



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

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Phone: (707)445-7541 Fax: (707) 268-3792

Hearing Date: July 11, 2019

To: Humboldt County Zoning Administrator

From: Cliff Johnson, Supervising Planner

Subject: **Rustic Farms LLC, Special Permit**  
Application Number 11138  
Case Numbers SP16-156  
Assessor's Parcel Number (APN) 522-282-003-000  
39675 Highway 299, Willow Creek area

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Please contact Caitlin Castellano, Planner, at 707-268-3731 or by email at [ccastellano1@co.humboldt.ca.us](mailto:ccastellano1@co.humboldt.ca.us) if you have any questions about the scheduled public hearing item.

**AGENDA ITEM TRANSMITTAL**

<b>Hearing Date</b> July 11, 2019	<b>Subject</b> Special Permit	<b>Contact</b> Caitlin Castellano
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**Project Description** Rustic Farms LLC seeks a Special Permit (SP16-088) for 5,420 square feet (SF) of existing outdoor full-sun cultivation. Ancillary seed propagation occurs within the cultivation area or immature plants are purchased offsite. Water is sourced from the Willow Creek Community Service District via a water connection located on the adjacent parcel (APN 522-272-006) under same ownership. No water storage is proposed. Estimated annual irrigation water usage is 54,500 gallons (10 gal/SF). Two (2) shipping containers are utilized onsite for drying activities and storage. Processing occurs offsite at a licensed facility. Power to the site is provided by generator and PGE service has been requested.

**Project Location:** The project is located in the Willow Creek area, on the east side of State Highway 299, approximately 50 feet east from the intersection of Panther Creek Road and State Highway 299, on the property known as 39675 State Highway 299.

**Present Plan Land Use Designations:** Residential Estates (RE 2.5-5), Density: Two and one half to Five acres per dwelling unit; Conservation Floodway (CF); Slope Stability: Moderate Instability.

**Present Zoning:** Agriculture General (AG).

**Application Number:** 11138

**Case Number:** SP16-156

**Assessor Parcel Number:** 522-282-003-000

**Applicant**

Rustic Farms LLC  
PO Box 143  
Burnt Ranch, CA 95527

**Owner**

Tyler Thompson and  
Holly Hayes  
PO Box 143  
Burnt Ranch, CA 95527

**Agent**

None.

**Environmental Review:** An Addendum to a previously adopted Mitigated Negative Declaration has been prepared for consideration per §15164 of the State CEQA Guidelines.

**State Appeal Status:** Project is NOT appealable to the California Coastal Commission.

**Major Issues:** None

**RUSTIC FARMS LLC**  
Case Number: SP16-156  
Assessor's Parcel Number: 522-282-003

**Recommended Zoning Administrator 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 that the Zoning Administrator has considered the Addendum to the adopted Mitigated Negative Declaration for the Commercial Medical Land Use Ordinance (CCMLUO) as described by Section §15164 of the State CEQA Guidelines, make all of the required findings for approval of the Special Permits based on evidence in the staff report, and adopt the Resolution approving the proposed Rustic Farms LLC project subject to the recommended conditions.*

**Executive Summary:**

Rustic Farms LLC seeks a Special Permit (SP16-088) for 5,420 square feet (SF) of existing outdoor full-sun cultivation. Ancillary seed propagation occurs within the cultivation area or immature plants are purchased offsite. No supplemental lighting is utilized for cultivation or ancillary propagation activities.

Water is sourced from the Willow Creek Community Service District (WCCSD) via a water connection located on the adjacent parcel (APN 522-272-006) under same ownership. No water storage is proposed. Estimated annual irrigation water usage is 54,500 gallons (10 gal/SF) and the WCCSD provided a "Will Serve" letter of up to 30,000 cubic feet (224,415 gallons) which is sufficient. No surface water diversions are utilized or proposed. The applicant hand waters seeds or purchases starts during ancillary propagation activities until transplanted into 200-gallon smart pots which utilizes micro sprinkler irrigation methods with mulch to conserve water and minimize the potential impact to surface and groundwater flows. The Project site is enrolled (WDID: 1B161288CHUM) as a Tier 2 site with North Coast Regional Water Quality Control Board's (NCRWQCB) Order No. 2015-0023 (Order). A Water Resources Protection Plan (WRPP) to protect water quality from cannabis cultivation and related activities was prepared by Timberland Resource Consultants in September 2016 and revised October 18, 2017. The applicant completed erosion control measures including stabilization of cut bank with large woody debris revetment, installation of flex pipe and French drain to re-direct storm water run-off from State Route 299, silt fencing, wattles and mulching, and graveling the roadway. Also, all enrollees must transition to the new Cannabis Cultivation Policy and Cannabis General order administered by the State Water Resources Control Board by July 31, 2019, which is included in the Conditions of Approval. Additionally, a Self-Certification (EPIMS-01923) pursuant to the California Department of Fish and Wildlife (CDFW) Environmental Permit Information Management System (EPIMS) was approved on October 31, 2018 which confirms the project does not or will not result in a diversion or obstruction of water, disturbance to land or vegetation and result in deposition of any material in to or adjacent to any river, stream or lake. The project is consistent with this standard. Conditions of Approval require the applicant to implement all identified corrective measures in the WRPP to achieve compliance with the 12 standard conditions and transition to the new Cannabis Cultivation Policy and Cannabis General.

Two (2) shipping containers are utilized onsite for drying activities and storage. Processing occurs offsite at a licensed facility. There is a portable toilet rental onsite. No employees will be utilized, only the two (2) owner operators. The minimum required parking spaces is two (2) and the site plan shows three (3). Currently a generator provides power for drying activities within the shipping container during the month of October. The applicant has requested a PGE drop (Notification # 111803362) to discontinue generator use. The Biological Report prepared by NRM recommended limited project related noise and CDFW referral comments requested the construction of noise containment structures for the generator so that noise released shall be no more than 50 decibels at 100 feet which is included in the Conditions of Approval.

Aerial imagery shows an initial conversion between 2005 – 2009 and then the site was expanded to its present size and configuration between 2010 and 2012. A Notice of Nuisance was recorded on the adjoining parcel (522-272-006 under same ownership) for illegal grading on both parcels (Vio-11-171) which was resolved through issuance of grading permit 15-694-x-6 was issued. A Timber Conversion Report was prepared by Timberland Resource Consultants (TRC) on July 16, 2018 and confirmed the conversion of 0.70 acres occurred but that it did not exceed the 3-acre conversion exemption maximum. TRC concluded that the conversion activities complied with the California Forest Practices Act and the California Forest Practice Rules and had no recommendations for the project. The report was forwarded to Calfire in April 2019 who responded with no comments.

The parcel has slopes greater than 50% and designated as "Moderate Instability." It is located in Geologic Unit BC per mapping from the National Earthquake Hazards Reduction Program (NEHRP). Lands in Unit BC are not expected to amplify ground shaking due to presence of rock (B) and very dense soil and soft rock (C). All grading on the property has been permitted (15-694-X-6) and no additional grading is proposed. Although the WRPP identified erosional issues with the cut bank above the cultivation site as a result of drainage runoff from State Route 299, those issues were corrected, and the approved CDFW EPIMS-01923 notification dated July 17, 2018 confirmed the erosional and drainage issues were resolved. Therefore, the project is not expected to contribute to potential hazards due to geologic instability.

The 5-acre property slopes from approximately 800 feet in elevation along SR 299 to approximately 500 feet in elevation along the Trinity River. Applicant testimony and photo evidence from Biological Report prepared by NRM indicates that the full-sun outdoor cultivation area cannot be seen from the Trinity River nor the properties located on the opposite side of the river. Additionally, the cultivation area cannot be seen from SR 299 as it is approximately 130 feet from roadway with a 49 percent slope (64-foot elevation loss). The project is conditioned to ensure security lighting be motion activated and comply with the International Dark-Sky Association standards and Fixture Seal of Approval Program; see: <https://www.darksky.org/our-work/lighting/lighting-for-citizens/lighting-basics/>. Standards include but are not limited to the following, 1) light shall be shielded and downward facing, 2) shall consist of Low Pressure Sodium (LPS) light or low spectrum Light Emitting Diodes (LED) with a color temperature of 3000 kelvins or less and 3) only placed where needed.

The subject property is located in the vicinity of potential Northern Spotted Owl (NSO) habitat and other sensitive species. The nearest NSO activity center is located approximate 0.6 miles from the site. A Biological Report was prepared in October 2018 by Natural Resources Management Corporation (NRM). NRM indicated there was likely West Coast fisher habitat on the adjacent public lands, however, the forest area on the parcel will not be affected by the current cultivation as it is an existing cleared flat with no new cannabis cultivation development proposed thus the project will have no impact on the West Coast Fischer. Four (4) ospreys were observed flying overhead and NRM expects no direct impacts on them as no trees will be removed and forging habitat is present in the vicinity but not directly on the property. NRM indicates that given the relatively small size of the cultivation area and close proximity to State Route 299, it is unlikely the daily operations will adversely affect the listed wildlife species. Additionally, cultivation activities are outdoor and unlikely to create light or noise pollution that would disturb wildlife. NRM recommended that structures requiring lighting (mixed light greenhouses or nurseries) be covered before sunrise and after sunset to avoid effects on nocturnal wildlife and attempt to keep noise levels at a minimum to help maintain the quality of habitat for all wildlife. Plant species were investigated as well, and no sensitive natural communities were found in the project area. Since the project seeks to permit pre-existing cannabis cultivation and no expansion, all major impacts to vegetation already occurred. Grading Permit 15-694-x-6 was approved in September 2014 and issued in June 2015. Light and noise attenuation measures are included in Ongoing Requirements/Development Restrictions in the Conditions of Approval and the project is conditioned on obtaining PGE for power. Based on comments received by CDFW, the project is also conditioned to refrain from using synthetic netting; and ensure refuse is contained in wildlife proof storage and construct noise containment structure for all generators so that noise released shall be no more than 50 decibels measured at 100 feet which will decrease potential impacts to NSO and other sensitive species as a result of noise.

The parcel's western boundary adjoins the Trinity River. The cultivation area is over 200 feet from the River's riparian drip line according to Humboldt County's Web GIS thus meeting the required SMA 100-foot setback and 200-foot setback when necessary to include slides, or areas with visible instability. The forest buffer between the cultivation area and Trinity River gravel bed is heavily vegetated and shows no sign of erosional issues. The Timber Conversion Report prepared by Timberland Resource Consultants states the Trinity River is greater than 200 feet from the cultivation area and a Class II water course is approximately 70 feet south east of the cultivation area which also meets a required 50-foot setback. Also, the Biological Report prepared by Natural Resources Management Corporation indicates the portion of the property where the Trinity River is located is inaccessible and received no impacts from current activities and thus was not included in the assessment. Additionally, irrigation water is sourced from the Willow Creek Community Services District. Therefore, there are no impacts to an SMA.

Access to the site is via a driveway off of State Route 299 (SR 299) located on the applicant/owner's adjoining parcel (APN 522-272-006; 39621 State Highway 299) which connects to the subject parcel. Due to the access road (SR 299) being maintained by California Department of Transportation (Caltrans) District 1, County Public Works, Land Use Division only recommended a referral to Caltrans. Caltrans referral response requested an encroachment permit for the existing road approach on APN 522-272-006 and proof of ownership/easement to access the subject parcel. The project is conditioned on obtaining a contingency easement over APN 522-272-006 for the benefit of the subject parcel, which is under the same ownership, and an encroachment permit from Caltrans for the driveway/private road encroachment onto SR 299.

The project was referred to the Northwest Information Center as well as the Tsnungwe Tribe and Hoopa Valley Tribe. Tsnungwe replied with no objection to the project. Ongoing conditions of approval are incorporated regarding the inadvertent discovery protocol to protect cultural resources.

Environmental review for this project was conducted and based on the results of that analysis, staff finds that all aspects of the project have been considered in a previously adopted Mitigated Negative Declaration that was adopted for the Commercial Medical Marijuana Land Use Ordinance and has prepared an addendum to this document for consideration by the Zoning Administrator (See Attachment 3 for more information).

**Recommendation:** Based on the evidence in the record, staff recommends that the Zoning Administrator approve the application subject to the recommended conditions.

**Alternatives:** Several alternatives may be considered: 1) The Zoning Administrator could elect not to hear this item and put the decision making in front of the Planning Commission. Any decision to place this matter before the Planning Commission must be done before opening the public hearing on this project; 2) The Zoning Administrator could elect to add or delete conditions of approval; 3) The Zoning Administrator could deny approval of the requested permits if you are unable to make all of the required findings. Planning Division staff is confident that the required findings can be made based on the submitted evidence and subject to the recommended conditions of approval. Consequently, Planning Division staff does not recommend further consideration of these alternatives.

**RESOLUTION OF THE ZONING ADMINISTRATOR  
OF THE COUNTY OF HUMBOLDT**

**Resolution Number 19-  
Case Number SP16-156  
Assessor's Parcel Number: 522-282-003**

**Makes the required findings for certifying compliance with the California Environmental Quality Act and conditionally approves the Rustic Farms LLC Special Permit request.**

**WHEREAS**, Rustic Farms LLC, submitted an application and evidence in support of approving a Special Permit for the continued operation of an existing commercial cannabis cultivation site consisting of 5,420 square feet of exiting full-sun outdoor cultivation with appurtenant structures for drying and storage; and

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

**WHEREAS**, the County Planning Division, the lead agency, prepared an Addendum to the Final Mitigated Negative Declaration (MND) prepared for the Commercial Medical Land Use Ordinance (CMMLUO) adopted by the Humboldt County Board of Supervisors on January 26, 2016. The proposed project does not present substantial changes that would require major revisions to the previous mitigated negative declaration. No new information of substantial importance that was not known and could not be known at the time was presented as described by §15162(c) of CEQA Guidelines; and

**WHEREAS**, Attachment 2 in the Planning Division staff report includes substantial evidence in support of making all of the required findings for approving the proposed Special Permits (Case Number SP 16-156); and

**WHEREAS**, a public hearing was held on the matter before the Humboldt County Zoning Administrator on July 11, 2019.

**NOW, THEREFORE**, be it resolved, determined, and ordered by the Humboldt County Zoning Administrator that the following findings be and are hereby made:

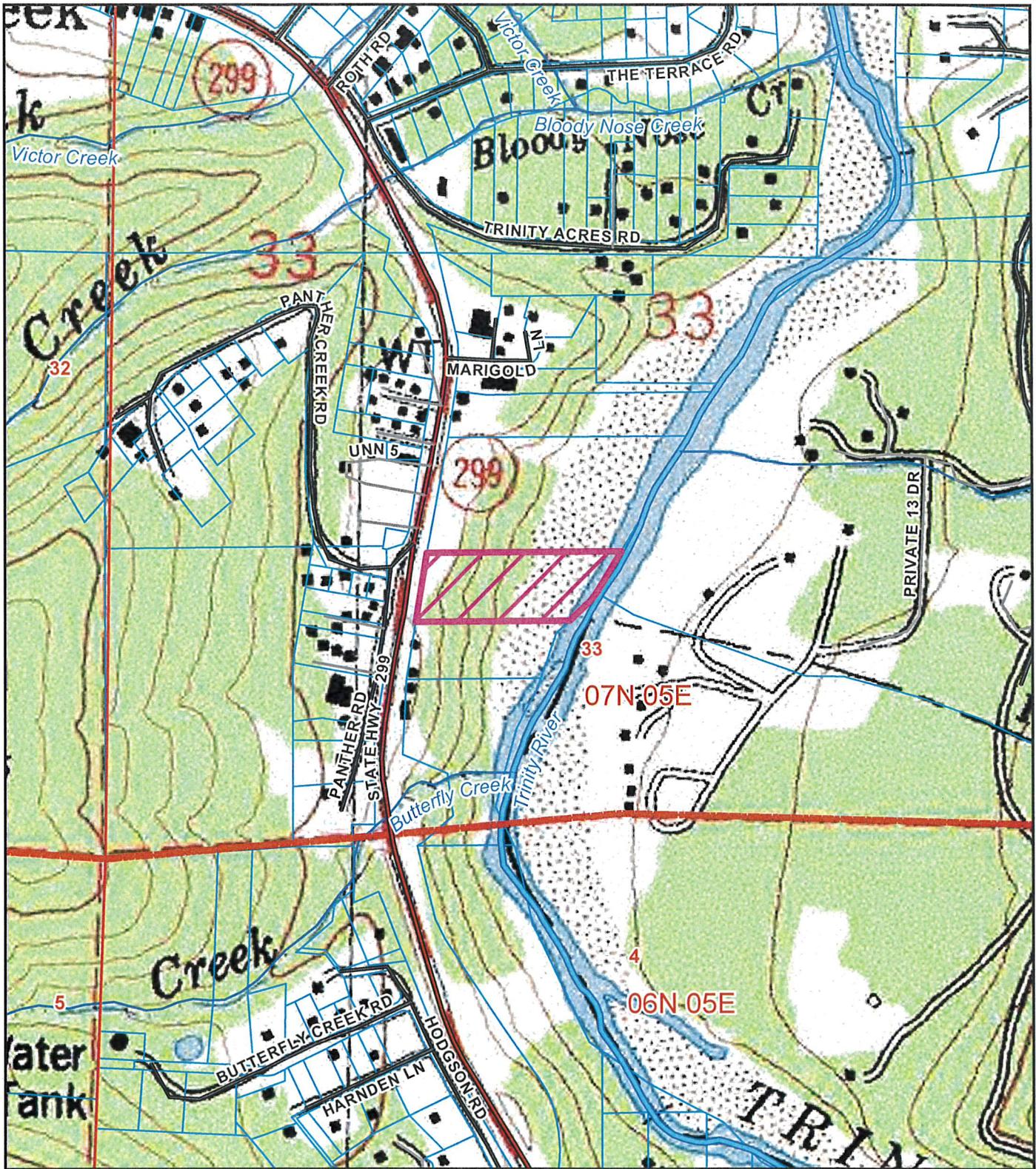
1. The Zoning Administrator considered the Addendum to the MND adopted for the Commercial Medical Marijuana Land Use Ordinance; and
2. The Zoning Administrator makes all of the required findings in Attachment 2 of the Zoning Administrator staff report for Case Number SP16-156 based on the submitted substantial evidence; and
3. The Special Permit (Case Number SP16-156) are approved as recommended and conditioned in Attachment 1.

Adopted after review and consideration of all the evidence on July 11, 2019.

I, John Ford, Zoning Administrator 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 Zoning Administrator at a meeting held on the date noted above.

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John Ford, Zoning Administrator  
Planning and Building Department  
County of Humboldt

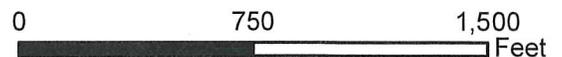


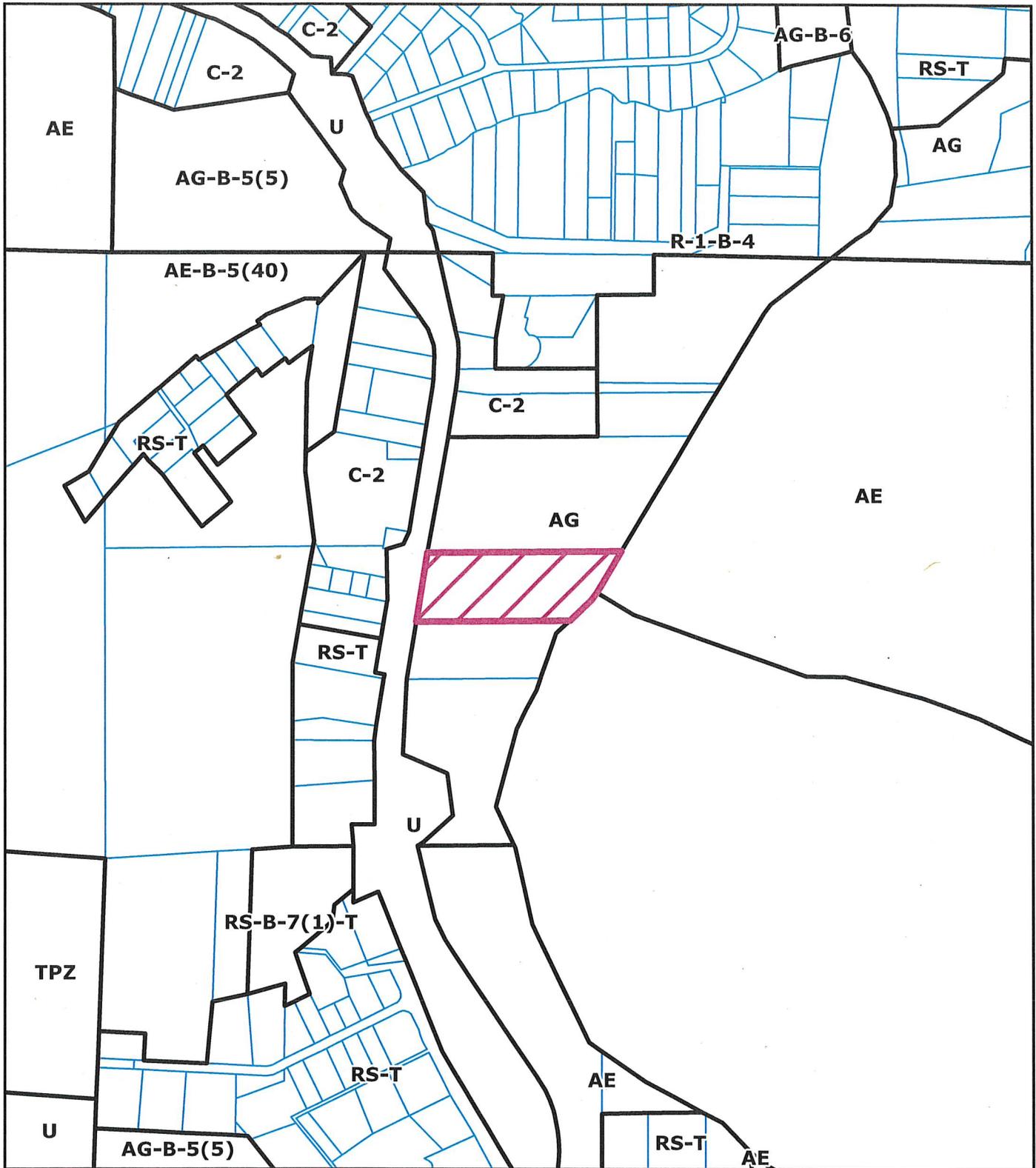
Project Area = 

**TOPO MAP  
 PROPOSED RUSTIC FARMS LLC  
 WILLOW CREEK AREA  
 SP-16-156  
 APN: 522-282-003  
 T07N R05E S33 HB&M (SALYER)**



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.



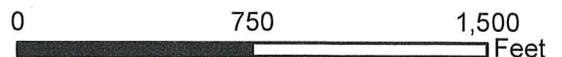


**ZONING MAP**  
**PROPOSED RUSTIC FARMS LLC**  
**WILLOW CREEK AREA**  
**SP-16-156**  
**APN: 522-282-003**  
**T07N R05E S33 HB&M (SALYER)**

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.



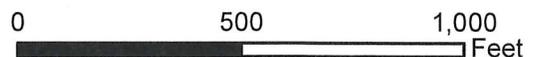


**AERIAL MAP**  
**PROPOSED RUSTIC FARMS LLC**  
**WILLOW CREEK AREA**  
**SP-16-156**  
**APN: 522-282-003**  
**T07N R05E S33 HB&M (SALYER)**

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.





**RESOLUTION OF THE ZONING ADMINISTRATOR  
OF THE COUNTY OF HUMBOLDT**

**Resolution Number 19-  
Case Number SP16-156  
Assessor's Parcel Number: 522-282-003**

**Makes the required findings for certifying compliance with the California Environmental Quality Act and conditionally approves the Humboldt Homegrown Cannabis Special Permits request.**

**WHEREAS**, Rustic Farms LLC, submitted an application and evidence in support of approving a Special Permit for the continued operation of an existing commercial cannabis cultivation site consisting of 5,420 square feet of existing full-sun outdoor cultivation with appurtenant structures for drying and storage; and

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

**WHEREAS**, the County Planning Division, the lead agency, prepared an Addendum to the Final Mitigated Negative Declaration (MND) prepared for the Commercial Medical Land Use Ordinance (CMMLUO) adopted by the Humboldt County Board of Supervisors on January 26, 2016. The proposed project does not present substantial changes that would require major revisions to the previous mitigated negative declaration. No new information of substantial importance that was not known and could not be known at the time was presented as described by § 15162(c) of CEQA Guidelines; and

**WHEREAS**, Attachment 2 in the Planning Division staff report includes substantial evidence in support of making all of the required findings for approving the proposed Special Permits (Case Number SP 16-156); and

**WHEREAS**, a public hearing was held on the matter before the Humboldt County Zoning Administrator on July 11, 2019.

**NOW, THEREFORE**, be it resolved, determined, and ordered by the Humboldt County Zoning Administrator that the following findings be and are hereby made:

1. The Zoning Administrator considered the Addendum to the MND adopted for the Commercial Medical Marijuana Land Use Ordinance; and
2. The Zoning Administrator makes all of the required findings in Attachment 2 of the Zoning Administrator staff report for Case Number SP16-156 based on the submitted substantial evidence; and
3. The Special Permit (Case Number SP16-156) are approved as recommended and conditioned in Attachment 1.

Adopted after review and consideration of all the evidence on July 11, 2019.

I, John Ford, Zoning Administrator 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 Zoning Administrator at a meeting held on the date noted above.

