office for guidance on obtaining the necessary permits.
4. If timberland is in the viewshed of a project, the current and future owners should be overtly notified that changes will occur to their views due to timber management activities. Further, no project should be allowed to negatively affect access to timberland for timber management purposes; neither on the project parcel(s) nor any other timberland parcels.
5. If timber harvesting has occurred and post-harvest restocking and prescribed erosion control maintenance obligations have not been met on a parcel, future owners should be overtly notified (14 CCR 1042). The current owner of a parcel is responsible for restocking requirements and maintenance of roads whether or not they were involved in the actual harvest plan.
6. If the project involves the development of parcels zoned as Timber Production Zone (TPZ), CALFIRE cannot support the project. Dividing TPZ land into parcels of less than 160 acres requires a Joint Timber Management plan prepared by a Registered Professional Forester (RPF), recorded as a deed restriction for a minimum of 10-years on all affected parcels, and approved by a four – fifths vote of the full board (Govt. Code 51119.5). TPZ may be rezoned using a "Ten Year Phase Out," which precludes the need for a Timberland Conversion Permit. CALFIRE opposes immediate rezoning of TPZ land.

## Cannabis

### **General:**

CALFIRE has responsibility for enforcement of Fire Safe Standards as required by Public Resources Code (PRC) 4290 and 4291. CALFIRE is not the lead agency in planning development and project permitting. However, CALFIRE provides comment as an emergency response expert agency, generally limited to plan review, and is not the approving agency for these projects.

### **Local Responsibility Areas:**

Should this project include Local Responsibility Area (LRA) lands, CALFIRE has no direct fire safe input on those parcels. However, in those areas with LRA parcels adjacent to State Responsibility Area (SRA) land, CALFIRE recommends that local standards be applied that are consistent with those CALFIRE makes for SRA lands. Also CAL FIRE is the primary command and control dispatch, for most local agency fire districts and departments.

### **State Responsibility Areas:**

Should this project include State Responsibility Area (SRA) lands, the following are CALFIRE's minimum input.

1. Agricultural cannabis growing operations medicinal or commercial shall have an easily accessible material safety data sheet (MSDS) or safety data sheet (SDS) for all chemicals and hazardous materials on site. Posted (NFPA 704) Placard clearly visible to emergency responders
2. California code of regulations Health and Safety (CCR 11362.769.) Indoor and outdoor medical marijuana cultivation shall be conducted in accordance with state and local laws related to land conversion, grading, electricity usage, water usage, water quality, woodland and riparian habitat protection, agricultural discharges, and similar matters. State agencies, including, but not limited to, the State Board of Forestry and Fire Protection, the Department of fish and Wildlife, the State Water Resources Control Board, the California regional water quality control boards, and traditional state law enforcement agencies shall address environmental impacts of medical marijuana cultivation and shall coordinate, when appropriate, with cities and counties and their law enforcement agencies in enforcement efforts.
3. International Fire Code (N101.1 Scope) Marijuana growing and extraction shall be in accordance with this chapter, of the International Building Code, and the International Mechanical Code. Cryogenic fluids shall comply with Chapter 55. Compressed gases shall comply with Chapter 53. Flammable and combustible liquids shall comply with Chapter 57. Hazardous materials shall comply with Chapter 50. LP-gas shall comply with Chapter 61 and the International Fuel Gas Code. All applicable California State Fire Marshal standards and regulations for the designated occupancy must be met.
4. Growing marijuana and the extracting of oils  
Extraction of marijuana oils; All materials hazardous and non-hazardous associated with the extraction process shall be utilized in conformance of the law and fire safe codes.



HUMBOLDT COUNTY  
PLANNING AND BUILDING DEPARTMENT  
CURRENT PLANNING DIVISION  
3015 H STREET, EUREKA, CA 95501 ~ PHONE (707) 445-7541

7/25/2018

**PROJECT REFERRAL TO: State Parks**

**Project Referred To The Following Agencies:**

Building Inspection Division, Public Works Land Use Division, Health and Human Services Environmental Health Division, County Counsel, CalFire, California Department of Fish And Wildlife, Northwest Information Center, Bear River Band Rohnerville Rancheria, Regional Water Quality Control Board, Humboldt County District Attorney, Humboldt County Agriculture Commissioner, South Humboldt Joint Unified School District School District, Humboldt County Sheriff, Sinkyone, State Parks

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**Applicant Name** Schackow Farms, Inc **Key Parcel Number** 211-401-007-000

**Application (APPS#)** 11708 **Assigned Planner** Rodney Yandell (707) 268-3732 **Case Number(s)** CUP16-351

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Please review the above project and provide comments with any recommended conditions of approval. To help us log your response accurately, please include a copy of this form with your correspondence.

Questions concerning this project may be directed to the assigned planner for this project between 8:30am and 5:30pm Monday through Friday.

County Zoning Ordinance allows up to 15 calendar days for a response. If no response or extension request is received by the response date, processing will proceed as proposed.

If this box is checked, please return large format maps with your response.

**Return Response No Later Than 8/9/2018**

Planning Commission Clerk  
County of Humboldt Planning and Building Department  
3015 H Street  
Eureka, CA 95501  
**E-mail:** PlanningClerk@co.humboldt.ca.us **Fax:** (707) 268-3792

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**We have reviewed the above application and recommend the following (please check one):**

Recommend Approval. The Department has no comment at this time.