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John Ford, Zoning Administrator  
Planning and Building Department  
County of Humboldt

## ATTACHMENT 1

### RECOMMENDED CONDITIONS OF APPROVAL

#### **APPROVAL OF THE CONDITIONAL USE PERMIT AND THE SPECIAL PERMIT IS CONDITIONED ON THE FOLLOWING TERMS AND REQUIREMENTS WHICH MUST BE SATISFIED BEFORE THE PROVISIONAL CANNABIS CULTIVATION PERMIT CAN BE FINALIZED.**

##### **A. General Conditions**

1. The applicant is responsible for obtaining all necessary County and State permits and licenses, and for meeting all requirements set forth by other regulatory agencies.
2. 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 Planning and Building 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.
3. The Applicant is responsible for costs for post-approval review for determining project conformance with conditions. A deposit is collected to cover this staff review. Permit conformance with conditions must be demonstrated prior to release of building permit or initiation of use and at time of annual inspection. A 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) shall be paid 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.
4. Within 60 days or prior to the issuance of a building permit, whichever comes first, the applicant shall submit a revised site plan, in addition to what is already shown, showing the following:
  - a. Surveyed parcel boundary lines.
  - b. \*Setback of cultivation area to property lines and Six Rivers National Forest lands (APN 522-311-041) as a result of surveyed property lines.
  - c. Cultivation area boundary totaling 5,420 SF.
  - d. Location of generator shed.
  - e. Location of portable toilet.

\*Should the cultivation area need to be reduced or shifted to meet setbacks, it must stay within the existing flat/disturbed area and any reconfiguration of the shall be depicted on the updated site plan.
5. 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 #6–17. 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.
6. The applicant shall secure permits for all structures related to the cannabis cultivation and other commercial cannabis activity, including but not limited to, two (2) shipping containers utilized for drying and storage. The plans submitted for building permit approval shall be consistent with the project description and approved project site 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.
7. The applicant shall connect to PGE and construct noise attenuation structure for the generator and shall secure appropriate building permit. The plans submitted for building permit approval shall be consistent with the project description and approved project site 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.

8. The applicant shall install water monitoring device to monitor water used for cannabis irrigation.
9. The applicant shall record a contingency easement for ingress egress and public utilities over APN 522-272-006 for the benefit of APN 522-282-003.
10. The applicant shall obtain an Encroachment Permit from California Department of Transportation (Caltrans) District 1 for the driveway/private road approach on APN 522-272-006 (39621 ST HWY 299) that is utilized to access the subject parcel.
11. The applicant shall implement all corrective actions detailed within the Water Resource Protection Plan developed for the parcel, prepared pursuant to Tier 2 enrollment under the North Coast Regional Water Quality Control Board Cannabis Waste Discharge Regulatory Program. A letter or similar communication from the RWQCB verifying that all their requirements have been met will satisfy this condition. [After July 31, 2019, plans and reporting shall conform to the Cannabis Cultivation Policy and Cannabis general Order adopted October 17, 2017 by the State Water Board.]
12. The applicant shall be compliant with the County of Humboldt's Certified Unified Program Agency (CUPA) requirements regarding 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.
13. 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.

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

1. The primary power source will be PG&E when service connection is secured. Until then, the generator sound levels must not result in the harassment of Northern Spotted Owl species as required to meet the performance standards for noise set by Department Policy Statement No. 16-005 clarifying CMMLUO Section 55.4.11 (o) requirements and CDFW referral comments received May 21, 2019. The combination of background and generator created noise measured at 100 feet or the edge of habitat, whichever is closer, shall be at or below 50 decibels. Conformance will be evaluated using current auditory disturbance guidance prepared by the United State Fish and Wildlife Service, and further consultation where necessary. Should a noise containment structure be necessary to obtain compliance, a building permit shall be obtained.
2. No light shall be utilized for cultivation or propagation activities. Security lighting shall be motion activated and comply with the International Dark-Sky Association standards and Fixture Seal of Approval Program; see: <https://www.darksky.org/our-work/lighting/lighting-for-citizens/lighting-basics/>. Standards include but are not limited to the following, 1) light shall be shielded and downward facing, 2) shall consist of Low Pressure Sodium (LPS) light or low spectrum Light Emitting Diodes (LED) with a color temperature of 3000 kelvins or less and 3) only placed where needed. 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.
3. 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.

4. All refuse shall be contained in wildlife proof storage containers, at all times, and disposed of at an authorized waste management facility.
5. Should any wildlife be encountered during work activities, the wildlife shall not be disturbed and be allowed to leave the work site unharmed.
6. All components of project shall be developed, operated, and maintained in conformance with the Project Description, the approved Site 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, this permit shall be modified to identify the offsite licensed facility.
7. Cannabis cultivation and other commercial cannabis activity shall be conducted in compliance with all laws and regulations as set forth in the CMMLUO and MAUCRSA, as applicable to the permit type.
8. If operating pursuant to a written approved compliance agreement, permittee shall abate or cure violations at the earliest feasible date, but in no event no more than two (2) years from the date of issuance of a provisional clearance or permit. Permittee shall provide plans for curing such violations to the Planning & Building Department within one (1) year of issuance of the provisional clearance or permit. If good faith effort towards compliance can be shown within the two years following the issuance of the provisional clearance or permit, The Planning Department may, at the discretion of the Director, provide for extensions of the provisional permit to allow for additional time to meet the outstanding requirements.
9. 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.
10. 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.
11. Confinement of the area of cannabis cultivation, processing, manufacture or distribution to the locations depicted on the approved site 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). The allowance for a setback reduction of 600 feet from Public lands is approved as part of this project. The adjacent property owned by Six Rivers National Forest is managed for open space and/or wildlife habitat purposes, and not developed or designated recreational facilities are within 600 feet of the cultivation area.
12. 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.
13. Comply with the terms of any applicable Streambed Alteration (1600) Permit obtained from the Department of Fish & Wildlife.
14. Comply with the terms of a less-than-3-acre conversion exemption or timberland conversion permit, approved by the California Department of Forestry and Fire Protection (CAL-FIRE), if applicable.

15. 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).
16. Refrain from the improper storage or use of any fuels, fertilizer, pesticide, fungicide, rodenticide, or herbicide.
17. Pay all applicable application, review for conformance with conditions and annual inspection fees.
18. 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.
19. The Master Log Books maintained by the applicant to track production and sales shall be maintained for inspection by the County.
20. Pay all applicable taxes as required by the Humboldt County Commercial Marijuana Cultivation Tax Ordinance (Humboldt County Code Section 719-1 et seq.).

#### 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;
    - (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. On-site housing, if any.
26. Term of Commercial Cannabis Activity Special Permit. Any Commercial Cannabis Cultivation SP issued pursuant to the CMMLUO shall expire 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.
27. 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.
28. Permit Renewals to comply with Updated Laws and Regulations. Permit renewal 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.
29. 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.
30. Transfer of any leases or permits approved by this 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.
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 COA #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 Condition of Approval #26 and 27 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 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 NAHC will then be contacted by the Coroner to determine appropriate treatment of the remains pursuant to PRC 5097.98. Violators shall be prosecuted in accordance with PRC 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. A deposit is collected to cover this staff review. Permit conformance with conditions must be demonstrated prior to release of building permit or initiation of use and at time of annual inspection. A 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) shall be paid 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.

6. A Notice of Determination (NOD) will be prepared and filed 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 NOD and will charge this cost to the project.
7. The applicant shall be aware that the Federal Government considers the cultivation of cannabis to be an illegal activity. This project is accessed by using roads that pass-through lands owned by the Federal Government. The Federal Government may not allow the applicant to use these roads to transport cannabis. In such case, Humboldt County will not provide relief to the applicant. Approval of this permit does not authorize transportation of cannabis across Federal lands.

## ATTACHMENT 2

### REQUIRED FINDINGS FOR APPROVAL

**Required Findings:** To approve this 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 Humboldt County Code (Required Findings for All Discretionary Permits) specify the findings that are required to grant a Conditional Use Permit 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 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 CEQA Guidelines have been made.

**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 Estates (RE1-5):</b> Applies to lands adjacent to urban areas or rural communities with limited public services but suitable for single-family residential use and intended as a transition from urban development to rural lands. Density range is 1-5 acres/unit</p> <p><b>Conservation Floodplain (CF):</b> Applies to the channels of rivers and streams, including areas which carry normal flood waters or the area between existing and planned levees, dikes or other flood control features and in which agriculture and limited recreational uses may be desirable or permissible.</p>	<p>The project includes 5,420 square feet (SF) of existing outdoor full-sun cultivation. Ancillary propagation occurs within outdoor cultivation area, drying occurs onsite in a shipping container and processing occurs offsite. These uses are considered agricultural use that is consistent with the RE land use designation which allows general agriculture and intensive agricultural activities. The cultivation operation is wholly within the RE land use designation and over 290 feet from the CF 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-G5)</p> <p>Related policies: C-P3. Consideration of Transportation Impacts in Land Use Decision Making</p>	<p>Access to the site is via a driveway off of State Route 299 (SR 299) located on the applicant/owners adjoining parcel (APN 522-272-006; 39621 State Highway 299) which connects to the subject parcel.</p> <p>Due to the access road (SR 299) being maintained by California Department of Transportation (Caltrans) District 1, County Public Works, Land Use Division only recommended a referral to Caltrans. Caltrans referral response requested an encroachment permit for the existing road approach on APN 522-272-006 and proof of ownership/easement to access the subject parcel. The project is conditioned on obtaining a contingency easement over APN 522-272-006 for the benefit of the subject parcel, which is under the same ownership, and an encroachment permit from Caltrans for the driveway/private road encroachment onto SR 299.</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 project does not involve residential development, nor is the project site part of the Housing Element Residential Land Inventory. However, the project will not preclude any future residential development if in conformance with the general plan and zoning designations. 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.</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-P8, Development Review, CO-S1. Identification of Local Open Space Plan, and CO-S2. Identification of the Open Space Action Program</p>	<p>The RE land use designation is not identified as an area intended to implement the open space plan. However, the project can be found consistent with the Open Space Plan Element because the proposed project is consistent with the allowable uses of the RE Land Use Designation of general and intensive agriculture. The proposed cannabis cultivation - an agricultural product - is within land planned for agricultural purposes, consistent with the use of Open Space land for management production of resources.</p> <p>The subject parcel's eastern property line is located in the center of the Trinity River Waterway and is adjacent to Six River's National Forest lands located on APN 522-311-041. Measurements from Humboldt County's Web GIS show a setback of approximately 614 feet to the adjacent land and Google Earth Pro shows a setback of approximately 630 feet thus the cultivation area complies with the requires 600-foot setback. The project is conditioned on obtaining a licensed surveyor to update the site plan with accurate property lines and confirm setbacks to the northern property line and eastern property line shared with SRNF. Should the cultivation area not meet a required setbacks, the applicant may shift the cultivation area within the existing graded flat (no additional grading or tree removal authorized) or decrease the cultivation area to meet setbacks.</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>The subject property is located in the vicinity of potential Northern Spotted Owl (NSO) habitat and other sensitive species. The nearest NSO activity center is located approximate 0.6 miles from the site. A Biological Report was prepared in October 2018 by Natural Resources Management Corporation (NRM). NRM indicated there was likely West Coast fisher habitat on the adjacent public lands, however, the forest area on the parcel will not be affected by the current cultivation as it is an existing cleared flat with no new cannabis cultivation development proposed thus the project will have no impact on the West Coast Fischer. Four (4) ospreys were observed flying overhead and NRM expects no direct impacts on them as no trees will be removed and forging habitat is present in the vicinity but not directly on the property. NRM indicates that given the relatively small size of the cultivation area and close proximity to State Route 299, it is unlikely the daily operations will adversely affect the listed wildlife species. Additionally, cultivation activities are outdoor and unlikely to create light or noise pollution that would disturb wildlife. NRM recommended and structures requiring lighting (mixed light greenhouses or nurseries) be covered before sunrise and after sunset to avoid effects on nocturnal wildlife and attempt to keep noise levels at a minimum to help maintain the quality of habitat for all wildlife. Plant species were investigated as well, and no sensitive natural communities were found in the project area. Since the project seeks to permit pre-existing cannabis cultivation and no expansion, all major impacts to vegetation already occurred. Grading Permit 15-694-x-6 was approved in September 2014 and issued in June 2005. Light and noise attenuation measures are included in Ongoing Requirements/Development Restrictions in the Conditions of Approval and the project is conditioned on obtaining PGE for power. Additionally, based on comments received by CDFW, the project is conditioned to refrain from using synthetic netting; and ensure refuse is contained in wildlife proof storage and construct noise containment structure for all generators so that noise released shall be no more than 50 decibels measured at 100 feet which will decrease potential impacts to NSO and other sensitive species as a result of noise.</p>
<p>Conservation and Open Space</p>	<p>Goals and policies contained in this Chapter relate to the protection and enhancement of</p>	<p>The project was referred to the Northwest Information Center as well as the Tsungwe Tribe</p>

Plan Section	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
<p>Chapter 10</p> <p>Cultural Resources</p> <p>Section 10.6</p>	<p>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>and Hoopa Valley Tribe. Tsnungwe replied with no objection to the project.</p> <p>Ongoing conditions of approval are incorporated regarding the inadvertent discovery protocol to protect cultural resources.</p>
<p>Conservation and Open Space</p> <p>Chapter 10</p> <p>Scenic Resources</p> <p>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-G2x)</p> <p>Related policies: SR-S4. Light and Glare</p>	<p>The project is for existing outdoor cannabis cultivation in full sun (no mixed-light in hoop or greenhouses). A heavily forested approximately 230-foot buffer is maintained between the developed area and the Trinity River and the 5-acre property slopes from approximately 800 feet in elevation along SR 299 to approximately 500 feet in elevation along the Trinity River. Photo evidence from Biological Report prepared by NRM indicates that the full-sun outdoor cultivation area cannot be seen from the Trinity River nor the properties located on the opposite side of the river. Additionally, the cultivation area cannot be seen from SR 299 as it is approximately 130 feet from roadway with a 49 percent slope (64-foot elevation loss). The project is conditioned to ensure security lighting be motion activated and comply with the International Dark-Sky Association standards and Fixture Seal of Approval Program; see: <a href="https://www.darksky.org/our-work/lighting/lighting-for-citizens/lighting-basics/">https://www.darksky.org/our-work/lighting/lighting-for-citizens/lighting-basics/</a>. Standards include but are not limited to the following, 1) light shall be shielded and downward facing, 2) shall consist of Low Pressure Sodium (LPS) light or low spectrum Light Emitting Diodes (LED) with a color temperature of 3000 kelvins or less and 3) only placed where needed.</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>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 delisting 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); and</p> <p>Related policies: WR-P8. Erosion and Sediment Discharge; WR-P36. Erosion and Sediment Control Measures.</p>	<p>The applicant hand waters seeds or purchased starts during ancillary propagation activities until transplanted into 200-gallon smart pots which utilizes micro sprinkler irrigation methods with mulch to conserve water and minimize the potential impact to surface and groundwater flows. The Project site is enrolled (WDID: 1B161288CHUM) as a Tier 2 site with North Coast Regional Water Quality Control Board's (NCRWQCB) Order No. 2015-0023 (Order). A Water Resources Protection Plan (WRPP) to protect water quality from cannabis cultivation and related activities was prepared by Timberland Resource Consultants in September 2016 and revised October 18, 2017. The applicant completed erosional control measured including stabilization of cut bank with large woody debris revetment, installation of flex pipe and French drain to re-direct storm water run-off from State Route 299, silt fencing, wattles and mulching, and graveling the roadway. Also, all enrollees must transition to the new Cannabis Cultivation Policy and Cannabis General order administered by the State Water Resources Control Board by July 31, 2019, which is include in the Conditions of Approval. Additionally, a Self-Certification (EPIMS-01923) pursuant to the California Department of Fish and Wildlife (CDFW) Environmental Permit Information Management System (EPIMS) was approved on October 31, 2018 which confirms the project does not or will result in a diversion or obstruction of water, disturbance to land or vegetation and result in deposition of any material in to or adjacent to any river, stream or lake. The project is consistent with this standard. Conditions of Approval require the applicant to implement all identified corrective measures in the WRPP to achieve compliance with the 12 standard conditions and transition to the new Cannabis Cultivation Policy and Cannabis General.</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 G11)</p> <p>Related policies: WR-IM7. Basin Plan Septic Requirements; and IS-P20. On-Site Sewage Disposal Requirements.</p>	<p>There is a portable toilet rental onsite. Only cultivation and drying will occur onsite. Processing will occur offsite. Division of Environmental Health (DEH) recommended approval with conditions to either 1) No processing until an acceptable site suitability report can establish the potential for onsite water treatment system, or 2) Provide an invoice to DEH to confirm the continual use of portable toilets to serve the needs of cultivation staff prior to reissuance of annual permit. The applicant submitted an invoice dated August 2, 2018 confirming its use and the project is conditioned on providing additional invoices prior to reissuance of annual permit. No processing will occur onsite, so portable toilets are sufficient.</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>Currently a generator provides power for drying activities within the shipping container during the month of October. The applicant has requested a PGE drop (Notification # 111803362) to discontinue generator use. The Biological Report prepared by NRM recommended limited project related noise and CDFW referral comments requested the construction of noise containment structures for the generator so that noise released shall be no more than 50 decibels at 100 feet which is included in the Conditions of Approval.</p>
<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-P71. Site Suitability, S-P6. Structural Hazards</p>	<p>The project site is not located in a mapped Alquist-Priolo fault zone nor is subject to liquefaction. The parcel has slopes greater than 50% and "Moderate Instability," as designated on the Humboldt County WebGIS layers. It is also located in Geologic Unit BC per mapping from the National Earthquake Hazards Reduction Program (NEHRP). Lands in Unit BC are not expected to amplify ground shaking due to presence of rock (B) and very dense soil and soft rock (C). All grading on the property has been permitted (15-694-X-6) and no additional grading is proposed. Although the WRPP identified erosional issues with the cut bank above the cultivation site as a result of drainage runoff from State Route 299, the issues were corrected, and the approved CDFW EPIMS-01923 notification dated July 17, 2018 confirmed the erosional and drainage issues were resolved. Therefore, the project is not expected to contribute to potential hazards due to geologic instability.</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>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-P10, Federal Flood Insurance Program; S-P11, Flood Plains; S-PX3, Construction Within Special Flood Hazard Areas</p>	<p>The subject site is outside any mapped flood hazard areas. The project site is not within a mapped dam or levee inundation area and, at approximately 27 miles distance from the coast and approximately 620 feet above mean sea level, is outside the areas subject to tsunami run-up. The site is located in ZFEMA Flood Map 06023C, Firm Panel 06023C0800F, Zone D. Zone D specifies that there are possible but undetermined flood hazards because no analysis has been conducted and flood insurance is not required. The cultivation area is approximate 490 feet to the gravel bar with an elevation change of 172 feet. Therefore, the project is not expected to contribute to potential hazards due to flooding.</p>
<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 subject property has a Very High Fire Hazard Severity Rating and a High Fire Rating and is located 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. CAL FIRE comments recommended compliance with the requirements of the County's Fire Safe Regulations (HCC Section § 3111-1 <i>et seq.</i>) which establishes development standards for minimizing wildfire danger in state responsibility designated areas. The project is for outdoor only, includes two existing shipping containers and municipal water is available for fire suppression activities if needed. No new major structures are proposed. The site plan depicts emergency access and turn around. Up to two people (owner operators) may be utilized (no employees). The project is consistent with this standard.</p>
<p>Community Infrastructure and Services Element, Chapter 5</p> <p>Implementation Action Plan</p>	<p>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.</p>	<p>N/A – site located within the Willow Creek Volunteer Fire District.</p>

<b>Plan Section</b>	<b>Summary of Applicable Goal, Policy or Standard</b>	<b>Evidence Which Supports Making the General Plan Conformance Finding</b>
Air Quality Chapter 15	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-G2X) and the successful reduction of greenhouse gas emissions to levels consistent with state and federal requirements (AQ-G3)  Related policies: AQ-P4, Construction and Grading Dust Control, AQ-S1. Construction and Grading Dust Control, AQ-P7. Interagency Coordination.	Grading permit 15-694-X-6 was approved 9/18/14 and issued 6/24/15, and all work complied with the North Coast Air Quality Management District (NCAQMD) fugitive dust emission standards.  Sources of greenhouse gas emissions may include vehicle trips from the site for supplies or to distributors or off-site processors and use of a generator for drying activities during the month of October. The applicant applied for a PGE drop (Notification # 111803362) to discontinue generator use. The applicants live in the Burnt Ranch area which is approximately 15 miles south of the project site. The quantity of greenhouse gas emissions generated from the project is expected to be less than significant.

**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.

<b>Zoning Section</b>	<b>Summary of Applicable Requirement</b>	<b>Evidence That Supports the Zoning Finding</b>
§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 522-282-003 is a legal parcel per Creation Deed # 15418 recorded September 24, 1956. There is no further evidence of subdivision nor terms, conditions or violations. Therefore, the subject parcel was lawfully created in its current configuration and can be developed as proposed.
§314-8.1 Agriculture General (AG)	The Agriculture General or AG Zone is intended to be applied in areas in which agriculture is the desirable predominant use and rural residential uses are secondary.	The project is for the cultivation of commercial outdoor cannabis in full sun with ancillary drying activities (no processing) activities. Commercial cannabis cultivation is recognized under State law as an agricultural product and agriculture activities are principally permitting and a desired use in the AG zone. The proposed use is specifically allowed with a special permit under Section 55.4.8.2.2 of the CMMLUO.
Minimum Lot Area:	Two and one-half (2 ½) acres.	4.6 acres/200,376 SF (assessed lot)
Minimum Lot Width:	One hundred feet (100').	Approximately 290 feet wide

Maximum Lot Depth:	(None specified)	Approximately 783 feet
Max. Lot Coverage:	Thirty-five percent (35 %).	0.001 % (320 SF = two (2) shipping containers 20'x8')
Min. Yard Setbacks (through the SRA requirements):	Firesafe (SRA) setbacks of 30 feet from all sides. Front: 30 feet Rear: 20 feet Side: Ten percent (10%) of the lot width on each side but not more than twenty feet (20') shall be required.	Meets 30-foot SRA Front (west): > 80 feet Rear (east): > 630 Side (north): 30 feet Side (south): 103 feet
Max. Building Height:	None specified	N/A – Shipping container is approx. 8.5 feet
Farm Outbuildings	Farm outbuildings shall not be less than twenty feet (20') from any dwelling on the premises	N/A - No residence on parcel.
§314-61.1 Streamside Management Area (SMA)	Placement of soil within SMAs shall be prohibited, except where specifically authorized by the SMA ordinance. Development within SMAs may include wildlife enhancement and restoration projects. The SMA of perennial streams outside of urban development and expansion areas is defined as 100 feet from the stream transition line.	The parcels western boundary adjoins the Trinity River. The cultivation area is over 200 feet from the River's riparian drip line according to Humboldt County's Web GIS thus meets the required SMA 100-foot setback and 200-foot setback when necessary to include slides, or areas with visible instability. However, the forest buffer between the cultivation area and Trinity River gravel bed is heavily vegetated and shows no sign of erosional issues. The Timber Conversion Report prepared by Timberland Resource Consultants states the Trinity River is greater than 200 feet and a Class II water course is approximately 70 feet south east of the cultivation area which also meets a required 50-foot setback. Also, the Biological Report prepared by Natural Resources Management Corporation indicates the portion of the property where the Trinity River is located is inaccessible and received no impacts from current activities and thus was not included in the assessment. Additionally, irrigation water is sourced from the Willow Creek Community Services District. Therefore, the project conforms to the referenced standard.
§314-109.1 Off-Street Parking	Off Street Parking for Agricultural use*: Parking space per employee at peak shift. A minimum of three parking spaces are required. <i>*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.</i>	The applicant states that not employees will be utilized, only the two (2) owner operators. The minimum required parking spaces is two (2) and the site plan shows three (3).

**314-55.4 Commercial Cultivation, Processing, Manufacturing and Distribution of Cannabis for Medical Use Inland Land Use Regulation (CMMLUO)**

<p>§314-55.4.8.2</p>	<p>Commercial cannabis cultivation is allowed on parcels zoned U, with no parcel size limitation. 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.</p>	<p>Aerial imagery shows an initial conversion between 2005 – 2009 and then the site was expanded to its present size and configuration between 2010 and 2012. A Notice of Nuisance was recorded on the adjoining parcel (522-272-006 under same ownership) for illegal grading on both parcels (Vio-11-171) which was resolved through issuance of grading permit 15-694-x-6. A Timber Conversion Report was prepared by Timberland Resource Consultants (TRC) on July 16, 2018 and confirmed the conversion of 0.70 acres occurred but that it did not exceed the 3-acre conversion exemption maximum. TRC concluded that the conversion activities complied with the California Forest Practices Act and the California Forest Practice Rules and had no recommendations for the project. The report was forwarded to Calfire in April 2019 who responded with no comments.</p>
<p>§314-55.4.8.2.2 Existing Outdoor and Mixed-Light Cultivation Areas</p>	<p>A Zoning Clearance Certificate, Special Permit or Use Permit may be issued for outdoor or mixed-light commercial cannabis cultivation for some or all of the cultivation area in existence prior to January 1, 2016, in zoning district U on parcels one acre or larger, but only when possible to bring the cultivation into compliance with all applicable standards set forth in this section and to eliminate existing violations as specified in this ordinance. No expansion of the existing cultivation area shall be permitted.</p>	<p>The applicant has provided evidence of the existing outdoor cultivation area prior to January 1, 2016 through the Commercial Cannabis Activity Registration Form received August 22, 2016 but did not specify an exact amount. County staff confirmed approximately 5,417 SF through the Cultivation Area Verification (CAV) process for issuance of the interim permit. The proposed project includes permitting 5,420 SF of existing outdoor cultivation on a parcel zoned AG. The cultivation area is consistent with the requirements for the cultivation type, status, and zoning of the parcel. The applicant will comply with all conditions of the CMMLUO, as specified in the recommended conditions of approval.</p>
<p>§314-55.4.8.10 Permit Limit</p>	<p>No more than four commercial cannabis activity permits may be issued to a single person.</p>	<p>According to records maintained by the Department, the applicant applied for one (1) and they are entitled to four (4). This application is for a single permit for cultivation.</p>
<p>§314-55.4.9.1 Accessory Processing</p>	<p>Processing for cultivation requiring a Special Permit or Use Permit will be considered in the Use Permit application.</p>	<p>Drying and curing occurs onsite in existing shipping container. All additional processing, such as timing and packaging, will occur offsite at a licensed facility.</p>
<p>§314-55.4.9.4 Pre-Application Registration</p>	<p>Existing cultivation sites shall register with the County within 180 days of the effective date of this ordinance.</p>	<p>The original applicant submitted the required registration form on August 22, 2016.</p>

§314-55.4.10 Application Requirements	Identifies the Information Required for All Applications	Attachment 4 identifies the information submitted with the application. Contents of the application are on file. All outstanding items are included as conditions of approval.
§314-55.4.11 Performance Standards	Identifies the Performance Standards for Cannabis Cultivation Activities	All the applicable performance standards are included as Conditions of project approval. They are required to be met throughout the timeframe of the permit.
§314-55.4.11.c Performance Standards-Water	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.	Irrigation water is sourced from the Willow Creek Community Services District (WCCSD). Annual estimated irrigation usage is 54,500 gallons (March – October). WCCSD provided a “Will Serve” letter for up to 30,000 cubic feet (224,415 gallons) for irrigation. No surface water diversions are utilized or proposed.
§314-55.4.11.d Performance Standards-Setbacks	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).	The site plan shows the project complies with the 30-foot property line setback for cannabis cultivation and onsite processing, and zoning and SRA requirements; and, indicates that there are no parks, schools, bus stops, tribal cultural resources, or places of religious worship within 600 feet of the cultivation site. However, the site plan states the property lines are approximate and not surveyed, and the property shares its eastern border with Six Rivers National Forest (SRNF) using the Trinity River as its property line. Measurements from Humboldt County's Web GIS show a setback of approximately 614 feet to the adjacent land and Google Earth Pro shows a setback of approximately 630 feet thus the cultivation area complies with the requires 600-foot setback. The project is conditioned on obtaining a licensed surveyor to update the site plan with accurate property lines and confirm setbacks to the northern property line and eastern property line shared with SRNF. Should the cultivation area not meet a required setbacks, the applicant may shift the cultivation area within the existing graded flat (no additional grading or tree removal authorized) or decrease the cultivation area to meet setbacks.

<p>§314-55.4.11.0 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>Currently a generator provides power for drying activities within the shipping container during the month of October. The applicant has requested a PGE drop (Notification # 111803362) to discontinue generator use. The Biological Report prepared by NRM recommended limited project related noise and CDFW referral comments requested the construction of noise containment structures for the generator so that noise released shall be no more than 50 decibels at 100 feet which is included in the Conditions of Approval.</p>
<p>§314-55.4.17 Sunset Date</p>	<p>No application for any Use Permit pursuant to the CMMLUO shall be processed for issuance or approval that is received after December 31, 2016.</p>	<p>The applicant filed the application on September 9, 2016.</p>

**4. Public Health, Safety and Welfare.** The following table identifies the evidence which supports finding that the proposed location of the use 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 properties or improvements in the vicinity.

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 any environmental damage.

**5. Residential Density Target:** The following table identifies the evidence which supports finding that 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.

Code Section	Summary of Applicable Requirement	Evidence that Supports the Required Finding
§312-17.1.5 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 project does not involve residential development, nor is the project site part of the Housing element Residential Land Inventory. However, the project will not preclude any future residential development. 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. The project is in conformance with the standards in the Housing Element.

**6. Environmental Impact:** The following table identifies the evidence which supports finding that the proposed development will not adversely impact the environment.

California Environmental Quality Act §15164	Addendum to an EIR or Negative Declaration.	As lead agency, the Department prepared an Addendum to the previously adopted Mitigated Negative Declaration (MND) (State Clearinghouse # 2015102005) prepared for the Commercial Medical Marijuana Land Use Ordinance (CMMLUO) and adopted by the County Board of Supervisors January 26, 2016. The MND prepared for the CMMLUO established that the environmental effects of existing cultivation operations would be reduced from the baseline impacts through the regulations applied by the CMMLUO. The proposed project is consistent with all regulations within the CMMLUO and all mitigation measures of the MND. The project is for the approval of an existing cannabis cultivation operation with associated processing facility and on-site reorganization to decrease environmental impacts. The environmental document on file include detailed discussions of all the relevant environmental issues.
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**ATTACHMENT 3**

**CEQA ADDENDUM TO THE  
MITIGATED NEGATIVE DECLARATION FOR THE COMMERCIAL MEDICAL MARIJUANA LAND USE ORDINANCE**

**Commercial Medical Marijuana Land Use Ordinance Mitigated Negative Declaration (MND)  
(State Clearinghouse # 2015102005), January 2016**

**APN 522-282-003; 39675 Highway 299,  
Willow Creek, County of Humboldt**

**Prepared By  
Humboldt County Planning and Building Department  
3015 H Street, Eureka, CA 95501**

**June 2019**

## Background

### Modified Project Description and Project History –

The Commercial Medical Marijuana Land Use Ordinance (CMMLUO) established specific regulations for commercial cannabis operations in Humboldt County. These regulations were developed in concert with the Mitigated Negative Declaration (MND) that was adopted for the ordinance in order to implement the mitigation measures of the MND. The MND addressed the broad environmental impacts that could be expected to occur from the adoption and implementation of the ordinance. The MND specified that the regulations established in the CMMLUO would mitigate the impacts of existing cannabis operations by establishing regulations for an existing unregulated land use to help prevent and reduce environmental impacts that are known to result from unpermitted baseline cultivation operations. Commercial cannabis cultivation in existence as of December 31, 2015 was included in the environmental baseline for the MND and the MND states that "Bringing existing operations into compliance will help to attenuate potential environmental effects from existing cultivation activities, including aesthetic impacts resulting from improper operation or poor siting." The current project was contemplated by the MND and compliance with the provisions of the CMMLUO will fully mitigate all environmental impacts of the project to a less than significant level.

The modified project involves a Special Permit (SP16-088) for 5,420 square feet (SF) of existing outdoor full-sun cultivation. Ancillary seed propagation occurs within the cultivation area or immature plants are purchased offsite. Water is sourced from the Willow Creek Community Service District via a water connection located on the adjacent parcel (APN 522-272-006) under same ownership. No water storage is proposed. Estimated annual irrigation water usage is 54,500 gallons (10 gal/SF). Two (2) shipping containers are utilized onsite for drying activities and storage. Processing occurs offsite at a licensed facility. Power to the site is provided by generator and PGE service has been requested.

The project does not utilize supplemental lighting for cultivation nor propagation activities and processing occurs offsite. The project is located on an existing flat that was permitted in 2015 under grading permit 15-694-X-6. Additional erosion control measures identified in the Water Resources Protection Plan were completed including stabilization of cut bank with large woody debris revetment, installation of flex pipe and French drain to re-direct storm water run-off from State Route 299, silt fencing, wattles and mulching, and graveling the roadway. These measures taken were to ensure the protection of the watershed and nearby habitat.

The modified project is consistent with the adopted MND for the CMMLUO because it complies with all standards of the CMMLUO which were intended to mitigate impacts of existing cultivation. These include constructing noise containment structure for the generator until PG&E power is connected and ensuring security lighting be motion activated and comply with the International Dark-Sky Association standards and Fixture Seal of Approval Program, which will limit impacts to biological responses as a result of light and noise; and, utilizing municipal water decreases impacts to water resources.

**Purpose** - Section 15164 of the California Environmental Quality Act (CEQA) provides that the lead agency shall prepare an addendum to a previously certified Mitigated Negative Declaration (MND) if some changes or additions are necessary but none of the conditions described in Section 15162 calling for a subsequent EIR or Negative Declaration have occurred. Section 15162 states that when an EIR has been certified for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

1. Substantial changes are proposed in the project which require major revisions of the previous MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous MND was certified as complete, shows any of the following: A) the project will have one or more significant effects not discussed in the previous MND; B) significant effect previously examined will be substantially more severe than shown in the previous MND; C) mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or D) mitigation measures or alternatives which are considerably different from those analyzed in the previous MND would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

### **Summary of Significant Project Effects and Mitigation Recommended**

No changes are proposed for the original MND recommended mitigations. The proposal to authorize the continued operation of an existing cannabis cultivation site consisting of 5,420 square feet of existing outdoor cannabis cultivation with ancillary storage and drying facilities is fully consistent with the impacts identified and adequately mitigated in the original MND. The project as conditioned to implement responsible agency recommendations, results in no significantly adverse environmental effects beyond those identified in the MND. Compliance with the CMMLUO ensures consistency with the adopted MND and provides for mitigation of all project related impacts to a less than significant level.

In reviewing the application for consistency with the adopted MND, the County considered the following information and studies, among other documents:

- Biological Report dated October 5, 2018 prepared by Natural Resources Management Corporation.
- A Water Resources Protection Plan for APN 522-282-003 (WDID: 1B161288CHUM) dated September 1, 2016 and revised October 18, 2017 prepared by Timberland Resource Consultants for the North Coast Regional Water Quality Control Board Order No. 2015-0023.
- Timber Conversion Report for APN 522-282-003 dated July 16, 2018 prepared by Timberland Resource Consultants.
- Cultivation and Operations Plan prepared by Rustic Farms received June 27, 2017.
- Plot Plan for Rustic Farms, LLC prepared by Trinity Valley Consulting Engineers (TVCE) dated April 2018.
- Approved Self-Certification (EPIMS-01923) Notification pursuant to the California Department of Fish and Wildlife Environmental Information Management System (EPIMS).
- Willow Creek Community Services District "Will Serve" letter.

### **Other CEQA Considerations**

Staff suggests no changes for the revised project.

### **EXPLANATION OF DECISION NOT TO PREPARE A SUPPLEMENTAL MITIGATED NEGATIVE DECLARATION OR ENVIRONMENTAL IMPACT REPORT**

See **Purpose** statement above.

In every impact category analyzed in this review, the projected consequences of the current project proposal are either the same or less than significantly increased than the initial project for which the MND was adopted. Based upon this review, the following findings are supported:

## **FINDINGS**

1. The proposed project will permit an existing cannabis operation and bring the operation into compliance with county and state requirements intended to adequately mitigate environmental impacts.
2. The circumstances under which the project was approved have not changed substantially. There are no new significant environmental effects and no substantial increases in the severity of previously identified effects.
3. For the current proposed project, there has been no new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous MND was adopted as complete.

## **CONCLUSION**

Based on these findings it is concluded that an Addendum to the certified MND is appropriate to address the requirements under CEQA for the current project proposal. All of the findings, mitigation requirements, and mitigation and monitoring program of the MND, remain in full force and effect on the original project.

## ATTACHMENT 4

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

Attachment 4 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. (Plot Plan Prepared by Trinity Valley Consulting Engineers (TVCE) dated April 2018 - Attached with project maps)
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. (Prepared by applicant received June 27, 2017 (Attached))
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. (Not applicable)
6. Description of water source, storage, irrigation plan, and projected water usage. (Included in Cultivation and Operations Plan)
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. (NOI and reporting - 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 (CDFW). (Not applicable)
9. 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)
10. 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)

11. 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)
12. Road Evaluation Report dated 8/31/2018. (On file)
13. Grading Permit 15-694x6 Plot Plan approved 10/9/14. (On file)
14. Timber Conversion Report prepared by Timberland Resources Consultants, dated July 16, 2018. (Attached)
15. Water Resources Protection Plan prepared by Timberland Resources Consultants dated 9/1/16 and revised 10/18/17. (Attached)
16. Biological Report prepared by Natural Resources Management Corporation (RNM) dated October 5, 2018. (Attached)
17. Willow Creek Community Services District "Will Serve" letter dated May 29, 2019. (Attached)
18. Approved Self-Certification (EPIMS-01923) Notification pursuant to the California Department of Fish and Wildlife Environmental Information Management System (EPIMS). (Attached)
19. BB Portable Toilet Invoice dated August 2, 2018.

# Cultivation and Operations Plan



- ▶ **Water Source:** Willow Creek Community Services District. We hand-water until transplant into 200G smart pots. We conserve water with the use of micro sprinklers and mulch for the main season 200G smart pots.

Projected water usage—averaged daily is approx. 220 gallons/day over the 8 month growing season.

- March- 500 gallons
- April- 5,000 gallons
- May- 7,000 gallons
- June- 10,000 gallons
- July- 10,000 gallons
- August- 10,000 gallons
- September- 7,000 gallons
- October- 5,000 gallons

- ▶ **Site drainage, runoff, and erosion control measures:** The cultivation site was re-engineered by TVCE under a grading permit. Erosion control measures on site include jute matting, waddles, seeded mulch, silt fencing and gravel.
- ▶ **Measures taken to ensure protection of watershed and nearby habitat:** We have a water discharge permit. We are working on a water resource protection plan with Timberland Resource Consultants. We cultivate using only organic practices and we use water conservation cultivation techniques. We will maintain the erosion control and runoff methods that were engineered and are in place.
- ▶ **Protocols for proper storage and use of fertilizers, pesticide, etc:** Storage will be in shipping container on site in labeled sealed bins as needed. Follow directions for use and follow all safety protocol. Safety gear will be provided in another bin as needed; first aid kit, eye wash, mask, gloves. We do not use any pesticides on our farm and are working on a Integrated Pest Management plan for the farm.

- Description of cultivation activities: We will cultivate a small main season outdoor (no artificial light) crop. Our season will start in March with the germination of our seeds. We will transplant into smart pots in June and harvest in October.
- Processing plan: flowers will be harvested, dried, and cured on site. Flowers will be bucked down and vacuum sealed for proper storage and locked in secure shipping container.
- Schedule of activities during each month:
  - March- seeds will be started in soil 6packs and watered as needed and transplanted into one gallon or three gallon pots at the middle to end of March.
  - April- plants will pre-flower and we will sex out plants and transplant sexed females into 3-10 gallon pots, water as needed. The males will be waste/compost.
  - May- continue transplanting as necessary. Water approx. every other day. Use beneficial soil drench inoculant. We will also amend the pre-existing soil on site in the 200G smart pots.
  - June- transplant females into 200G smart pots, water as needed(usually every 3 days), and use fencing cage to support plant growth.
  - July- prune and water as needed. Soil drench beneficial innoculants per instructions for use.
  - August- top dress fertilize with mocha bat guano every two weeks. use netting for support of budding plant growth and water every two days.
  - September- fertilize with liquid bloom once per instructions for use. clean dead leaves from plants and water as needed.
  - October- harvest flowers as needed and water as needed. This is our only month of projected generator use until we get a power drop. PG&E service request was submitted (Notification#111803362) August 9, 2016. We will dry and cure in shipping containers.
- Security Plan: There is a chain link fence with razor wire the length of the property along Hwy 299 and a locking gate to

property off Hwy 299. The perimeter of the garden will have light and motion detection sensors. There will be personnel on site from Sept1-Oct31.



App 11138

39675 Hwy 299

APN 522-282-003

Rustic Farms COPS amendment

Security Plan- During flowering season a person will be present 24 hours a day. Motion lights and motion security sensors will be present in the cultivation area.

Processing will be performed offsite.

Soil Management- No soil will be stored onsite except soil being used in existing grow containers. No compost will be stored onsite.

Generator- generator used will be an EU6500 series Honda not to exceed 50 decibels measured at the property line. Sound dampening will be added around generator if necessary.



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



July 16, 2018

Holly Hayes  
 Rustic Farms LLC  
 PO Box 143  
 Burnt Ranch, CA 95527

Dear Holly Hayes,

Re: APN 522-282-003

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 #11138) for APN 522-282-003. 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), sited below.

*Where existing or proposed operations occupy 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 circulate the report to CAL-FIRE for review and comment.*

Timberland Resource Consultants (TRC) inspected and evaluated the cultivation site and associated areas contained within the application on July 4, 2018 and July 15, 2018. The RPF 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: 522-282-003  
 Acreage: 4.6 acres  
 Legal Description: SW ¼ of Section 33  
Township 7 North, Range 5 East,  
Humboldt Base & Meridian, Humboldt County  
 Located on USGS 7.5' Quadrangle: Willow Creek  
 Humboldt County Zoning: Agriculture General (AG)  
 Site Address: 39675 State Highway 299  
 Landowner/Timber Owner: Tyler Thompson & Holly Hayes

## Project Location (Cont.)

The project is located in Humboldt County, in the Willow Creek area, on the east side of State Highway 299, approximately 0.7 miles south from the intersection of State Highway 96 and State Highway 299, on the property known as 39675 State Highway 299.

## 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 Aerials. To avoid speculation and maintain relevancy, the property background focuses mainly on the past 10-15 years.*

The forested portions of the property contain second growth Douglas-fir, tanoak, red alder and madrone. The balance of the property is Trinity River gravel bar. There were signs of past timber harvesting, which appeared to have occurred approximately 60-70 years ago, based upon the presence of old growth Douglas-fir stumps and skid roads. Review of 1947 historic aerial imagery revealed dense stands of old growth Douglas-fir within the subject property and surrounding north facing slopes. Review of historic aerial imagery from 1972 shows no remaining old growth Douglas-fir stands and signs of major ground disturbance or changes in stand structure or composition suggesting that timber harvesting occurred between this time period. Review of more recent historic imagery from 1988 to 2016 reveals no signs of additional harvest entry except for conversion operations as described below. Moreover, no timber harvesting plans have been recorded by Cal Fire (Watershed Mapper v2 [http://egis.fire.ca.gov/watershed\\_mapper/](http://egis.fire.ca.gov/watershed_mapper/)). The current landowner, Tyler Thompson & Holly Hayes, purchased the property from Josh and Lisa McKnight on 6-20-2018

## Project Description

One existing cultivation site was inspected during the field assessment within APN 522-282-003. The following table lists the inspected site and its respective acreage; see detailed site descriptions below.

Cultivation Site/Associated Area	Total Acreage	Converted?	Converted Acreage
Cultivation Site	0.70	Yes	0.70
TOTAL	0.70		0.70

### Cultivation Site

The cultivation site encompasses an approximately 10,000 ft<sup>2</sup> graded flat, which historically consisted of approximately 6,000 ft<sup>2</sup> of full term/outdoor cultivation. Review of historic aerial imagery reveals the site was initially developed between 2005-2009. Between 2010 and 2012 the site was significantly expanded to its present size and configuration. Subsequent timber harvesting occurred in association with the stabilization of the cut slopes and fill slopes from 2014 to the present. The total acreage of timber conversion is approximately 0.70 acres. However, cut and fill slopes are expected to naturally regenerate with Douglas-fir and other hardwoods overtime, which conservatively account for 0.45 acres. The cultivation activities observed at this site impede the use of this space for current timber growth and harvesting, and the landowner has effectively converted the single use of this space from timber production to cannabis cultivation.

### Timberland Conversion Summary

TRC observed approximately 0.70 acres of unauthorized timberland conversion. 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)."

No conversion areas exist within a Watercourse and Lake Protection Zone (WLPZ) or Equipment Exclusion Zone (EEZ) on the property. The closest watercourse is a Class III, which is located approximately 70 feet southeast as depicted on the attached map. The Trinity River is greater than 200 feet east of the cultivation site.

### 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."

- 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.

The RPF identified no slash, woody debris, or logs from past conversion activities that require treatment.

### 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"

A query of the California Natural Diversity Database (CNDDDB) on July 9, 2018 revealed one observation of sensitive, rare, threatened, or endangered species or species of special concern within a 0.7-mile radius biological assessment area (BAA) surrounding the property. The silver-haired bat (*Lasiurus noctivagans*) was observed approximately 1,400 feet north of the cultivation site. No 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. The query of the CNDDDB revealed one known Northern Spotted Owl (NSO) Activity Center (HU 325) within 0.7 miles of the property. This AC is approximately 3,600 feet southwest of the cultivation site. Given the presence of Highway 299

## Limitations and Considerations for Timberland Conversion Activities (Cont.)

and numerous residences surrounding the project area, NSO habitat within the property is "foraging" at best.

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 symptoms, signs, or evidence of oak mortality were observed (*Oak Mortality Disease Control*). According to UC Berkeley's Mobile SOD Map, no SOD infections are located within a one-mile radius of the property. No risk assessment was made at the property. The conversion activities do not appear to have impacted forest health.

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)(1): "No timber operations are allowed on significant historical or archeological sites."

No archeological sites were observed during the TRC field assessment. The RPF 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 Chris Carroll, a certified archaeological surveyor with current CALFIRE Archeological Training (Archeological Training Course #575). The survey consisted of examining boot scrapes, rodent disturbances, natural and manmade areas of exposed soils, and road and cultivation site surfaces.

Per 14 CCR 1104.2(2)(1), 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 0.70 acres of unauthorized timberland conversion has occurred within APN 522-282-003. This total does not exceed the three-acre conversion exemption maximum. The conversion activities conducted on the property comply with the California Forest Practice Act and the California Forest Practice Rules. The RPF has no recommendations for this project.

Sincerely,



Chris Carroll, RPF #2628  
Timberland Resource Consultants



# APN 522-282-003

## Conversion Evaluation Map

 Property Boundary

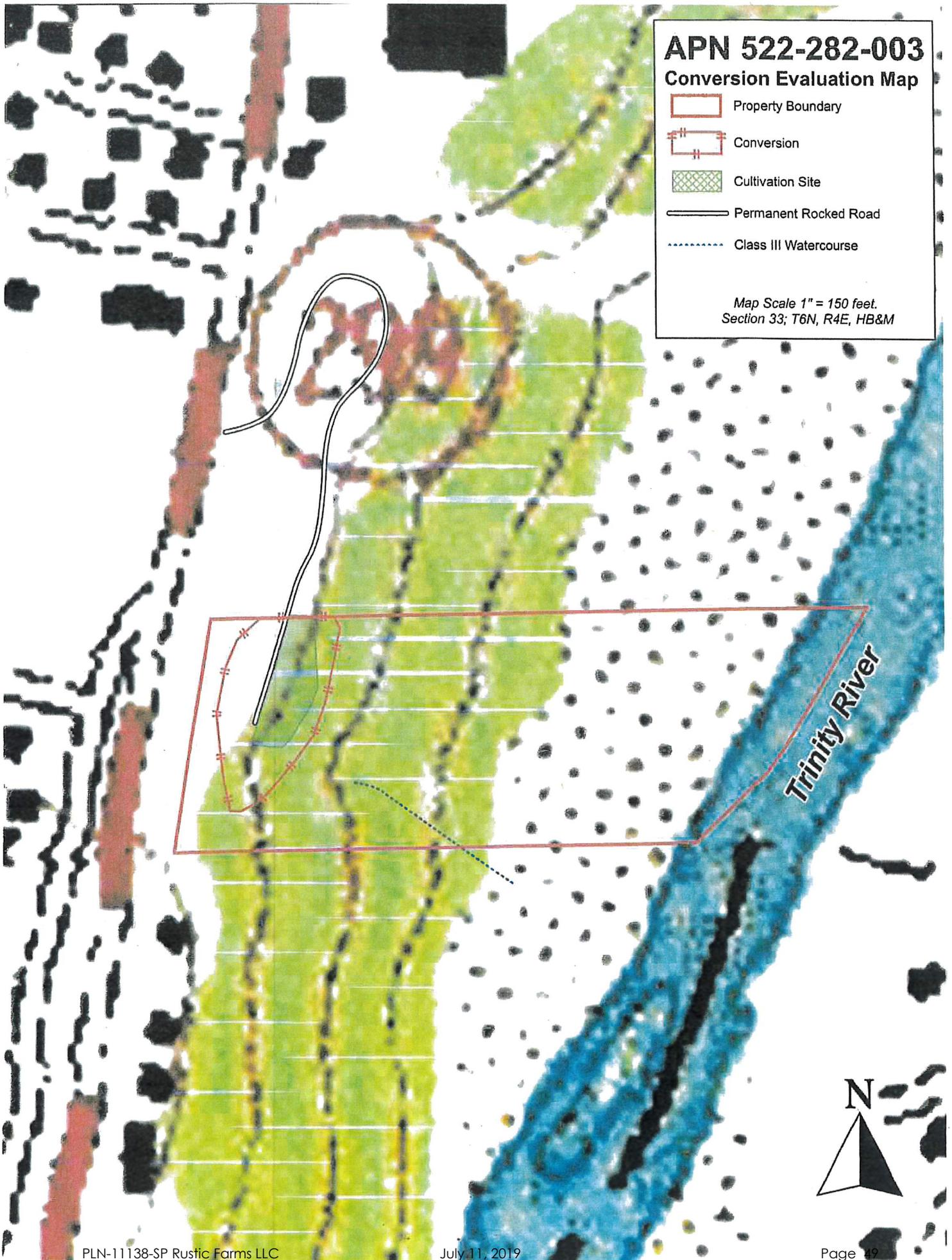
 Conversion

 Cultivation Site

 Permanent Rocked Road

 Class III Watercourse

Map Scale 1" = 150 feet.  
Section 33; T6N, R4E, HB&M



# APN 522-282-003

## Conversion Evaluation Map

-  Property Boundary
-  Conversion
-  Cultivation Site
-  Permanent Rocked Road
-  Class III Watercourse