Recommend Conditional Approval. Suggested Conditions Attached.

Applicant needs to submit additional information. List of items attached.

Recommend Denial. Attach reasons for recommended denial.

Other Comments: The project area is located greater than 600 feet from Humboldt Redwoods State Park.

Therefore, State Parks has no further concerns or comment at this time.

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DATE: August 6, 2018

PRINT NAME: Shannon Dempsey  
Environmental Coordinator  
North Coast Redwoods District, CA State Parks  
shannon.dempsey@parks.ca.gov



**California Department of Fish and Wildlife  
CEQA Referral Checklist**

Applicant: Schackow Farms		Date: 9/12/18	
APPS No.: 11708	APN: 211-401-007	DFW CEQA No.: 2017-0460	Case No.: CUP16-351
<input type="checkbox"/> New	<input checked="" type="checkbox"/> Existing	<input type="checkbox"/> Mixed-light (SF):	<input checked="" type="checkbox"/> Outdoor (SF): 43,560 <input type="checkbox"/> Indoor <input type="checkbox"/> RRR

Thank you for referring this application to the California Department of Fish and Wildlife (CDFW) for review and comment.

CDFW offers the following comments on the Project in our role as a Trustee and Responsible Agency pursuant to the California Environmental Quality Act (CEQA; California Public Resource Code Section 21000 *et seq.*). These comments are intended to assist the Lead Agency in making informed decisions early in the planning process.

- Recommend Approval. The Department has no comment at this time.
- Recommend Conditional Approval. Suggested conditions below.
- Applicant needs to submit additional information. Please see the list of items below.
- Recommend Denial. See comments below.

**Please note the following information:**

*Done*

- CDFW requests, prior to Project approval, a copy of the County Cannabis Area Assessment (CAV).
- A Final Lake or Streambed Alteration Agreement (1600-2017-0137) has been issued to the applicant.
- The existing Project is located in/near Northern Spotted Owl (*Strix occidentalis caurina*, a State- and Federally-Threatened species) potential habitat. CDFW requests, as a condition of project approval, protocol level surveys (two-year) by an experienced wildlife biologist by 2021, to determine whether the area has NSO presence. Prior to survey completion, CDFW requests that the applicant assume presence and avoid impacts as determined by a qualified biologist, in consultation with CDFW. In addition, the Department requests that use of anticoagulant rodenticides be prohibited in all cultivation related operations.
- Prohibition on use of synthetic netting. To minimize the risk of wildlife entrapment, Permittee shall not use any erosion control and/or cultivation materials that contain synthetic (e.g., plastic or nylon) netting, including photo- or biodegradable plastic netting. Geotextiles, fiber rolls, and other erosion control measures shall be made of loose-weave mesh, such as jute, hemp, coconut (coir) fiber, or other products without welded weaves.
- Leave wildlife unharmed. If any wildlife is encountered during the Authorized Activity, Permittee shall not disturb the wildlife and shall allow wildlife to leave the work site unharmed.
- The environmental impacts of improper waste disposal are significant and well documented. CDFW requests, as a condition of Project approval, that all refuse be contained in wildlife proof storage containers, at all times, and disposed of at an authorized waste management facility.

- ☒ The referral materials state that there is an existing rainwater catchment pond onsite. CDFW requests as a condition of Project approval:
  - That the applicant comply with the CDFW Bullfrog Management Plan provided in the Final LSAA. Reporting requirements shall be submitted to CDFW at 619 Second Street, Eureka, CA 95501, no later than December 31 of each year.
  - That fish stocking be prohibited without written permission from the Department pursuant to Section 6400 of the Fish and Game Code.
- ☒ Human induced noise pollution may adversely affect wildlife species in several ways including abandonment of territory, loss of reproduction, auditory masking (inability to hear important cues and signals in the environment), hindrance to navigation, and physiological impacts such as stress, increased blood pressure, and respiration. To avoid disturbance, CDFW requests, as a condition of project approval, the construction of noise containment structures (or modification) for all generators and operations related fans on parcel; noise released shall be no more than 50 decibels measured from 100ft.
- ☒ This project has the potential to affect sensitive fish and wildlife resources such as Northern Spotted Owl (*Strix occidentalis caurina*), Chinook Salmon (*Oncorhynchus tshawytscha*), Coho Salmon (*O. kisutch*), Steelhead Trout (*O. mykiss*), Green Sturgeon (*Acipenser medirostris*), Pacific Lamprey (*Entosphenus tridentatus*), Foothill Yellow-legged Frog (*Rana boylei*), Pacific Giant Salamander (*Dicamptodon tenebrosus*), Southern Torrent Salamander (*Rhyacotriton variegatus*), Northern Red-legged Frog (*Rana aurora*), Tailed Frog (*Ascaphus truei*), Western Pond Turtle (*Actinemys marmorata marmorata*), and amphibians, reptiles, aquatic invertebrates, mammals, birds, and other aquatic and riparian species.

Thank you for the opportunity to comment on this Project. Please send all inquiries regarding these comments to [kalyn.bocast@wildlife.ca.gov](mailto:kalyn.bocast@wildlife.ca.gov) .

Please confirm that you have received this email.

Sincerely,

California Department of Fish and Wildlife  
619 2nd Street  
Eureka, CA 95501