Map Scale 1" = 150 feet.  
Section 33; T6N, R4E, HB&M

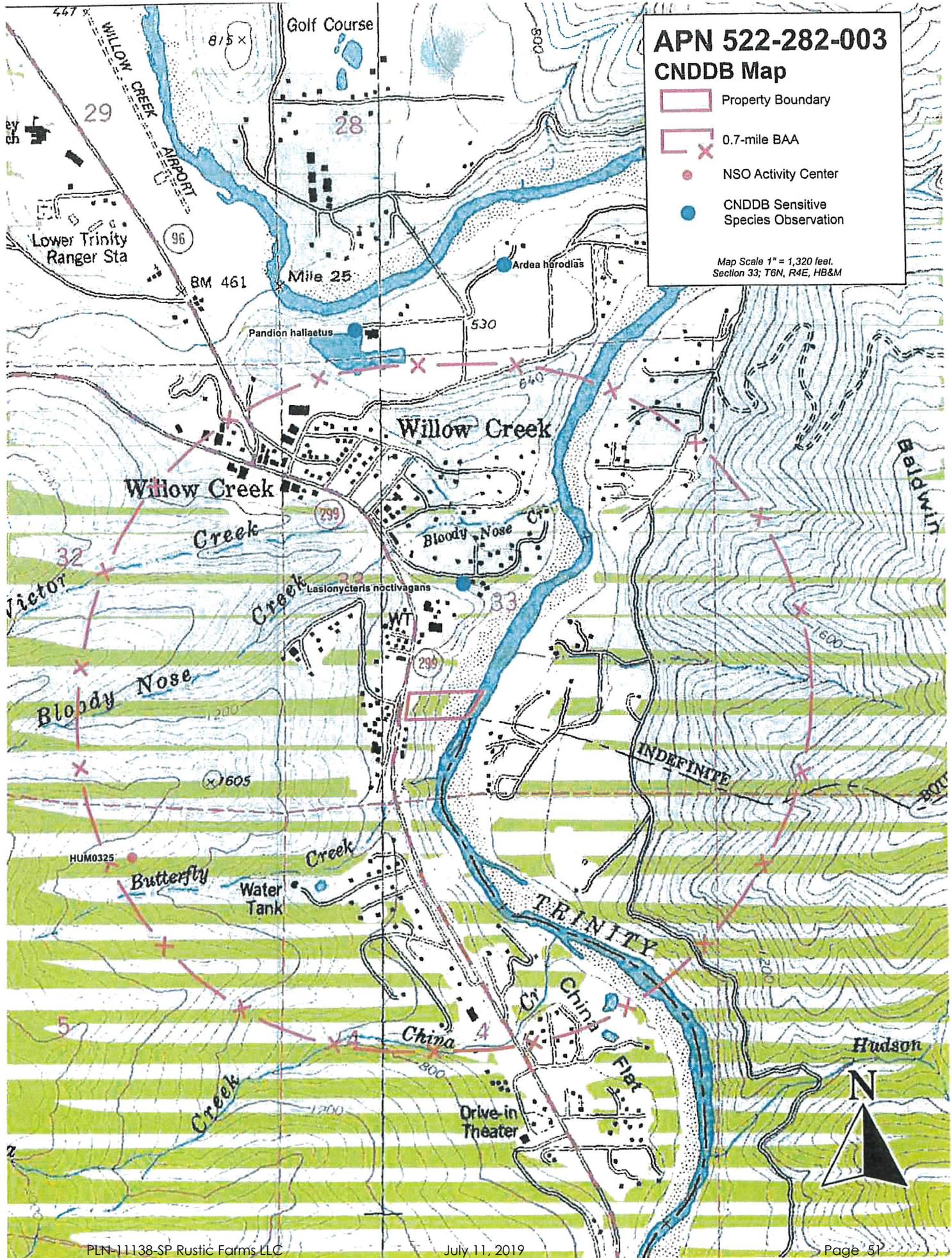


# APN 522-282-003

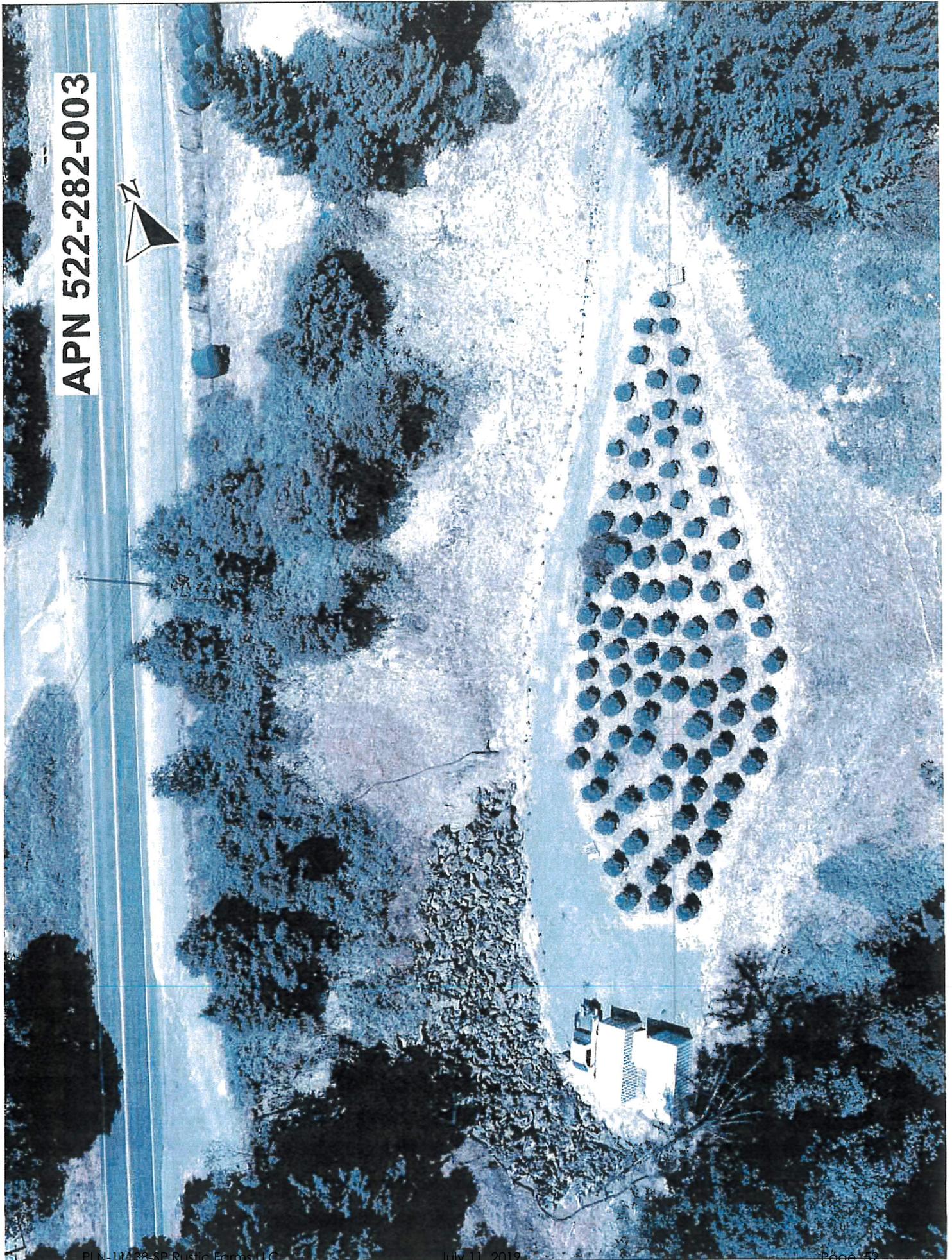
## CNDDDB Map

-  Property Boundary
-  0.7-mile BAA
-  NSO Activity Center
-  CNDDDB Sensitive Species Observation

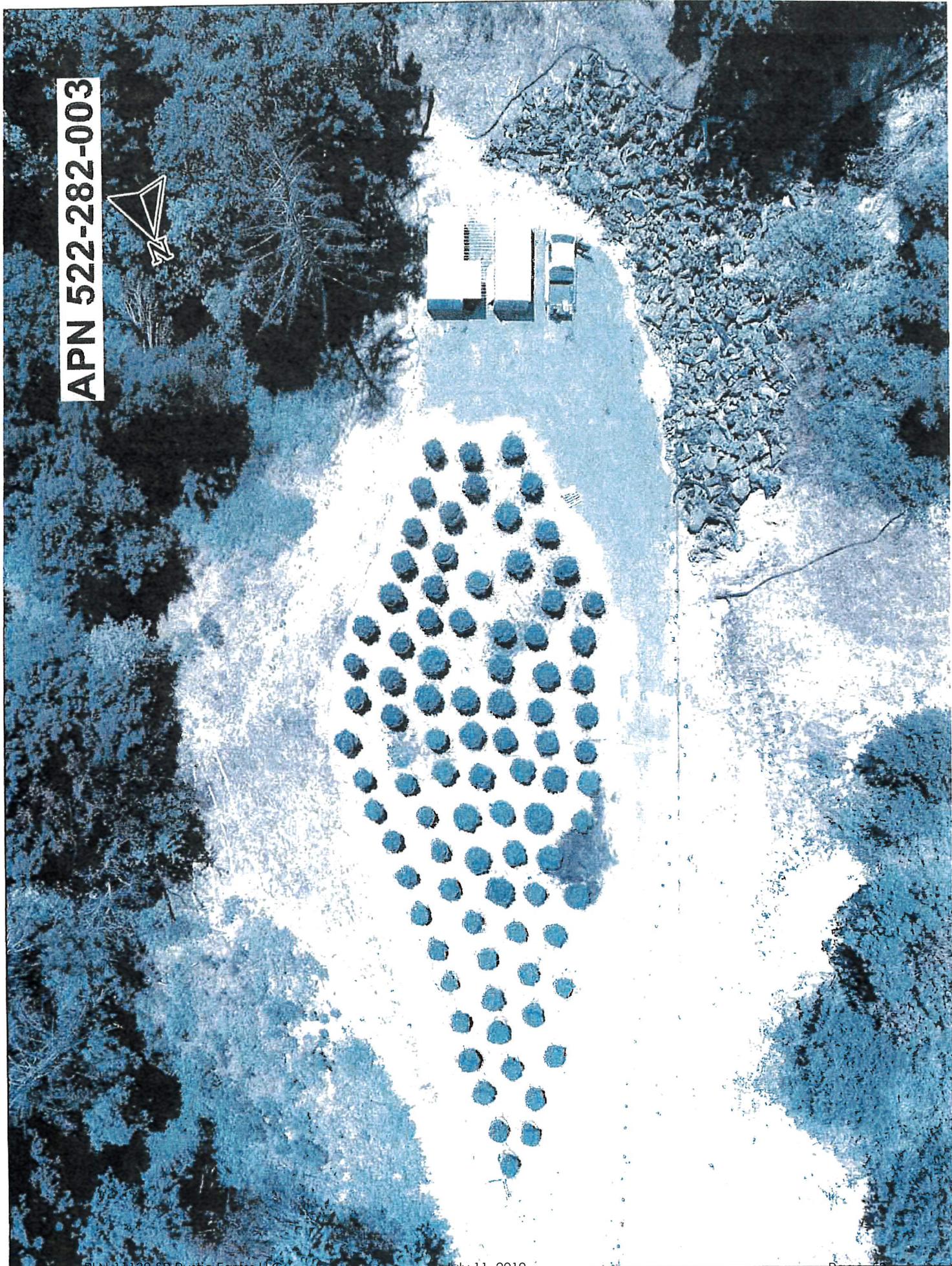
Map Scale 1" = 1,320 feet.  
Section 33, T6N, R4E, HB&M



APN 522-282-003



APN 522-282-003



APN 522-282-003



Rustic Farms

39675 Hwy 299

APN 522-282-003

WRPP Implementation

All roadways have had gravel added

All slopes and flats have had straw, seed, wattles, filter fabric per grading plan requirements.



# Water Resource Protection Plan

**WDID: 1B161288CHUM**

**APN(s): 522-282-003 (Humboldt)**

*Prepared by:*

**Timberland Resource Consultants**

**165 South Fortuna Blvd**

**Fortuna, California 95540**

**9/1/2016**

**Revised: 10/18/2017**

180102111206TRC191

**Purpose**

This Water Resource Protection Plan (WRPP) has been prepared on behalf of the property owner for the Humboldt county property identified as parcel numbers 522-282-003 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 aerial photography review and interpretation, existing USGS quad map review, GIS mapping of field data, review of on-site photography points, streamflow calculations, and general planning. 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.

**Property Description**

The property assessed is approximately 4.6 acres, located in Section 33, T7N, R5E, HB&M, Humboldt County from the Salyer 7.5' USGS Quad map. The property is located in Willow Creek, California, and is accessed by Highway 299. Vegetation on the property consists of conifer timberland. The property has an east facing aspect with an elevation range of approximately 680' to 440' above sea level. The project area contains unnamed tributaries to the Trinity River.

**Project Description**

There is currently one cultivation area located on the. Cultivation on the property consists of a single outdoor cultivation area consisting of potted plants totaling approximately 9790 ft<sup>2</sup>. Total cultivation area on the property is approximately 9790 ft<sup>2</sup>. All water used for irrigation is derived from the Willow Creek Community Service District from the adjacent property to the north.

**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) following the accumulation of 3" total precipitation or by November 15, whichever is sooner, 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>).

**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.



### Assessment of the Standard Conditions

Assessment of Standard Conditions consisted of field examinations in the summer of 2017. The examination evaluated areas near, and areas with the potential to directly impact, watercourses for sensitive conditions including, but not limited to, existing and proposed roads, skid trails and landings, unstable and erodible watercourse banks, unstable upslope areas, debris, jam potential, inadequate flow capacity, changeable channels, overflow channels, flood prone areas, and riparian zones. Field examinations also evaluated all roads and trails on the property, developed areas, cultivation sites, and any structures and facilities appurtenant to cultivation on the property. Anywhere the Standard Conditions are not met on the property, descriptions of the assessments and the prescribed treatments are outlined following each associated section below.

### 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

#### 1. Site Maintenance, Erosion Control, and Drainage Features

Roads are being classified as "permanent" (being used year-round), and "historic legacy road" (being an unusable decommissioned road that was used in the past to access areas below the property).

Permanent roads consist of a main access road to the cultivation area. The main access road is rocked and in adequate condition. A historic road exists leading to a lower clearing on the property and water infrastructure.

An unstable area, and evidence of the potential of road/surface related runoff to further destabilize this area, was noted during the assessment of the property. The cut bank above the cultivation area has had past failure events (2011) prior to the use of the landing for cultivation, and after the first season of cultivation (2016), as seen by historic aerial imagery and physical reconnaissance. Past failure events appear to be caused by drainage runoff from Highway 299, the delivery of water through a buried pipe at the top of the cutbank at Site 01, and the resulting saturation of the cutbank. The source of water coming from the pipe is unknown as the pipe is not on any utility line maps as stated by the discharger, does not appear to be associated with the construction and drainage of Highway 299, and only carries water during and after rain events during the winter. Past stabilization efforts of the cutbank have failed primarily due to the lack of knowledge regarding the existence of the buried pipe. Recent cutbank stabilization efforts consist of large woody debris revetments,

## Summary of Standard Conditions Compliance (Cont.)

installation of silt fencing, wattles, and mulching. Also, the discharger has installed two flex pipes (Site 01) underneath the landing that will be connected to the buried pipe and convey flows to the forested hillside below the landing at Site 03. Stockpiled construction materials are not stored in locations that could be transported to receiving waters. Further details can be found in the Mitigation Report to follow.

During inspection of the roads, cultivation areas, and watercourses, two sites were identified where runoff was not being adequately dispersed, drained, and/or erosion of the road surface was occurring. Of these sites, three sites (Sites 01, 03, & 04) require further development of the flex pipes. Sites 01 and Site 02 require the application of ground cover on exposed cut and fill slopes. Further details can be found in the Mitigation Report to follow.

The cultivation area is located on a graded flat below Highway 299 with slopes of less than 5% and adjoining natural hillslopes of 57%. Surrounding the cultivation area is wooded hillside with Highway 299 uphill, with the nearest riparian area being a Class III watercourse 70' away. The cultivation area was recently re-graded so no drainage or erosion could be observed. It appears the cultivation area is well drained with no associated erosion. Ground cover has been established within the cultivation area with straw mulching and downhill hillslopes have been covered with erosion control mats and seeding, although not entirely adequate.

### 2. Stream Crossing Maintenance

There is one stream crossing located on the property. The stream crossing at Site 7 consists of a dirt ford crossing on a Class III watercourse. The road on which the crossing is located is a decommissioned historic legacy road. The crossings current condition is that of a steep hillside watercourse and crossing. The ford crossing has eroded away the fill prism of the road, stabilized naturally, and has become vegetated. The crossing shows no current sign of excessive erosion or sediment discharge. Further details can be found in the Mitigation Report to follow.

### 3. Riparian and Wetland Protection and Management

Assessment of the property concluded that cultivation areas and associated facilities are not located or occurring within 100' of any Class I or II watercourse or within 50' of any Class III watercourse or wetland, buffers maintain natural slopes with native vegetation, and buffers are of sufficient width to filter wastes from runoff discharging from production lands and associated facilities to all wetlands, streams, drainage ditches, or other conveyances.

### 4. Spoils Management

Currently, no spoils are stored on the property. If any further spoiling material is required, such as from stream crossing installation or other grading, the discharger shall follow the BMPs in Appendix B of the Order, under Spoil Management. Spoil sites shall be located outside any standard width riparian area (50' for Class III and 100' for Class III) and shall be stabilized and contained as per the BMPs. Further details can be found in the Mitigation Report to follow.

### 5. Water Storage and Use

All water on the property is derived from the Willow Creek Community Service District. The service district water meets and exceed the required water demands for agricultural use.

**Summary of Standard Conditions Compliance (Cont.)**

At this time, the discharger has no storage installed. It is estimated that the Discharger uses approximately 110,000-gallons of water for cultivation throughout the entire growing season. Water usage estimates are based on the irrigation of 4,985 ft<sup>2</sup> of irrigated soil medium at 1.5-gallons per 10 square feet per day throughout the 150-day growing season. Water metering device(s) shall be installed in 2018 to meter water used for the irrigation of cannabis.

Sq. ft.
4,985

Agriculture	Gallons per 10 sq. ft.					Client
	1/10	1.5/10	2/10	2.5/10	3/10	
Per day	499	748	997	1,246	1,496	
Per week	3,490	5,234	6,979	8,724	10,469	0
Feb	13,958	20,937	27,916	34,895	41,874	0
30 day months	14,955	22,433	29,910	37,388	44,865	0
31 day months	15,454	23,180	30,907	38,634	46,361	0
150 Days	74,775	112,163	149,550	186,938	224,325	0

Dom = 0  
Ag = 748

Domestic only			Domestic & Ag (Ag on bottom)							Domestic only	
Jan	Feb	March	April	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0	0	0	9272.1	14581.13	19067.63	22432.5	22432.5	16824.38	5608.125	0	0
			9272.1	14581.13	19067.63	22432.5	22432.5	16824.38	5608.125		

Domestic Use
25
50
75

Gallons per person per day

Domestic	People in Household				
	1	2	3	4	5
Per day	50	100	150	200	250
Per week	350	700	1,050	1,400	1,750
Feb	1,400	2,800	4,200	5,600	7,000
30 day months	1,500	3,000	4,500	6,000	7,500
31 day months	1,550	3,100	4,650	6,200	7,750
365 Days	18,250	36,500	54,750	73,000	91,250

Total Water Use = 110218  
Total AG = 110218

**6. Irrigation Runoff**

During multiple visits to the property, no irrigation runoff, or evidence of such runoff, was observed at any of the cultivation sites.

**7. Fertilizers and Soil Amendments**

Fertilizers and soil amendments are stored in the shipping container next to the cultivation area. The Discharger shall ensure that fertilizers, potting soils, compost, and other soils and soil amendments are stored in structures on the property in a manner in which they will not enter or be transported into surface waters and so that nutrients or other pollutants will not be leached into groundwater. Soil and amendment piles shall be either used or contained with wattles and seeded and soil amendments are applied and used per the manufacturers guidelines. The cultivation area is currently maintained so as to prevent nutrients from leaving the site during the growing season and post-harvest.

**8. Pesticides and Herbicides**

Pesticides and fungicides were found stored in the shipping container next to the cultivation area. The discharger shall ensure that all pesticide and herbicide products on the property are currently used, and stored in closed structures, to ensure that they do not enter or are released into surface or ground waters. The use of pesticide products is consistent with product labeling.

**9. Petroleum Products and Other Chemicals**

Currently, no fuel storage is present on the property. Should the discharger at any point in the future obtain bulk fuel storage or petroleum products, any/all future petroleum products and other liquid chemicals,

### Summary of Standard Conditions Compliance (Cont.)

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 shall be of suitable material and construction to be compatible with the substance(s) stored and conditions of storage such as pressure and temperature. 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 cover shall be provided to prevent any/all precipitation from entering said secondary containment vessel. Dischargers shall ensure that diked areas are sufficiently impervious to contain discharged chemicals. Discharger(s) shall implement spill prevention, control, and countermeasures (SPCC) and have appropriate cleanup materials available onsite if the volume of a fuel container is greater than 1,300 gallons. 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.

#### 10. Cultivation-Related Wastes

No organic cultivation-related wastes were found stored on the property. Dead or harvested plant is disposed of off-property. Non-organic cultivation-related wastes are stored in shipping container next to the cultivation area and then disposed of off-property. Discarded tarps and plastic material is buried within the fillslope below the shipping container at Site 06. These plastic materials are also located nearby or within the drainage ditch for the landing and will have to be removed and disposed of. Further details can be found in the Mitigation Report to follow.

#### 11. Refuse and Human Waste

Garbage and refuse is stored within the shipping container and hauled away to a landfill transfer station. There are no human waste disposal facilities at this property. Workers use off-site bathroom facilities.

## Summary of Standard Conditions Compliance (Cont.)

### 12. Remediation/Clean-up/Restoration

Currently, two of the Standard Conditions is not being met; Site Maintenance, Erosion Control, and Drainage Features and Cultivation-Related Wastes. Sites will be treated in accordance with regulations, following approval of any and/or all necessary permits, and done in accordance with the BMP's listed in Appendix B of the Order and those included in this WRPP. Additionally, several other general recommendations have been made as follows:

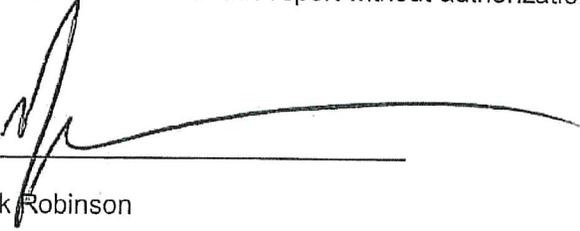
#### General Recommendations

- Seed and mulch all exposed bare earth mineral soils resulting of grading and development of the land as well as any remnant, unused, cultivation relation soils.
- Fertilizer, soil amendmets, and pesticide use it to be recorded in such a manner that cumulative annual totals are recorded for annual reporting.
- Water use shall be designed and metered such that water used for the irrigation of cannabis will be recorded. Water use for the irrigation of cannabis is to be recorded monthly for annual reporting.
- Frequent use of un-surfaced roads should be avoided, particularly when road surfaces are soft/saturated.
- Existing or newly installed road surface drainage structures such as water bars, rolling dips, ditch relief culverts, and intentionally in/out-sloped segments of road shall be maintained to ensure continued function of capturing and draining surface runoff.

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

### Prepared by Timberland Resource Consultants

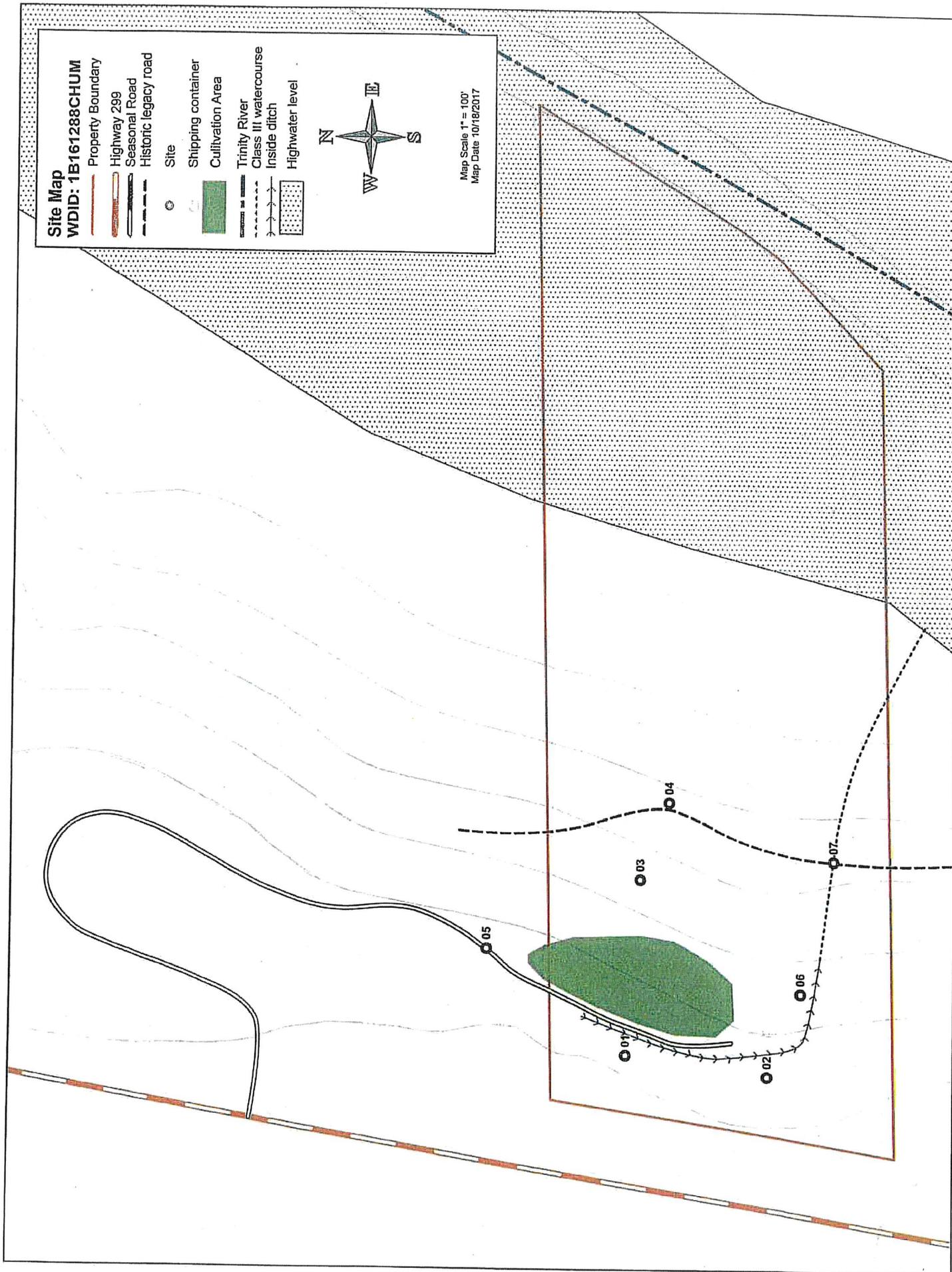
1. This Water Resource Protection Plan has been prepared for the property within APN 522-282-003 in Humboldt County, at the request of the Client.
2. Timberland Resource Consultants does not assume any liability for the use or misuse of the information in this Water Resource Protection Plan.
3. The information is based upon conditions apparent to Timberland Resource Consultants at the time the inspection was conducted. 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.

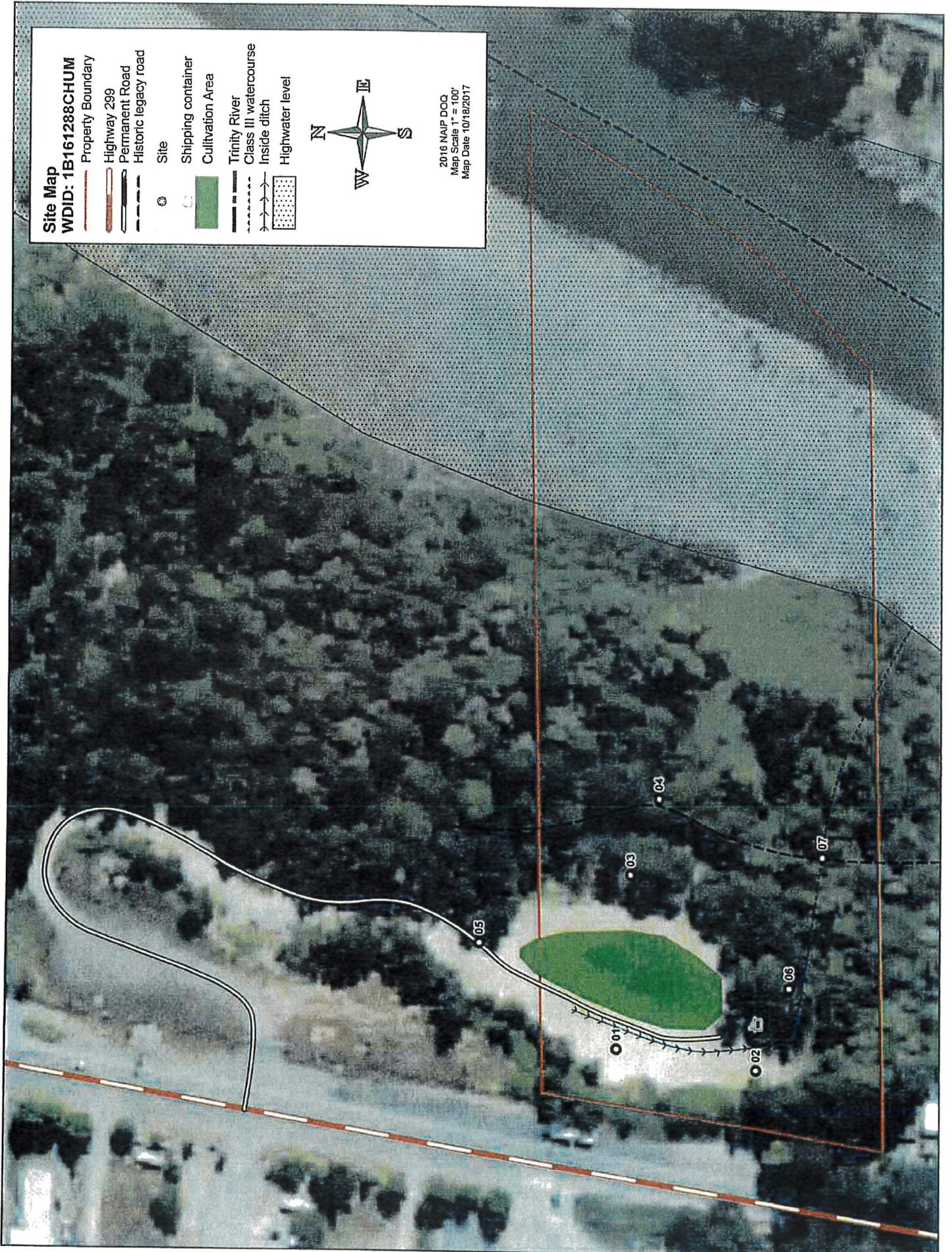


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Nick Robinson

Timberland Resource Consultants





**Site Map**  
**WDID: 1B161288CHUM**

- Property Boundary
- Highway 299
- Permanent Road
- Historic legacy road
- Site
- Shipping container
- Cultivation Area
- Trinity River
- Class III watercourse
- Inside ditch
- Highwater level

2016 NAIP DOG  
 Map Scale 1" = 100'  
 Map Date 10/18/2017



## WRPP - Mitigation Report

WDID# - 1B161288CHUM

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
1	-123.624951 40.932104	Other	X	X		A.1.	Prior to 10/15/17 pending the approval of any required permits	
<p>Current Condition: Flex pipe are unconnected to the buried pipe at the top of the cutbank. Cutbank slopes lack adequate ground cover and stabilization. Existing wattles in drainage ditch are not staked down.</p>						<p>Prescribed Action: Connect the flex pipe to the buried pipe in the cutbank. Establish ground cover on cutbanks at Site 01 with erosion control mats, staked wattles, and seeding and mulching. Stake wattles in drainage ditch.</p>		
Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
2	-123.625009 40.931769	Other	X	X		A.1.		
<p>Current Condition: Road surface runoff from Highway 299 is concentrating above a cutbank and then draining down it, resulting in cutbank failure. Sand bags were placed around the head of the gully on the shoulder of Highway 299 and rock armoring was placed at the knick point of the cutbank, both to prevent further downcutting during storm events. A cutbank revetment was also installed consisting of large woody debris, primarily tree stumps. Below, in the drainage ditch at the toe of the cutbank, silt fencing was installed.</p>						<p>Prescribed Action: None.</p>		
Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
3	-123.624416 40.932075	Other	X	X		A.1.		
<p>Current Condition: Flex pipes are buried under the landing and emerge at this point.</p>						<p>Prescribed Action: None.</p>		
Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
4	-123.62418 40.932008	Other	X	X		A.1.	Prior to 10/15/17 pending the approval of any required permits	
<p>Current Condition: Outlet of the flex pipes from Site 01 do not extend past the toe of the landings fillslope and lacks an energy dissipater.</p>						<p>Prescribed Action: Extend the flex pipes from Site 03 to the outboard edge of the legacy road below the landing at Site 04. Install energy dissipaters at the outlets of the pipes. Due to the inaccessible location to equipment, we recommend using hand placed stones and straw bale energy dissipaters.</p>		



# WRPP - Mitigation Report

WDID# - 1B161288CHUM

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
5	-123.624632 40.932434	Permanent		X		A.1.		
Current Condition: Recently installed rolling dip.						Prescribed Action: Maintain rolling dip to ensure continued function of capturing and draining surface runoff.		
Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
6	-123.624756 40.931693	Other	X	X		A.10.	Prior to 10/15/18 pending the approval of any required permits	
Current Condition: Discarded tarps and plastic material is buried within the fillslope.						Prescribed Action: Remove and properly dispose of plastic material buried in the fillslope.		
Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
7	-123.62435 40.931614	Trail		X		A.2.		
Current Condition: Decommissioned ford crossing on an historic legacy road. The crossing has stabilized, is heavily vegetated, and shows no sign of excessive erosion or sediment discharge.						Prescribed Action: None.		

### **BMP: General BMPs**

- If operations require moving of equipment across a flowing stream, such operations shall be conducted without causing a prolonged visible increase in stream turbidity. For repeated crossings, the operator shall install a bridge, culvert, or rock-lined crossing.
- During construction in flowing water, which can transport sediment downstream, the flow shall be diverted around the work area by pipe, pumping, temporary diversion channel or other suitable means. When any dam or artificial obstruction is being constructed, maintained, or placed in operation, sufficient water shall at all times be allowed to pass downstream to maintain fish life below the dam. Equipment may be operated in the channel of flowing live streams only as necessary to construct the described construction.
- Disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations. The disturbed portion of any stream channel shall be restored to as near their original condition as possible. Restoration shall include the mulching of stripped or exposed dirt areas at crossing sites prior to the end of the work period.
- Structures and associated materials not designed to withstand high seasonal flow shall be removed to areas above the high-water mark before such flows occur.
- No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete washing, oil or petroleum products, or other organic or earthen material from any logging, construction, or associated activity of whatever nature shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into waters of the State. When operations are completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within 150 feet of the high-water mark of any stream.

#### **BMPs and Diagrams**

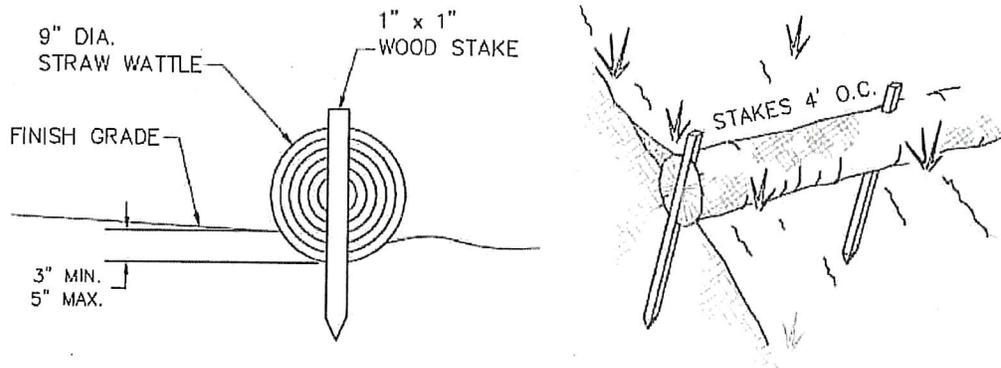
## **BMP: General Erosion Control**

- Timing for soil stabilization measures within the 100 feet of a watercourse or lake: For areas disturbed from May 1 through October 15, treatment shall be completed prior to the start of any rain that causes overland flow across or along the disturbed surface. For areas disturbed from October 16 through April 30, treatment shall be completed prior to any day for which a chance of rain of 30 percent or greater is forecast by the National Weather Service or within 10 days, whichever is earlier.
- Within 100 feet of a watercourse or lake, the traveled surface of logging roads shall be treated to prevent waterborne transport of sediment and concentration of runoff that results from operations. Treatment may consist of, but not limited to, rocking, out sloping, rolling dips, cross drains, water bars, slope stabilization measures, or other practices appropriate to site-specific conditions.
- The treatment for other disturbed areas within 100 feet of a watercourse or lake, including: (A) areas exceeding 100 contiguous square feet where operations have exposed bare soil, (B) approaches to road watercourse crossings out to 100 feet or the nearest drainage facility, whichever is farthest, (C) road cut banks and fills, and (D) any other area of disturbed soil that threatens to discharge sediment into waters in amounts deleterious to the quality and beneficial uses of water, shall be grass seeded and mulched with straw or fine slash. Grass seed shall be applied at a rate exceeding 100 pounds per acre. Straw mulch shall be applied in amounts sufficient to provide at least 2- 4-inch depth of straw with minimum 90% coverage. Slash may be substituted for straw mulch provided the depth, texture, and ground contact are equivalent to at least 2 – 4 inches of straw mulch. Any treated area that has been subject to reuse or has less than 90% surface cover shall be treated again prior to the end of operations.
- Within 100 feet of a watercourse or lake, where the undisturbed natural ground cover cannot effectively protect beneficial uses of water from operations, the ground shall be treated with slope stabilization measures described in #3 above per timing described in #1 above.
- Side cast or fill material extending more than 20 feet in slope distance from the outside edge of a landing which has access to a watercourse or lake shall be treated with slope stabilization measures described in #3 above. Timing shall occur per #1 above unless outside 100 feet of a watercourse or lake, in which completion date is October 15.
- All roads shall have drainage and/or drainage collection and storage facilities installed as soon as practical following operations and prior to either (1) the start of any rain which causes overland flow across or along the disturbed surface within 100 feet of a watercourse or lake protection, or (2) any day with a National Weather Service forecast of a chance of rain of 30 percent or more, a flash flood warning, or a flash flood watch.

### BMPs and Diagrams

### BMP: General Erosion Control (Cont.)

- Erosion control and sediment detention devices and materials shall be incorporated into the cleanup/restoration work design and installed prior to the end of project work and before the beginning of the rainy season. Any continuing, approved project work conducted after October 15 shall have erosion control works completed up-to-date and daily.
- Erosion control materials shall be, at minimum, stored on-site at all times during approved project work between May 1 and October 15.
- Approved project work within the 5-year flood plain shall not begin until all temporary erosion controls (straw bales or silt fences that are effectively keyed-in) are installed downslope of cleanup/restoration activities.
- Non-invasive, non-persistent grass species (e.g., barley grass) may be used for their temporary erosion control benefits to stabilize disturbed slopes and prevent exposure of disturbed soils to rainfall.
- Upon work completion, all exposed soil present in and around the cleanup/restoration sites shall be stabilized within 7 days.
- Soils exposed by cleanup/restoration operations shall be seeded and mulched to prevent sediment runoff and transport.
- Straw Wattles (if used) shall be installed with 18 or 24-inch wood stakes at four feet on center. The ends of adjacent straw wattles shall be abutted to each other snugly or overlapped by six inches. Wattles shall be installed so that the wattle is in firm contact with the ground surface.



BMPs and Diagrams

## BMP: General Erosion Control Techniques

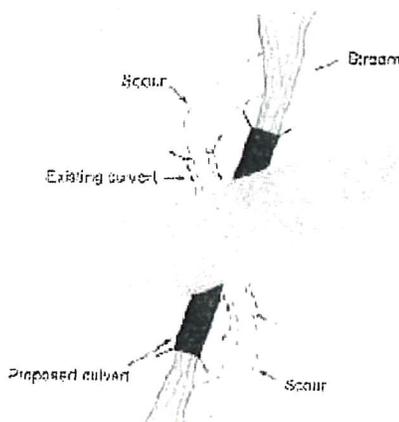
TABLE 34. Guidelines for erosion and sediment control application

Timing of application	Technique	Portion of road and construction area treated
Erosion control during construction	Hydromulching, hydroseeding	Road fill slopes, cut slopes, bare soil areas
	Dry seeding	Road fill slopes, cut slopes, bare soil areas
	Wood chip, straw, Excelsior or tackified mulch	Road fill slopes, cut slopes, bare soil areas
	Straw wattles	Road fill slopes and cut slopes
	Gravel surfacing	Road, landing and turnout surfaces
	Dust palliative	Road surfaces
	Minimize disturbance (soil and vegetation)	All areas peripheral to construction
Sediment control during construction	Sediment basin	Roadside ditches, turnouts and small stream crossings
	Sediment traps (e.g., silt fences, straw bales barriers, woody debris barriers)	Road fill slopes, cutbanks, bare soil areas and ditches
	Straw bale dams	Ditches and small streams
	Sumps and water pumps	Stream channels and stream crossings
	Streamflow diversions (e.g., temporary culverts, flex pipe, etc.)	Stream channels and stream crossings
	Surface diversion and dispersion devices (pipes, ditches, etc.)	All disturbed bare soil areas
	Road shaping	Road and landing surfaces
	Gravel surfacing	Road, landing and turnout surfaces
	Bituminous or asphalt surfacing	Road surface
	Rolling dips	Road surface
Permanent erosion control	Ditch relief culverts	Roadbed and road fill
	Downspouts and berm drains	Road fill slopes
	Waterbars	Road and landing surfaces
	Berms	Road surface and roadside areas
	Ditches	Road and landing surfaces
	Riprap	Road fill slopes, stream crossing fills, cutbanks, stream and lake banks
	Soil bioengineering	Road fill slopes, cut slopes, stream crossings, streambanks
	Tree planting	Road fill slopes, cutbanks, bare soil areas, stream crossings, streambanks

HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

## BMP: Permanent Culvert Crossing

- New culvert installations shall be sized to accommodate flows associated with a 100-year storm event.
- If the new culvert is replacing a poorly installed old culvert, the crossing may need to be abandoned to the following standard:
  - When fills are removed they shall be excavated to form a channel that is as close as feasible to natural watercourse grade and orientation, and that is wider than the natural channel.
  - Excavated banks shall be laid back to a 2:1 (50%) or natural slope.
- New culverts shall be placed at stream gradient, or have downspouts, or have energy dissipaters at outfall.
  - Align culverts with the natural stream channel orientation to ensure proper function, prevent bank erosion, and minimize debris plugging. See Figure 97 below.
  - Place culverts at the base of the fill and at the grade of the original streambed or install a downspout past the base of the fill. Downspouts should only be installed if there are no other options.
  - Culverts should be set slightly below the original stream grade so that the water drops several inches as it enters the pipe.
  - Culvert beds should be composed of rock-free soil or gravel, evenly distributed under the length of the pipe.
  - Compact the base and sidewall material before placing the pipe in its bed.
  - Lay the pipe on a well-compacted base. Poor basal compaction will cause settling or deflection in the pipe and can result in separation at a coupling or rupture in the pipe wall.
  - Backfill material should be free of rocks, limbs, or other debris that could dent or puncture the pipe or allow water to seep around the pipe.
  - Cover one end of the culvert pipe, then the other end. Once the ends are secure, cover the center.
  - Tamp and compact backfill material throughout the entire process, using water as necessary for compaction.
  - Backfill compacting will be done in 0.5 – 1.0 foot lifts until 1/3 of the diameter of the culvert has been covered.
  - Push layers of fill over the crossing to achieve the final design road grade, road fill above the culvert should be no less than one-third to one-half the culvert diameter at any point on the drivable surface.
- Critical dips shall be installed on culvert crossings to eliminate diversion potential. Refer to Figure 84 below.
- Road approaches to crossings shall be treated out to the first drainage structure (i.e. waterbar, rolling dip, or hydrologic divide) to prevent transport of sediment.
- Road surfaces and ditches shall be disconnected from streams and stream crossings to the greatest extent feasible. Ditches and road surfaces that cannot be feasible disconnected from streams or stream crossings shall be treated to reduce sediment transport to streams.
- If downspouts are used, they shall be secured to the culvert outlet and shall be secure on fill slopes.
- Culverts shall be long enough so that road fill does not extend or slough past the culvert ends.
- Inlet of culverts, and associate fill, shall be protected with appropriate measures that extend at least as high as the top of the culvert.
- Outlet of culverts shall be armored with rock if road fill sloughing into channel can occur.
- Armor inlets and outlets with rock, or mulch and seed with grass as needed (not all stream crossings need to be armored).
- Where debris loads could endanger the crossing, a debris catchment structure shall be constructed upstream of the culvert inlet.
- Bank and channel armoring may occur, when appropriate, to provide channel and bank stabilization.

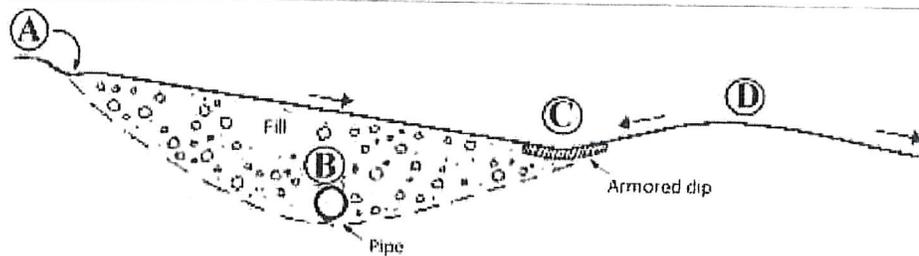
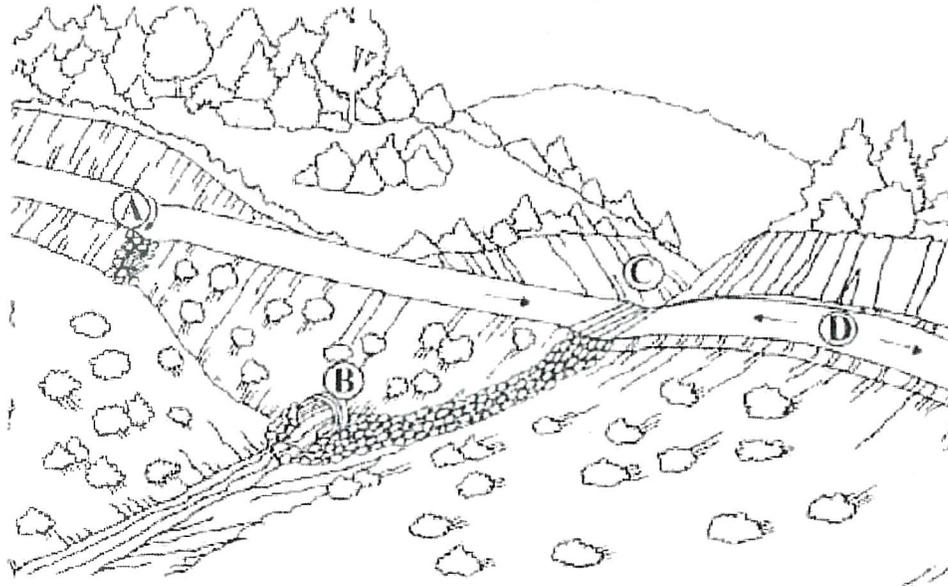


**FIGURE 97.** Culvert alignment should be in relation to the stream and not the road. It is important that the stream enters and leaves the culvert in a relatively straight horizontal alignment so streamflow does not have to turn to enter the inlet or discharge into a bank as it exits. This figure shows a redesigned culvert installation that replaces the bending alignment that previously existed. Channel turns at the inlet increase plugging potential because wood going through the turn will not align with the inlet. Similarly, channel turns at the inlet and outlet are often accompanied by scour against the channel banks (Wisconsin Transportation Information Center, 2004).

HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

BMPs and Diagrams

**BMP: Permanent Culvert Crossing (Cont.)**

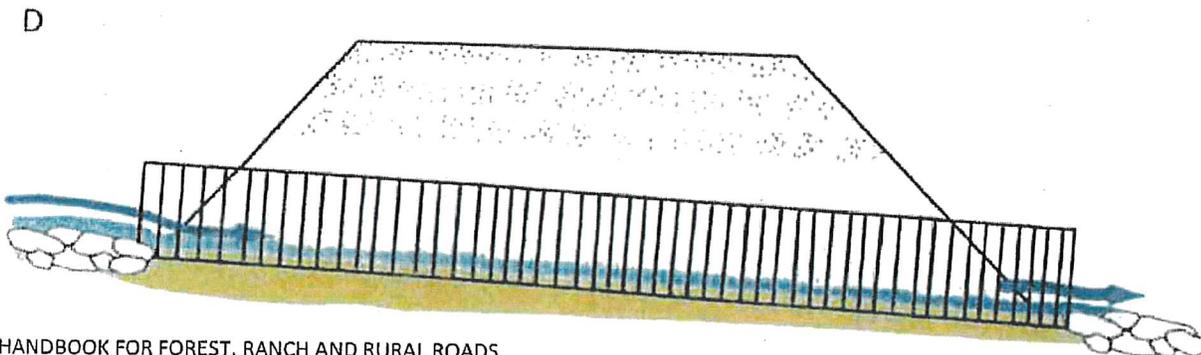
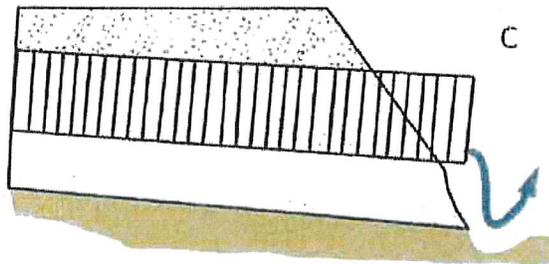
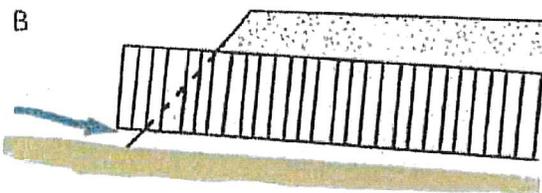
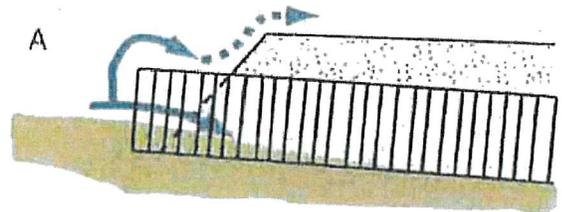


**FIGURE 84.** Critical dips or dipped crossing fills should be centered near a stream crossing's down-road hinge line, not over the centerline of the crossing where overtopping could cause washout or severe erosion of the fill. If the stream crossing culvert (B) plugs, water will pond behind the fill until reaching the critical dip or low point in the crossing (C) and flowing back down into the natural stream channel. The down-road ditch must be plugged to prevent streamflow from diverting down the ditch line. For extra protection in this sketch, riprap armor has been placed at the critical dip outfall and extending downslope to the stream channel. This is only required or suggested on stream crossings where the culvert is highly likely to plug and the crossing fill overtopped. The dip at the hinge line is usually sufficient to limit erosional damage during an overtopping event. Road surface and ditch runoff is disconnected from the stream crossing by installing a rolling dip and ditch relief culvert just up-road from the crossing (A) (Keller and Sherar, 2003).

HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

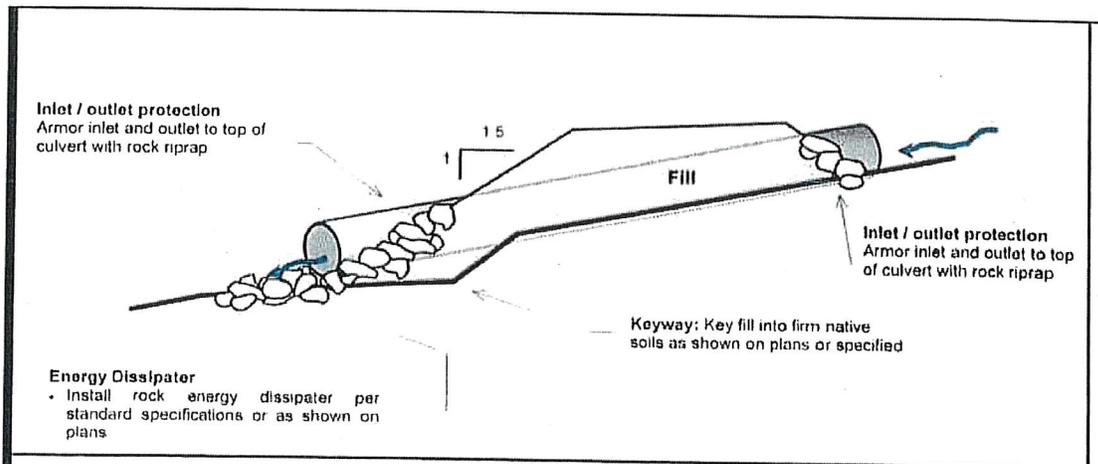
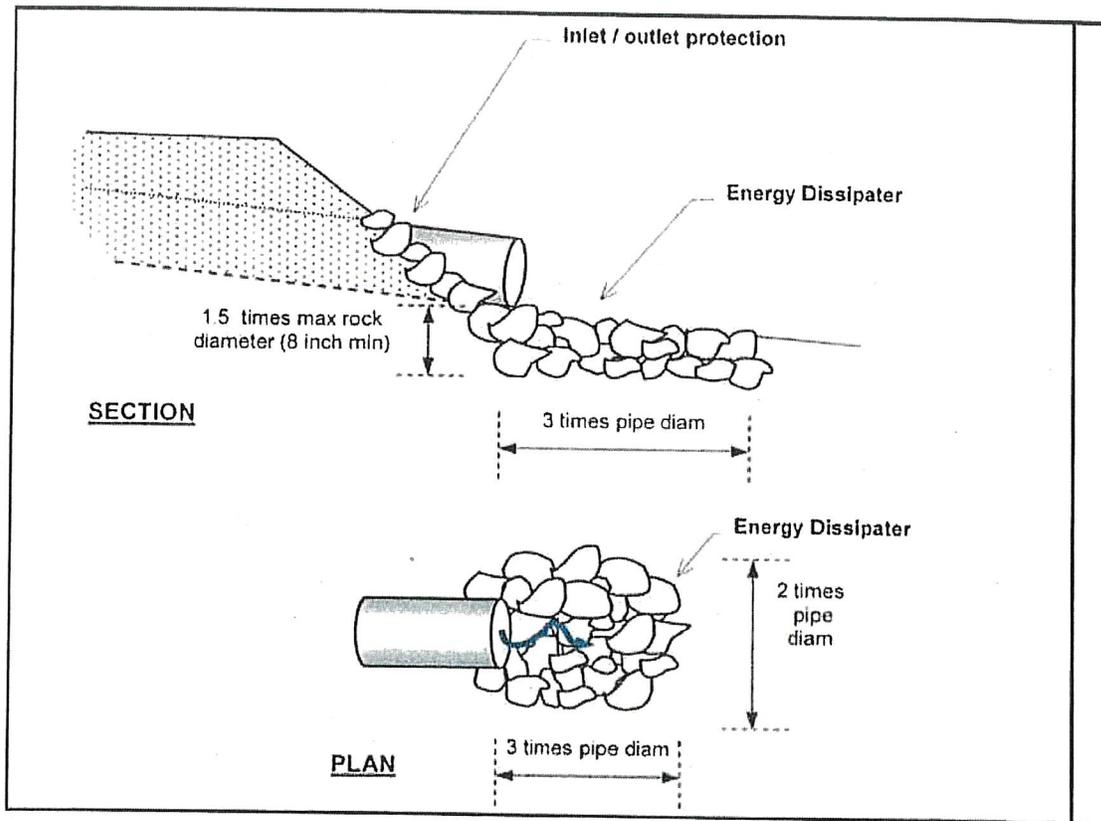
BMPs and Diagrams

**BMP: Permanent Culvert Crossing (Cont.)**



**FIGURE 155.** Proper culvert installation involves correct culvert orientation, setting the pipe slightly below the bed of the original stream, and backfilling and compacting the fill as it is placed over the culvert. Installing the inlet too low in the stream (A) can lead to culvert plugging, yet if set too high (B) flow can undercut the inlet. If the culvert is placed too high in the fill (C), flow at the outfall will erode the fill. Placed correctly (D), the culvert is set slightly below the original stream grade and protected with armor at the inlet and outlet. Culverts installed in fish-bearing stream channels must be inset into the streambed sufficiently (>25% embedded) to have a natural gravel bottom throughout the culvert (Modified from: MDSL, 1991).

## BMP: Culvert Rock Armoring Specifications



Riprap installed to protect the inlet and outlet of a stream crossing culvert from erosion or for energy dissipation should be keyed in the natural channel bed and banks to an approximate depth of about 1.5x the maximum rock thickness. Riprap should be placed at least up to the top of the culvert at both the inlet and outlet to protect them from splash erosion and to trap any sediment eroded from the newly constructed fill slope above.

## BMP: Inlet and Outlet Armoring

- Inlets of culverts and associate fills shall be protected with rock armoring that extends at least as high as the top of the culvert.
- Outlets of culverts shall be provided a rocked energy dissipater at the outfall of the culvert.
- Outlets of culverts and associate fills shall be protected with rock armoring that extends at least as high as the top of the culvert if road fill sloughing into channel can occur.
- Prior to inlet and outlet rocking, the inlet and outlets shall be prepared. Preparation will include removal of vegetation and stored materials from the inlet and outlet.
- Inlets may require construction of an inlet basin.
- Slopes at the outlet should be shaped to a 2:1 or natural slope prior to placing rock armor.
- Rock used at culvert inlets and outlets should be a matrix of various sized rocks and rip-rap that range from a 3" dia. to a 2' dia.
- The largest rocks should be places at the base of the culvert or fill. Incrementally smaller rocks shall be placed over the larger rocks at the armoring extend up the slope. Voids and spaces shall be back filled with smaller gravels and rocks.

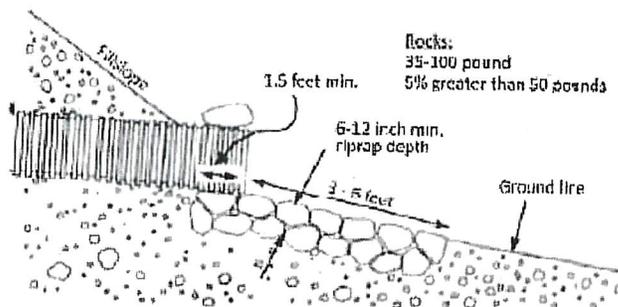


FIGURE 107A. Riprap armor at culvert outlet (Modified from: Keller et al., 2012).

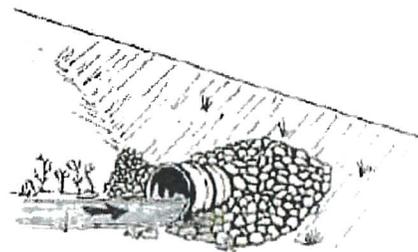


FIGURE 107B. Riprap armor at culvert inlet (Keller and Shera, 2003).

HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

## BMP: Stream Bank Armoring (Riprap)

- Riprap should be installed on top of geotextile fabric or a clean mixture of coarse gravel and sand.
- The riprap should be keyed into the streambed and extend below the maximum expected scour depth with an adequately sized key base width at a thickness of a minimum of 2x the median (D50) rock diameter with the largest stone sizes placed at the base of the riprap structure.
- The armor should be set into the streambank so it does not significantly protrude into, or constrict, the natural channel, or otherwise reduce channel capacity.
- The riprap should extend along the length of unstable or over steepened bank and up the bank sufficiently to encompass the existing bank instability and/or design flood elevations.

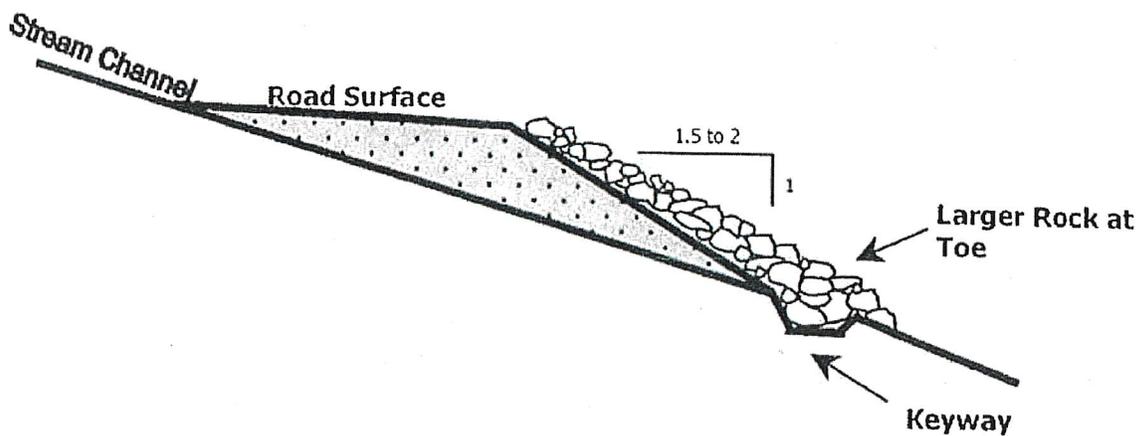
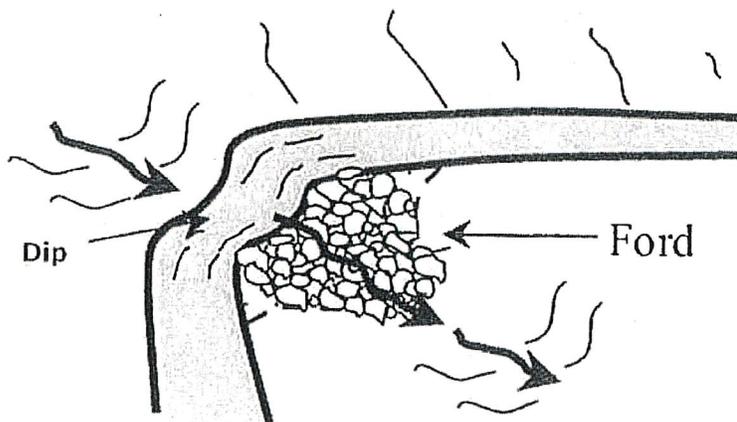
BMPs and Diagrams

## BMP: Rocked Ford

- Rocked fords are drainage structures designed to carry watercourses across roads with little to no erosion of the road surface or fill.
- Fords constructed in-channel shall be of appropriately sized material that shall withstand erosion or displacement by expected velocities and placed in a broad, U-shaped channel to create a drivable crossing.
  - The road shall dip into and out of the rocked ford to minimize diversion potential. Construct a broad rolling dip across the roadbed, centered at the crossing, which is large enough to contain the expected 100-yr flood discharge while preventing flood flow from diverting down the road or around the rock armor.
- The road surface at the ford shall be constructed with clean rock. The rock shall be applied to a minimum depth of 6 inches.
  - A range of interlocking rock armor sizes should be selected and sized so that peak flows will not pluck or transport the armor off the roadbed or the sloping fill face of the armored fill.
- The ford's outlet shall be rock armored to resist downcutting and erosion.
  - *Excavate the keyway and armored area* - Excavate a two to three-foot-deep "bed" into the dipped road surface and adjacent fillslope (to place the rock in) that extends from approximately the middle of the road, across the outer half of the road, and down the outboard road fill to where the base of the fill meets the natural channel. At the base of the fill, excavate a keyway trench extending across the channel bed.
  - *Armor the basal keyway* - Put aside the largest rock armoring to create the buttresses. Use the largest rock armor to fill the basal trench and create a buttress at the base of the fill. This should have a "U" shape to it and it will define the outlet where flow leaves the armored fill and enters the natural channel.
  - *Armor the fill* - Backfill the fill face with the remaining rock armor making sure the final armor is unsorted and well placed, the armor is two coarse-rock layers in thickness, and the armored area on the fill face also has a "U" shape that will accommodate the largest expected flow.
  - *Armor the top of the fill* - Install a second trenched buttress for large rock at the break-in-slope between the outboard road edge and the top of the fill face.
- Road approaches to rocked fords shall be rock surfaced out to the first drainage structure (i.e. waterbar, rolling dip, or hydrologic divide) to prevent transport of sediment using rock.
- Bank and channel armoring may occur when appropriate to provide channel and bank stabilization.
- Road approach rock and rock ford armoring shall be reapplied following use as needed to maintain a permanent crossing.

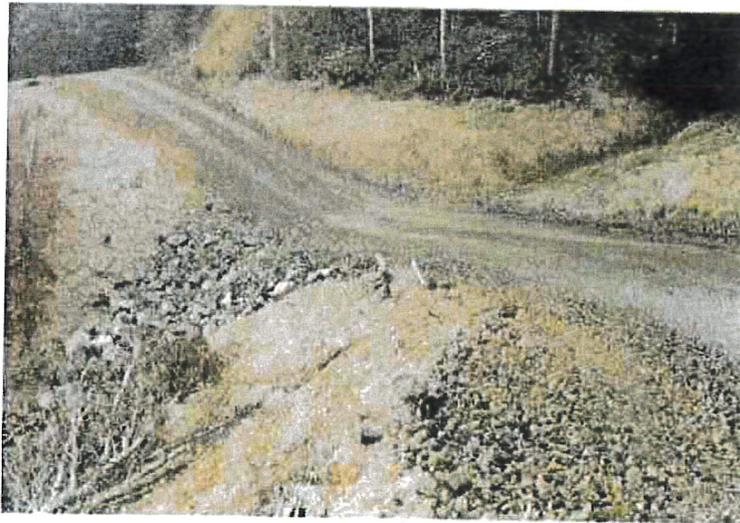
### BMP: Rocked Ford (Cont.)

**FORD:** A large dip is graded into the road at the axis of the stream channel. The outside fill face is dished out to form a spillway with large rock. On large watercourses, rock is keyed several feet into firm native soils. The road surface is rocked with 6" of minus rock .



## BMP: Armored Ford/Fill

- Armored fords are watercourse crossing fills comprised primarily of rock and designed to carry watercourses across roads without erosion or displacement of installed fill material.
- Armored fords shall have a U-shaped channel to create a drivable crossing.
  - The road shall dip into and out of the armored ford to minimize diversion potential. Construct a broad rolling dip across the roadbed, centered at the crossing, which is large enough to contain the expected 100-yr flood discharge while preventing flood flow from diverting down the road or around the rock armor.
- The road surface at the armored ford shall consist of rock small enough to be easily passable by vehicle, but large enough to not be transported during high flow storm events.
- The ford's inlet shall be rock armored if a threat of head cutting exists.
  - *Excavate the keyway* - Excavate a one to three-foot-deep "bed" into the inboard edge of the road
  - *Armor the basal keyway* - place various sized rock in the constructed keyway to prevent head cutting. Use the largest rock armor to fill the keyway trench and create a buttress along the inboard edge of the road. This should have a "U" shape to it and it will define the inlet where flow leaves the natural channel and enters the road.
- The ford's outlet shall be rock armored to resist downcutting and erosion.
  - *Excavate the keyway and armored area* - Excavate a two to three-foot-deep "bed" into the dipped road surface and adjacent fillslope (to place the rock in) that extends from approximately the middle of the road, across the outer half of the road, and down the outboard road fill to where the base of the fill meets the natural channel. At the base of the fill, excavate a keyway trench extending across the channel bed.
  - *Armor the basal keyway* - Put aside the largest rock armoring to create the buttresses. Use the largest rock armor to fill the basal trench and create a buttress at the base of the fill. This should have a "U" shape to it and it will define the outlet where flow leaves the armored fill and enters the natural channel.
  - *Armor the fill* - Backfill the fill face with the remaining rock armor making sure the final armor is unsorted and well placed, the armor is two coarse-rock layers in thickness, and the armored area on the fill face also has a "U" shape that will accommodate the largest expected flow.
  - *Armor the top of the fill* - Install a second trenched buttress for large rock at the break-in-slope between the outboard road edge and the top of the fill face.
- Road approaches to armored fords shall be surface rocked out to the first drainage structure (i.e. waterbar, rolling dip, or hydrologic divide) to prevent transport of sediment using rock.
- Bank and channel armoring may occur when appropriate to provide channel and bank stabilization.
- Armored ford armoring shall be reapplied following use as needed to maintain a permanent crossing.



**FIGURE 120.** This armored fill crossing of a steep, ephemeral stream was constructed to provide a low maintenance crossing. The crossing has been deeply dipped to reduce the volume of road fill and to eliminate the potential for stream diversion. The fill slope has been heavily armored through the axis of the crossing to contain flood flows and prevent downcutting. Armored fills cannot be used on fish bearing streams.

HANDBOOK FOR FOREST, RANCH AND RURAL ROADS  
BMPs and Diagrams

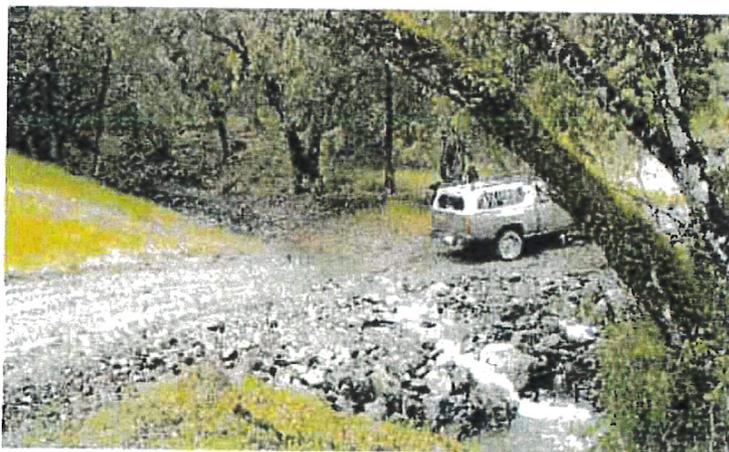
## **BMP: Armored Ford [Fill] (Cont.)**



**FIGURE 121D.** Well graded rock armor is then backfilled into the structure and spread across the breadth of the U-shaped stream crossing, and about one-third the way up the roadbed, so that streamflow will only flow over or come in contact with resistant armor material. The armor must be spread and compacted across the design width of the expected flood flow channel width so peak flows will not flank the armored structure.



**FIGURE 121E.** Two weeks after this armored fill was constructed, a storm flow event occurred and the structure maintained its function and integrity. The road approaches had not yet been compacted or surfaced with road rock.



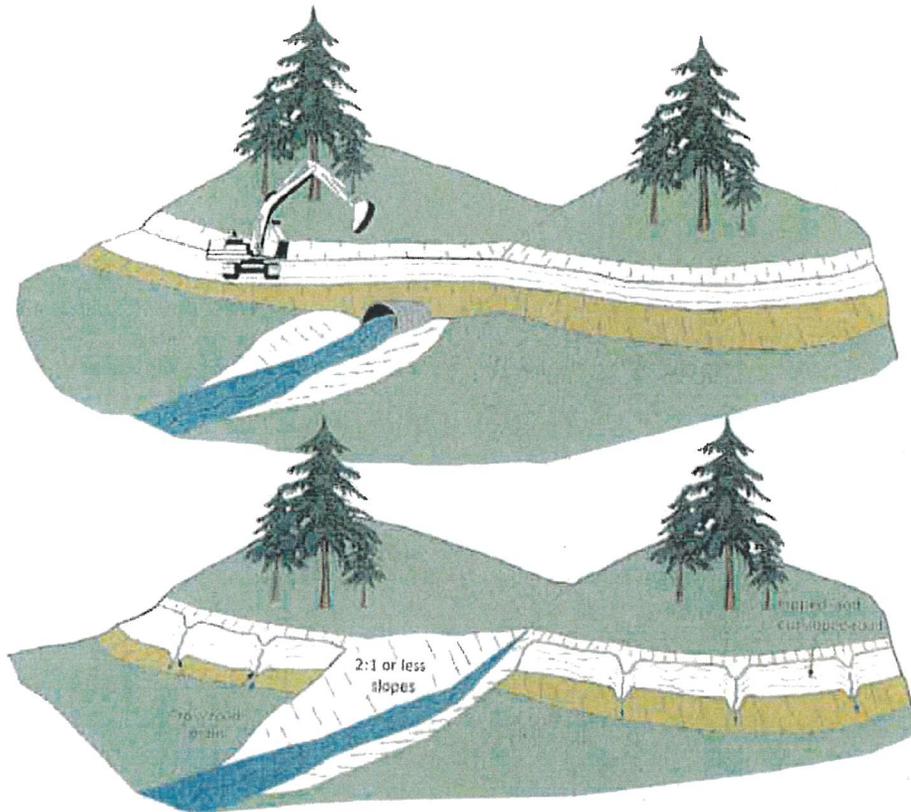
**FIGURE 121F.** The same armored fill as it appeared after the first winter flood flows. No maintenance was required to reopen the road. It is also clear that no stream diversion is possible at this stream crossing site, and the volume of fill within the crossing has been reduced to the minimum amount needed to maintain a relatively smooth driving surface on this low volume road.

HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

BMPs and Diagrams

## BMP: Permanent Crossing Decommissioning Specifications

- When fills are removed they shall be excavated to form a channel that is as close as feasible to natural watercourse grade and orientation, and that is wider than the natural channel.
- Excavated banks shall be laid back to a 2:1 (50%) or natural slope.
- Temporary crossings shall be removed by November 15.
  - Any temporary culvert crossing left in after October 15 or installed between October 15 and May 1, shall be sized to accommodate the estimated 100-year flow.
- Bank and channel armoring may occur when appropriate to provide channel and bank stabilization.



**FIGURE 263.** On roads that are to be closed (decommissioned), all stream crossing culverts and fills should be removed. Stream crossing excavations are best performed using an excavator. The original channel should be excavated and exhumed down to the former streambed, with a channel width equal or greater than the natural channel above and below the crossing. Sideslopes should be laid back to a stable angle, typically a 2:1 (50%) gradient, or less. Spoil can be endhailed off-site or stored on the road bench adjacent the crossing, provided it is placed and stabilized where it will not erode or fail and enter the stream.

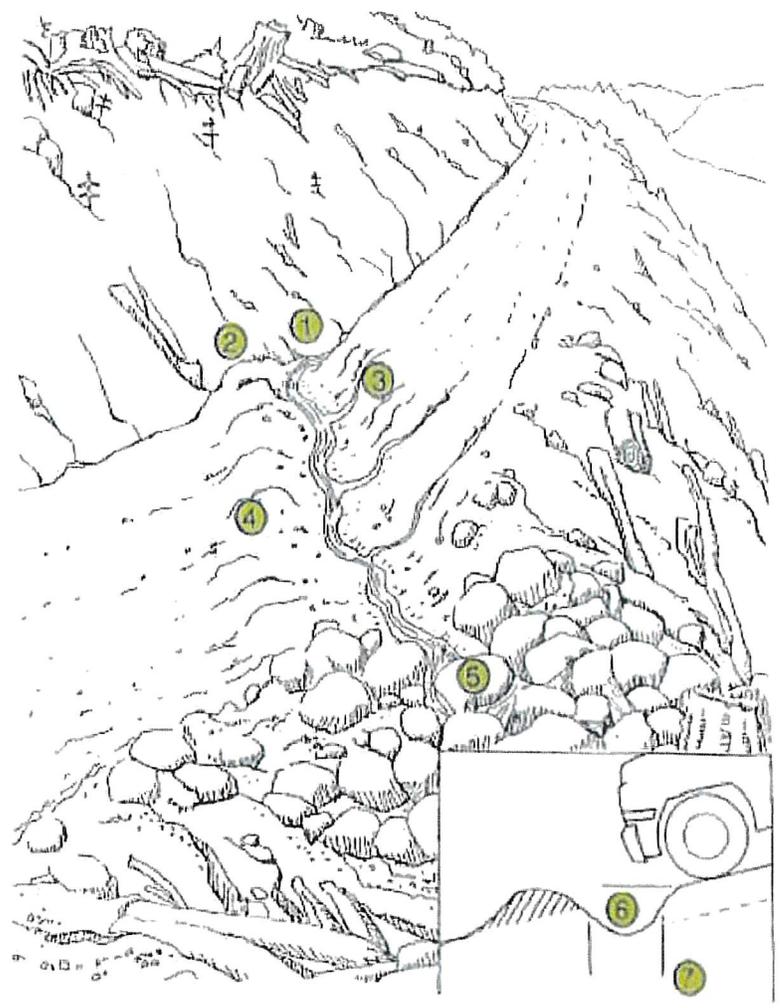
### **BMP: Permanent Crossing Decommissioning Specifications (Cont.)**

- Excavating and removing all fill materials placed in the stream channel when the crossing was originally built.
- Fill material should be excavated to recreate the original channel grade (slope) and orientation.
- The excavated channel bed should be as wide, or slightly wider than, the original watercourse channel.
  - This can be better determined by observing the channel width of the watercourse up slope of crossing to be removed at a point in which the crossing or any other disturbance has not affected the natural channel slope and width.
- If the channel sideslopes were disturbed, they should be graded (excavated) back to a stable angle (generally less than 50% (2:1)) to prevent slumping and soil movement.
- The bare soils should then be mulched, seeded, and planted to minimize erosion until vegetation can protect the surface.
- The approaching, hydrologically connected road segments should be cross-road drained to prevent road runoff from discharging across the freshly excavated channel sideslopes.

### BMP: Waterbar Construction

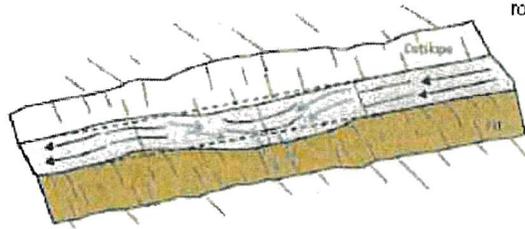
**FIGURE 40.** Waterbars are constructed on unsurfaced forest and ranch roads that will have little or no traffic during the wet season. The waterbar should be extended to the cutbank to intercept all ditch flow (1) and extend beyond the shoulder of the road. A berm (2) must block and prevent ditch flow from continuing down the road during flood flows. The excavated waterbar (3) should be constructed to be self-cleaning, typically with a 30° skew to the road alignment with the excavated material bermed on the downhill grade of the road (4). Water should always be discharged onto the downhill side on a stable slope protected by vegetation. Rock (shown in the figure) should not be necessary if waterbars are spaced close enough to prevent serious erosion. (5) The cross ditch depth (6) and width (7) must allow vehicle cross-over without destroying the function of the drain. Several alternate types of waterbars are possible, including one that drains only the road surface (not the ditch), and one that drains the road surface into the inside ditch (BCME, 1991).

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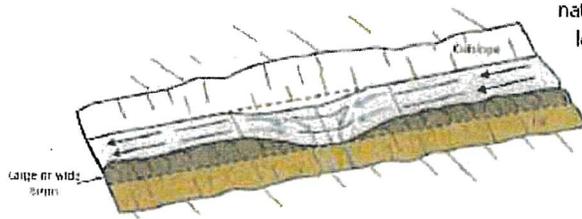
## BMP: Rolling Dip and Rocked Rolling Dip (Cont.)

### Type 1 Rolling Dip (Standard)



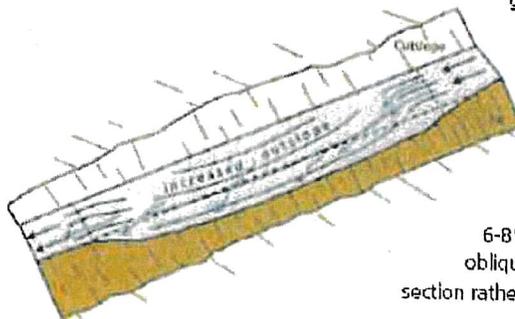
Type 1 rolling dips are used where road grades are less than about 12-14% and road runoff is not confined by a large through cut or berm. The axis of the dip should be perpendicular to the road alignment and sloped at 3-4% across the road tread. Steep roads will have longer and more abrupt dip dimensions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

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## BMP: Lead out ditch



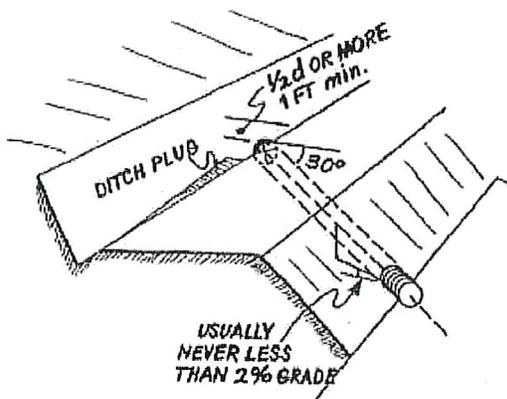
**FIGURE 55.** *Steep roads that go straight up or down a hillside are very difficult to drain. This steep, fall line road developed a through cut cross section that was drained using lead out ditches to direct runoff off the road and onto the adjacent, vegetated hillside. The road was "outsloped" to drain runoff to the right side, and the lead out ditch was built slightly steeper than the road grade, to be self-cleaning. Four lead out ditches have been constructed at 100-foot intervals to the bottom of the hillside.*

HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

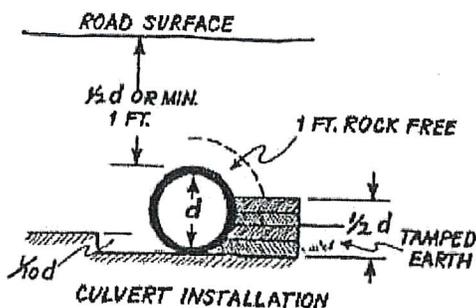
### BMPs and Diagrams

## BMP: Ditch Relief Culvert

- Install ditch relief culverts at an oblique (typically 30 degree) angle to the road so that ditch flow is not forced to make a sharp angle turn to enter the pipe. On low gradient roads (<5%), where ditch flow is slow, ditch relief culverts can be installed at right angles to the road.
- Install ditch relief culverts (DRC) to outlet at, and drain to, the base of the fill.
- If it cannot be installed at the base of the fill, install the DRC with a grade steeper than the inboard ditch draining to the culvert inlet, and install a downspout on the outlet to carry the culverted flow to the base of the fillslope.
- Downspouts longer than 20 feet should be secured to the hillslope for stability.
- Ditch relief culverts should not carry excessive flow such that downcutting of the ditchline or gullying below the outlet occur.
- Do not discharge flows from ditch relief culverts onto unstable fill or active landslides.
- If the ditch is on an insloped or crowned road, consider using outsloping to drain the road surface. The ditch and the ditch relief culvert would then convey only spring flow from the cutbanks and hillslope runoff, and not turbid runoff from the road surface.

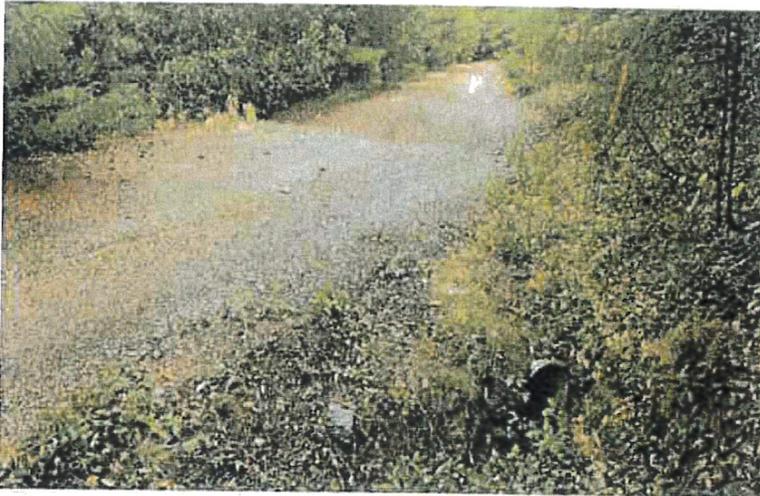


**FIGURE 48.** The elements of a properly installed ditch relief culvert. The culvert is angled at about 30 degrees to the road alignment to help capture flow and prevent culvert plugging or erosion of the inlet area. It is set at the base of the fill (ideally) or with a grade slightly steeper than the grade of the contributing ditch (but never with a grade less than 2 percent) (USDA-SCS, 1983). At a minimum, the grade of the ditch relief culvert should be sufficient to prevent sediment accumulation at the inlet or deposition within the culvert itself (it should be self-cleaning) (USDA-SCS, 1983).



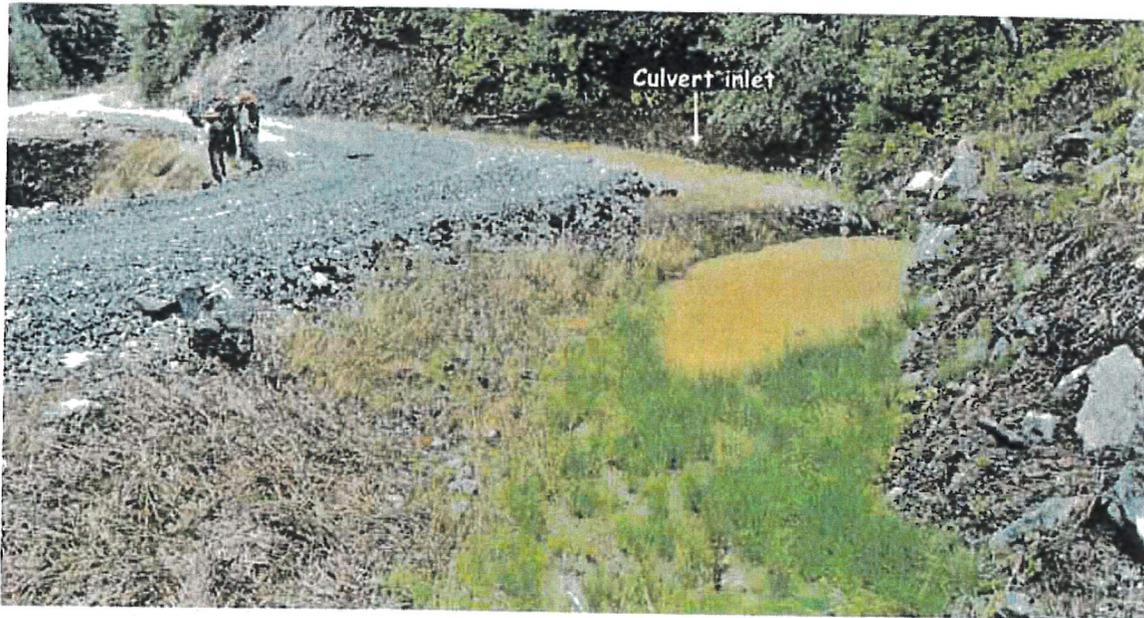
HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

## BMP: Ditch Relief Culvert (Cont.)



**FIGURE 39.** Waterbars are often used to drain surface runoff from seasonal, unsurfaced roads. Because they are easily broken down by vehicles, waterbars are only used on unsurfaced roads where there is little or no wet weather traffic. In this photo, a waterbar and ditch relief culvert are used to drain all road surface and ditch runoff from the insloped road prism.

HANDBOOK FOR FOREST, RANCH AND RURAL ROADS



**FIGURE 238.** Traffic and surface runoff from graveled roads often produces surface erosion, turbid runoff and fine sediment transport that can be delivered to streams. Where ditches can't be eliminated, sediment traps and roadside settling basins can be installed to capture and remove most of the eroded sediment. This settling basin has been constructed along the inside ditch just before a stream crossing culvert inlet (see arrow). Eroded sediment from the road and ditch are deposited in the basin before flow is released to the stream. Fine sediments have filled about 1/3 of this basin and vegetation is now growing. Sediment basins require periodic maintenance to maintain their storage capacity.

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BMPs and Diagrams

## **BMP: Storage Bladders**

- Location for storage bladder must be sited and planned as to minimize the potential for impacts due to rolling and/or failure. Storage bladders should be stored on flat slopes where stability will not be affected.
- If bladders are stored on slopes the potential for rolling must be assessed and if necessary containment or anchors installed. Options to mitigate the potential for rolling may include a fence, dirt berm, or a tethered anchor.
- Secondary containment is recommended in the form of a dirt berm, containment pit or impermeable material with skeletal support. Dirt berms shall be sculpted to a maximum 1:2 slope ratio. The containment should be capable of holding the contents of the bladder. At the least, secondary containment should be designed to slow the initial force of a failure.
- Bladders should be monitored consistently throughout their use to prevent failure. Inspections for structural weaknesses and other risks that may cause failure should occur a minimum of once per month.



*This is an example of a containment pit which will assist in mitigating the impacts if this storage bladder failed.*

## **BMP: Cultivation Site Restoration**

- Remove all cultivation and associated materials from designated cultivation site.
  - This includes plant mass, root balls, potting containers, cultivation medium and any materials associated with the preparation, cultivation, and harvest of commercial cannabis.
  - Cultivation medium removed from the site shall be stored/disposed of in compliance with Order conditions related to spoils management.
- All disturbed and/or unstable slopes shall be stabilized and returned to pre-project conditions.
  - Slopes shall be contoured as close as feasible to natural grade and aspect.
  - Temporary erosion control shall be applied to prevent sediment run-off.
- Soil exposed as a result of project work, soil above rock riprap, and interstitial spaces between rocks shall be revegetated with native species by live planting, seed casting, or hydroseeding prior to the rainy season of the year work is completed.
  - Native plants characteristic of the local habitat shall be used for revegetation when implementing and maintaining cleanup/restoration work in riparian and other sensitive areas.
  - Native forbes and gramminoids shall be planted to replace sediment stabilization, sediment filtration and nutrient filtration
  - Native trees and shrubs shall be planted to replace bank stabilization, inputs of large woody debris and temperature control within riparian areas.
  - Restoration of the quality/health of the riparian stand shall promote: 1) shade and microclimate controls; 2) delivery of wood to channels, 3) slope stability and erosion control, 4) ground cover, and 5) removal of excess nutrients.

# Biological Report

Willow Creek, Humboldt County, California

APN 522-282-003



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*October 5<sup>th</sup>, 2018*



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## **I. Summary of Findings and Conclusions**

The parcel APN 304-092-014 is in the community of Willow Creek in Humboldt County, California (Figure 1). This Biological Report reviewed the cultivation area at the above APN to determine potential effects on wildlife species currently listed or proposed for listing, including the Humboldt marten (*Martes caurina humboldtensis*) and fisher (*Pekania pennanti*). The project was also reviewed for the potential to impact special status plant species and or sensitive natural communities. See Tables 1 and 2 for a list of reviewed species.

*No sensitive wildlife, plant species or natural communities were found within or near the cultivation area. We have determined that the cultivation and operations are likely to have little to no effects on sensitive wildlife species or any special status plants or natural communities.*

## **II. Introduction, Background, and Project Understanding**

The purpose of this Biological Report is to review the project in sufficient detail to determine potential impacts to wildlife species currently listed or formally proposed for listing as endangered or threatened under the federal Endangered Species Act (ESA) or designated as sensitive by the California Department of Fish and Wildlife; these species are hereinafter referred to as special status species. Species with potential habitat present, or whose presence was not confirmed but potentially occur in the general area, are considered in further detail and include the Humboldt marten (*Martes caurina humboldtensis*) and fisher (*Pekania pennanti*).

This report also reviews potential impacts to any plant species that are listed, candidates for listing, or proposed for listing under the ESA, CESA and the California Native Plant Protection Act and or meet the definition of rare or endangered under the California Environmental Quality Act (CEQA), hereinafter referred to as special status plants. Species for which habitat is present within the vicinity of the project area are listed in Table 2.

A biological assessment of the project area and the surrounding habitat was conducted to evaluate any potential habitat for special status animal or plant species or other environmental issues. In addition, these areas were surveyed in order to describe any terrestrial and aquatic animals or plants occurring in and around the project area.

### ***Project Site***

The project is located on Humboldt County APN 522-282-003 in the community of Willow Creek, located in the Trinity River watershed. The legal description of the site is within the USGS 7.5' Salyer quadrangle T7N, R5E Sec 33 HB&M. The parcel is approximately 5 acres in size, sloping from approximately 800 feet in elevation on the western border along CA-Hwy 229 to approximately 500 feet in elevation along the Trinity River. The upper portion of this parcel is reported by the landowner to have received a considerable amount of fill after the major flood event of 1964, as the community of willow creek excavated the alluvial material and waste deposited in town by the floodwaters. A few years after the flood, a flat was reportedly graded into this fill deposit. In 2011/2012 this original flat was expanded/regraded to current dimensions of 20,000 square feet, and a grading permit was obtained in 2016. All infrastructure is confined to this flat, upon which all vegetation was removed. Directly to the east of this flat the parcel is heavily forested, sloping at an approximately 50% grade down to the gravel bar of the Trinity River. This large portion of the parcel is undeveloped and relatively inaccessible to foot traffic and entirely inaccessible to vehicles. There is no vehicular access to the river bar from anywhere on this parcel.

### ***Biological Description***

The upper portion of the parcel is dominated by closed-canopy mixed evergreen forest forming a *Pseudotsuga menziesii* Forest Alliance (S4), composed primarily of a *Pseudotsuga menziesii* – *Quercus chrysolepis* – *Arbutus menziesii* / *Notholithocarpus densiflorus* var. *densiflorus* association. Other associated canopy species include *Quercus kelloggii* and *Acer macrophyllum*. The sparse herbaceous understory is primarily composed primarily of *Polystichum munitum* and *Rubus ursinus*. The lower portion of the parcel along the river bar was not visited. The edges of the clearing associated with the flat described above and the cut banks along the access road are dominated by *Baccharis pilularis* Shrubland Alliance (S5), primarily composed of *Baccharis pilularis* – *Rubus armeniacus* / weedy herb associations. Weedy grasses such as *Hordeum vulgare*, *Briza maxima*, *Festuca perennis*, and *Gastridium phleoides* dominate the steeper cut-bank sections above and below the terrace flat.

No watercourses cross this parcel, but the eastern parcel boundary abuts the Trinity River. This portion of the property is inaccessible and receives no impacts from current or proposed activity and is therefore not included in this assessment.

Soils over the entire parcel are mapped as 243—Maymen family-Rock outcrop, metasedimentary complex, 60 to 80 percent slopes, with parent material of residuum weathered from metasedimentary rock and no parent material (unweathered bedrock) respectively. These soils are described as gravelly loams from a depth of 0 to 8 inches and unweathered bedrock below (NRCS, 2018). See Appendix C for NRCS soils map.

### ***Project Description***

There is currently approximately 5,400 square feet of outdoor *Cannabis* cultivation on this parcel, over an approximately 8,000 square foot existing impact area. This project proposes to license this existing square footage with no expansion. See Figures 2-3.



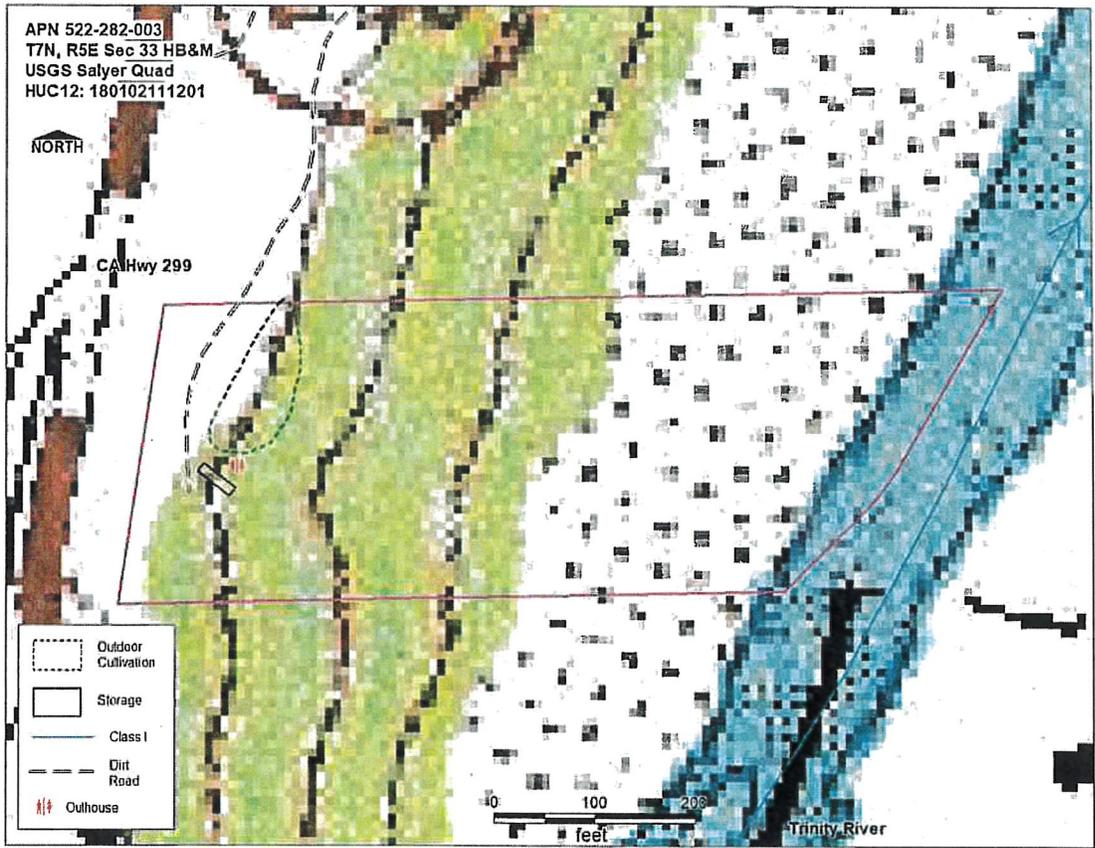


Figure 2. Property map for APN 522-282-003, Topographic view.

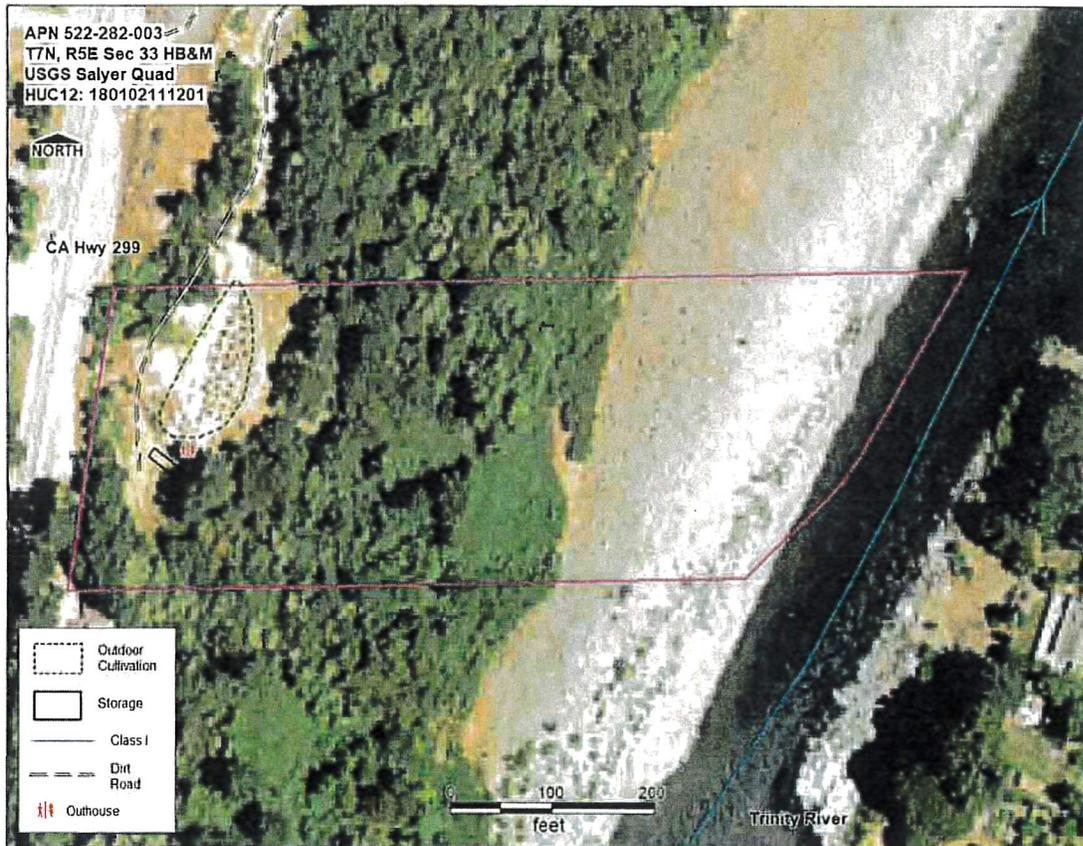


Figure 3. Property map for APN 522-282-003, 2016 NAIP Image

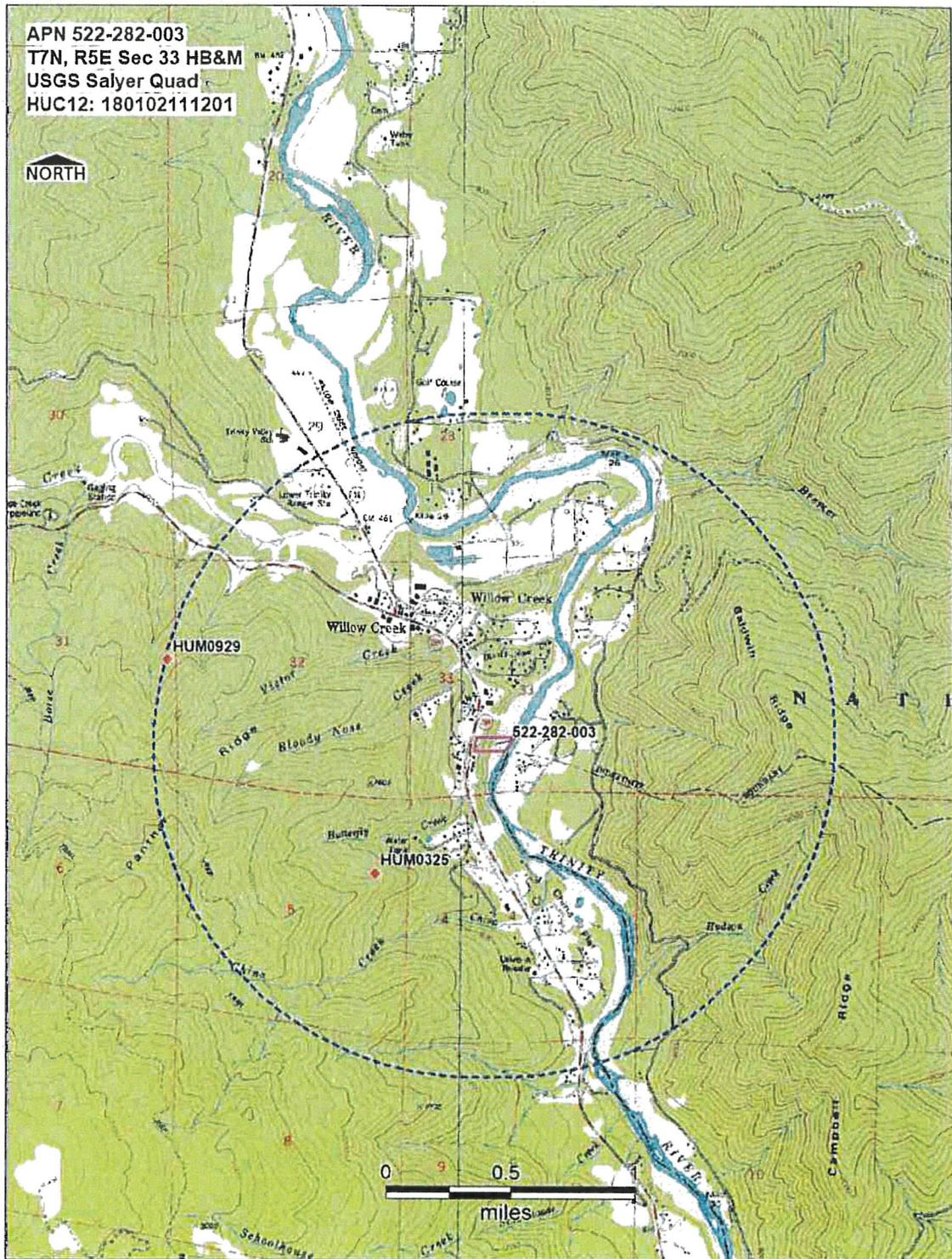


Figure 4. NSO activity centers within 1.3-mile radius of APN 522-282-003

### III. Methods

#### *Pre-Field Review*

Prior to the survey, the California Department of Fish and Wildlife (CDFW) California Natural Diversity Data Base (CNDDDB, 2018) record of wildlife species occurrences for Humboldt County was queried for a nine-Quad area around the project site, to determine which special status species may occur within the project area and to compile a target species list (Table 1). There are two northern spotted owl (NSO) Activity Centers in a 1.3-mile radius of this project: HUM0325 is 0.6 miles away and HUM0929 is 1.3 miles away (Figure 4).

Additionally, the current inventories of the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants of California (CNPS 1, 2018), the CDFW California Natural Diversity Database (CNDDDB, 2018) were consulted to determine which special status plant species may occur within the project area and to compile a target species list. A nine-Quad query of CNDDDB and CNPS Inventory records resulted in 58 listed vascular and nonvascular plant species. These species were used to form a target list, found in Table 2. These scoping strategies are consistent with the California Department of Fish and Wildlife protocols (CDFW, 2018) and the California Environmental Quality Act (State of California, 2001).

Table 1. CNDDDB list of potential special status wildlife species in the Salyer nine-quad area

Common Name	Scientific Name	Fed/State Listing
bald eagle	<i>Haliaeetus leucocephalus</i>	State Endangered
northern goshawk	<i>Accipiter gentilis</i>	State Species of Special Concern (SSC)
osprey	<i>Pandion haliaetus</i>	Watch List
Humboldt marten	<i>Martes caurina humboldtensis</i>	Candidate Endangered
Pacific fisher- West Coast DPS	<i>Pekania pennanti</i>	Proposed & Candidate Threatened
California wolverine	<i>Gulo gulo</i>	State Threatened
Sonoma tree vole	<i>Arborimus pomo</i>	SSC
Townsend's big-eared bat	<i>Corynorhinus townsendii</i>	SSC
western pond turtle	<i>Emys marmota</i>	SSC
Pacific tailed frog	<i>Ascaphus truei</i>	SSC
foothill yellow-legged frog	<i>Rana boylei</i>	Candidate Threatened
northern red-legged frog	<i>Rana aurora</i>	SSC
southern torrent salamander	<i>Rhyacotriton variegatus</i>	SSC
Del Norte salamander	<i>Plethodon elongatus</i>	Watch List
summer-run steelhead trout	<i>Oncorhynchus mykiss irideus</i>	SSC
chinook salmon	<i>Oncorhynchus tshawytscha</i>	SSC

Table 2. Target species list: CNPS Rare Plant Rank (CNPR) in the Salyer nine-quad area (CNPS 1, 2018)

Scientific Name	Common Name	CRPR	SRank	Blooming Period	Habitat	Micro Habitat	Elevation Low (m)	Elevation High (m)
<i>Allium siskiyouense</i>	Siskiyou onion	4.3	S4	(Apr)May-Jul	Lower montane coniferous forest, Upper montane coniferous forest	rocky, sometimes serpentinite	855	2500
<i>Antennaria suffrutescens</i>	evergreen everlasting	4.3	S4?	Jan-Jul	Lower montane coniferous forest (serpentinite)		500	1600
<i>Arnica cernua</i>	serpentine arnica	4.3	S4	Apr-Jul	Lower montane coniferous forest (serpentinite)		500	1920
<i>Astragalus umbraticus</i>	Bald Mountain milk-vetch	2B.3	S2	May-Aug	Cismontane woodland, Lower montane coniferous forest	sometimes roadside	150	1250
<i>Bensoniella oregona</i>	bensoniella	1B.1	S2	May-Jul	Bogs and fens, Lower montane coniferous forest (openings), Meadows and seeps	mesic	915	1400
<i>Botrypus virginianus</i>	rattlesnake fern	2B.2	S2	Jun, Aug, Sep	Bogs and fens, Lower montane coniferous forest (mesic), Meadows and seeps, Riparian forest	streams	715	1355
<i>Carex arcta</i>	northern clustered sedge	2B.2	S1	Jun-Sep	Bogs and fens, North Coast coniferous forest (mesic)		60	1400
<i>Carex geyeri</i>	Geyer's sedge	4.2	S4	May-Aug	Great Basin scrub, Lower montane coniferous forest		1155	2195
<i>Carex praticola</i>	northern meadow sedge	2B.2	S2	May-Jul	Meadows and seeps (mesic)		0	3200
<i>Chrysosplenium glechomifolium</i>	Pacific golden saxifrage	4.3	S3	Feb-Jun	North Coast coniferous forest, Riparian forest	Streambanks, sometimes seeps, sometimes roadsides	10	220
<i>Collomia diversifolia</i>	serpentine collomia	4.3	S4	May-Jun	Chaparral, Cismontane woodland	serpentinite, rocky or gravelly	200	600
<i>Collomia tracyi</i>	Tracy's collomia	4.3	S4	Jun-Jul	Broadleafed upland forest, Lower montane coniferous forest	rocky, sometimes serpentinite	300	2100
<i>Coptis laciniata</i>	Oregon goldthread	4.2	S3?	(Feb)Mar-May (Sep-Nov)	Meadows and seeps, North Coast coniferous forest (streambanks)	Mesic	0	1000
<i>Cornus canadensis</i>	bunchberry	2B.2	S2	May-Jul	Bogs and fens, Meadows and seeps, North Coast coniferous forest		60	1920

<i>Cypripedium californicum</i>	California lady's-slipper	4.2	S4	Apr-Aug (Sep)	Bogs and fens, Lower montane coniferous forest	seeps and streambanks, usually serpentinite	30	2750
<i>Cypripedium montanum</i>	mountain lady's-slipper	4.2	S4	Mar-Aug	Broadleafed upland forest, Cismontane woodland, Lower montane coniferous forest, North Coast coniferous forest		185	2225
<i>Epilobium oregonum</i>	Oregon fireweed	1B.2	S2	Jun-Sep	Bogs and fens, Lower montane coniferous forest, Meadows and seeps, Upper montane coniferous forest	mesic	500	2240
<i>Epilobium septentrionale</i>	Humboldt County fuchsia	4.3	S4	Jul-Sep	Broadleafed upland forest, North Coast coniferous forest	sandy or rocky	45	1800
<i>Erythranthe trinitensis</i>	pink-margined monkeyflower	1B.3	S3	Jun-Jul (Aug)	Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Upper montane coniferous forest	Often serpentinite, often roadsides	400	2285
<i>Erythronium citrinum</i> var. <i>citrinum</i>	lemon-colored fawn lily	4.3	S3	Mar-May	Chaparral, Lower montane coniferous forest	usually serpentinite	150	1300
<i>Erythronium oregonum</i>	giant fawn lily	2B.2	S2	Mar-Jun (Jul)	Cismontane woodland, Meadows and seeps	sometimes serpentinite, rocky, openings	100	1150
<i>Erythronium revolutum</i>	coast fawn lily	2B.2	S3	Mar-Jul (Aug)	Bogs and fens, Broadleafed upland forest, North Coast coniferous forest	Mesic, streambanks	0	1600
<i>Eucephalus vialis</i>	wayside aster	1B.2	S1	Jun-Sep	Lower montane coniferous forest, Upper montane coniferous forest	gravelly	910	1545
<i>Gilia capitata</i> ssp. <i>pacifica</i>	Pacific gilia	1B.2	S2	Apr-Aug	Coastal bluff scrub, Chaparral (openings), Coastal prairie, Valley and foothill grassland		5	1665
<i>Glyceria grandis</i>	American manna grass	2B.3	S3	Jun-Aug	Bogs and fens, Meadows and seeps, Marshes and swamps (streambanks and lake margins)		15	1980
<i>Iliamna latibracteata</i>	California globe mallow	1B.2	S2	Jun-Aug	Chaparral (montane), Lower montane coniferous forest, North Coast coniferous forest (mesic), Riparian scrub (streambanks)	Often in burned areas	60	2000
<i>Kopsiopsis hookeri</i>	small groundcone	2B.3	S1S2	Apr-Aug	North Coast coniferous forest		90	885

<i>Lewisia cotyledon</i> var. <i>howellii</i>	Howell's lewisia	3.2	S2	Apr-Jul	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest	rocky	150	2010
<i>Lilium kelloggii</i>	Kellogg's lily	4.3	S3	May-Aug	Lower montane coniferous forest, North Coast coniferous forest	Openings, roadsides	3	1300
<i>Lilium pardalinum</i> ssp. <i>vollmeri</i>	Vollmer's lily	4.3	S3	(Jun)Jul-Aug	Bogs and fens, Meadows and seeps (mesic)		30	1680
<i>Lilium rubescens</i>	redwood lily	4.2	S3	Apr-Aug (Sep)	Broadleafed upland forest, Chaparral, Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest	Sometimes serpentinite, sometimes roadsides	30	1910
<i>Listera cordata</i>	heart-leaved twayblade	4.2	S4	Feb-Jul	Bogs and fens, Lower montane coniferous forest, North Coast coniferous forest		5	1370
<i>Lycopodium clavatum</i>	running-pine	4.1	S3	Jun-Aug (Sep)	Lower montane coniferous forest (mesic), Marshes and swamps, North Coast coniferous forest (mesic)	often edges, openings, and roadsides	45	1225
<i>Micranthes marshallii</i>	Marshall's saxifrage	4.3	S3	Mar-Aug	Riparian forest	rocky streambanks	90	2130
<i>Microseris borealis</i>	northern microseris	2B.1	S1	Jun-Sep	Bogs and fens, Lower montane coniferous forest, Meadows and seeps	mesic	1000	2000
<i>Mitlichhoferia elongata</i>	elongate copper moss	4.3	S4		Broadleafed upland forest, Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Meadows and seeps, Subalpine coniferous forest	Metamorphic rock, usually acidic, usually vernal mesic, often roadsides, sometimes carbonate	0	1960
<i>Mitellastrum caulescens</i>	leafy-stemmed mitrewort	4.2	S4	(Mar)Apr-Oct	Broadleafed upland forest, Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest	mesic, sometimes roadsides	5	1700
<i>Montia howellii</i>	Howell's montia	2B.2	S2	(Feb)Mar-May	Meadows and seeps, North Coast coniferous forest, Vernal pools	vernally mesic, sometimes roadsides	0	835
<i>Oenothera wolfii</i>	Wolf's evening-primrose	1B.1	S1	May-Oct	Coastal bluff scrub, Coastal dunes, Coastal prairie, Lower montane coniferous forest	sandy, usually mesic	3	800

<i>Piperia candida</i>	white-flowered rein orchid	1B.2	S3	(Mar)May-Sep	Broadleaved upland forest, Lower montane coniferous forest, North Coast coniferous forest	sometimes serpentinite	30	1310
<i>Pityopus californicus</i>	California pinefoot	4.2	S4	(Mar-Apr) May-Aug	Broadleaved upland forest, Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest	mesic	15	2225
<i>Platanthera stricta</i>	slender bog-orchid	4.2	S3	May-Aug	Lower montane coniferous forest, Meadows and seeps	mesic	1000	2300
<i>Pleuropogon refractus</i>	nodding semaphore grass	4.2	S4	(Mar)Apr-Aug	Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest, Riparian forest	Mesic	0	1600
<i>Ptilidium californicum</i>	Pacific fuzz wort	4.3	S3S4	May-Aug	Lower montane coniferous forest, Upper montane coniferous forest	Usually epiphytic on trees, fallen and decaying logs, and stumps; rarely on humus over boulders	1140	1800
<i>Ramalina thrausta</i>	angel's hair lichen	2B.1	S2?		North Coast coniferous forest	On dead twigs and other lichens	75	430
<i>Ribes laxiflorum</i>	trailing black currant	4.3	S4	Mar-Jul (Aug)	North Coast coniferous forest	sometimes roadside	5	1395
<i>Rosa gymnocarpa var. serpentina</i>	Gasquet rose	1B.3	S2	Apr-Jun (Aug)	Chaparral, Cismontane woodland	Serpentine. Often roadsides, sometimes ridges, streambanks, and openings.	400	1725
<i>Sanguisorba officinalis</i>	great burnet	2B.2	S2	Jul-Oct	Bogs and fens, Broadleaved upland forest, Meadows and seeps, Marshes and swamps, North Coast coniferous forest, Riparian forest	often serpentinite	60	1400
<i>Sanicula tracyi</i>	Tracy's sanicle	4.2	S4	Apr-Jul	Cismontane woodland, Lower montane coniferous forest, Upper montane coniferous forest	openings	100	1585

<i>Sedum laxum</i> <i>ssp. flavidum</i>	pale yellow stonecrop	4.3	S4	May-Jul	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Upper montane coniferous forest	Serpentinite or volcanic	455	2000
<i>Sidalcea</i> <i>malachroides</i>	maple-leaved checkerbloom	4.2	S3	(Mar)Apr- Aug	Broadleafed upland forest, Coastal prairie, Coastal scrub, North Coast coniferous forest, Riparian woodland	Often in disturbed areas	0	730
<i>Sidalcea</i> <i>malviflora</i> <i>ssp.</i> <i>patula</i>	Siskiyou checkerbloom	1B.2	S2	May-Aug	Coastal bluff scrub, Coastal prairie, North Coast coniferous forest	often roadcuts	15	880
<i>Sidalcea</i> <i>oregana</i> <i>ssp.</i> <i>eximia</i>	coast checkerbloom	1B.2	S1	Jun-Aug	Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest		5	1340
<i>Tauschia</i> <i>glauca</i>	glaucous tauschia	4.3	S4	Apr-Jun	Lower montane coniferous forest (gravelly, serpentinite)		80	1700
<i>Thermopsis</i> <i>robusta</i>	robust false lupine	1B.2	S2	May-Jul	Broadleafed upland forest, North Coast coniferous forest		150	1500
<i>Tiarella</i> <i>trifoliata</i> <i>var.</i> <i>trifoliata</i>	trifoliolate laceflower	3.2	S2S3	(May)Jun- Aug	Lower montane coniferous forest, North Coast coniferous forest	edges, moist shady banks, streambanks	170	1500
<i>Trillium ovatum</i> <i>ssp. oettingeri</i>	Salmon Mountains wakerobin	4.2	S3	Feb-Jul	Lower montane coniferous forest, Riparian scrub, Upper montane coniferous forest	Mesic	855	2024
<i>Vaccinium</i> <i>scoparium</i>	little-leaved huckleberry	2B.2	S3	Jun-Aug	Subalpine coniferous forest (rocky)		1036	2200

\*Listing codes are as follows: CRPR 1B = rare, threatened, or endangered in CA and elsewhere; CRPR 2B = rare, threatened, or endangered in CA, but more common elsewhere; CRPR 3 = plants about which more information is needed; a review list; CRPR 4 = of limited distribution or infrequent throughout a broader area in California. Ranks at each level also include a threat rank and are determined as follows: 0.1-Seriously threatened in California; 0.2-Moderately threatened in California; 0.3-Not very threatened in California (CNPS 1, 2018). S1: Fewer than 6 viable occurrences worldwide/ statewide, and/ or up to 518 hectares; S2: 6-20 viable occurrences worldwide/ statewide, and/ or more than 518-2,590 hectares; S3: 21-100 viable occurrences worldwide/ statewide, and/or more than 2,590-12,950 hectares; S4: Greater than 100 viable occurrences worldwide/ statewide, and/or more than 12,950 hectares; S5: Demonstrably secure because of its worldwide/ statewide abundance. Additional Threat Ranks: 0.1=Very threatened; 0.2=Threatened; 0.3= No current threat known.

### *Field Survey*

On August 2<sup>nd</sup>, 2018 NRM wildlife biologist Alicia Heitzman conducted a site visit to survey the project and surrounding area for all terrestrial and aquatic species present. The survey was conducted at 9:30 am for approximately 1 hour on a warm (70°F/21°C), sunny morning. Alicia holds a B.S. in Wildlife Management and Conservation and has been conducting wildlife surveys in Northern California for 3 years.

While walking the area, all auidial detections of bird and mammal species were noted, and the entire area traversed. An approximate 100-foot buffer around the project area was scanned for wildlife sign (tracks and scat). In addition, trees were inspected for activity or sign of use by wildlife (cavities, nests, scrapes or accumulated vegetation), and all cover objects were inspected for potential amphibian species.

NRM botanist Claire Brown also conducted a site visit on August 2<sup>nd</sup>, 2018. Claire Brown holds a B.S. in Ecology and Evolutionary Biology and has been conducting botanical surveys and vegetation assessments in California for 6 years. Field survey hours totaled 1.5. The comprehensive survey method was used to cover the project area intensively (Figure 5). The project area plus an approximate 100-foot buffer was surveyed for potential habitat for special status plants, special status plant populations, and sensitive natural communities (Table 2). The scope of this survey was particularly focused on identifying potential habitat for special status plants that would be impacted by the project, as the seasonal timing was not appropriate to detect most target species. Vascular plants encountered in the field were identified to the lowest taxonomic level necessary for a rare species determination. Species were identified using the Jepson Manual 2nd edition (Baldwin et al., 2012) A comprehensive species list for the project area was recorded and is found in Appendix B.

Vegetation types within and around the project area were identified and recorded according to the conventions of A Manual of California Vegetation, Second Edition (Sawyer and Keeler-Wolf, 2009). CDFW's California Sensitive Natural Communities list (CDFW 2, 2018) was referenced to determine if Sensitive Communities were included in the vegetation alliances and associations found on-site.

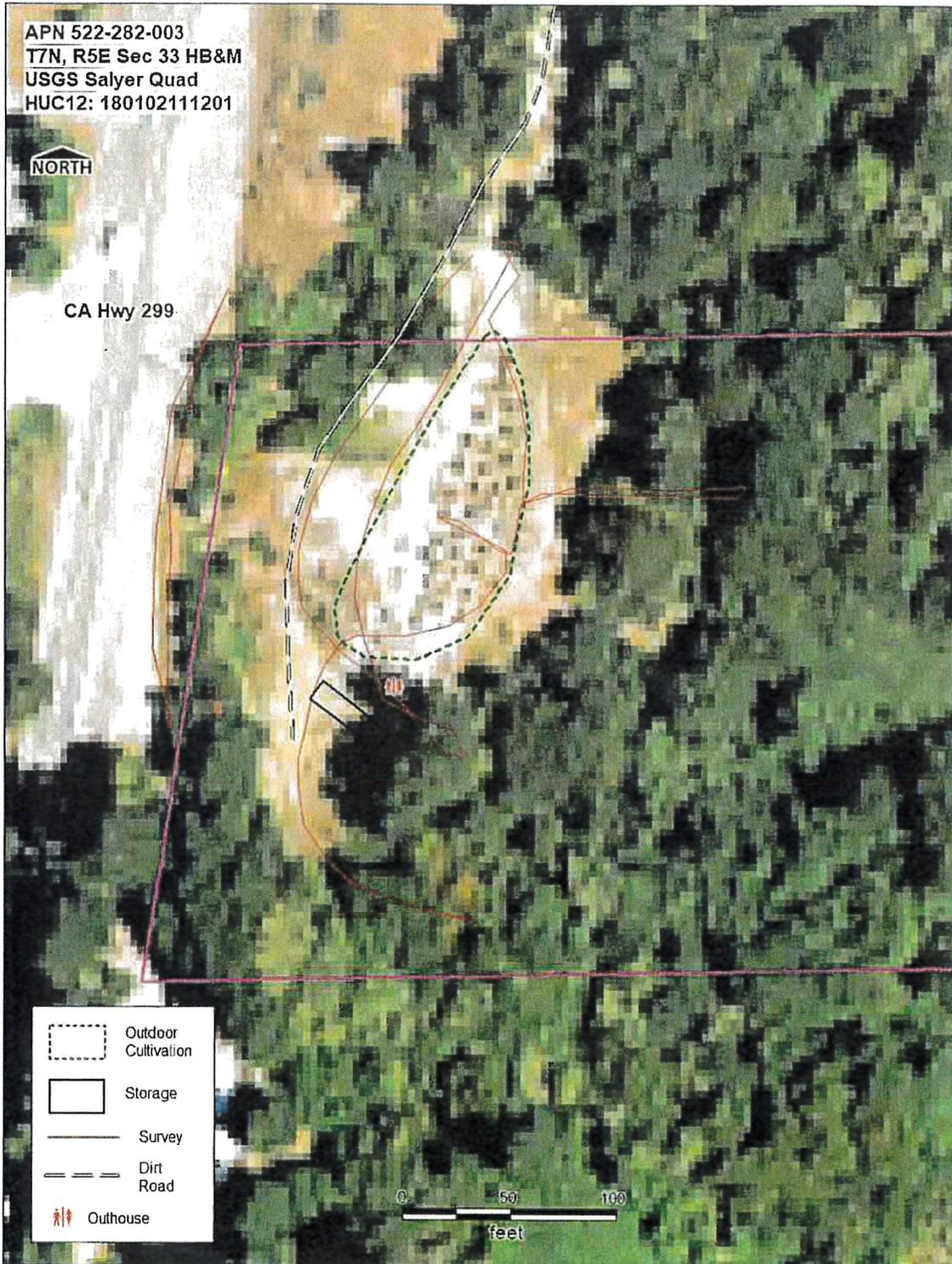


Figure 5. Biological and botanical survey route August 2nd, 2018

## IV. Results and Discussion: Wildlife

### *Summary of Findings*

For all species, direct effects are those which are caused by the action (project) and occur at the same time and place. Indirect effects are defined as those effects caused by the proposed action and are later in time, but still reasonably certain to occur. No listed wildlife species or special status species were detected during the survey. Special status and additional species of interest, and the potential for project impacts, are presented in Table 3, below. None of these species are expected to experience impacts from the proposed projects either directly or indirectly. The only wolverine recorded in California (2008) had maintained a 290 square mile area in Tahoe National Forest when last reported six years later. In addition, this animal is past life expectancy for wolverine in the wild and the species may once again no longer exist in the state of California. All wildlife species detected during the survey are listed in Table 4. Despite the proximity of northern spotted owl (NSO) Activity Centers HUM0325 (0.6 mi) and HUM0929 (1.3 mi) there is no NSO nesting habitat on this parcel although foraging in the area is likely.

### *Survey Results*

A CNDDDB database search for all special status species within a 1-mile radius of the project revealed records for West Coast fisher. There is some fisher habitat likely available on adjacent USFS land; however, the forested area on the parcel will not be affected by the current cultivation. The project area is an already existing cleared flat and no new cultivation related development will be occurring on the parcel. It is determined that the project will have no impact on West Coast fisher even if they are found to be breeding in area.

Four ospreys were observed flying overhead during the biological survey on August 2<sup>nd</sup>, 2018. No direct effects to osprey are expected as no trees will be removed for the project development, and foraging habitat is present in surrounding area but not directly on property.

Ultimately, this project area is a small (5,400 square-foot) existing cultivation site immediately adjacent to Highway 299. It is unlikely that daily operations and cultivation activity for this project will adversely affect listed wildlife species, as no trees will be removed, and cultivation activity is limited to a historically impacted area on the western edge of the parcel. Additionally, cultivation activities are all outdoor and unlikely to create light or noise pollution that could disturb wildlife. As a major highway is located less than 100 feet from the project area, disturbance from vehicular traffic on the project area would be insignificant compared to the highway.

Table 3. Special status species, species present in project area, and potential impacts

Common Name <i>Scientific Name</i>	Listin g Statu s	General Habitat Description	Presence of Suitable Habitat w/in Site?	Potentially Affected by Project?	Comments
<b>BIRDS</b>					
northern goshawk	SSC	Within, and in vicinity of, coniferous forest; uses old nests, and maintains alternate sites. Prefers middle and higher elevations, and mature, dense conifer forests.	No	No	Some nesting/foraging may be present on adjacent USFS land; no impacts expected
osprey	WL	Ocean shore, bays, freshwater lakes, and larger streams	No	No	Likely present in Trinity river watershed; no impacts expected
bald eagle	SE	Requires large bodies of water, or free flowing rivers with abundant fish, and adjacent snags or other perches. Nests in large, old-growth, or dominant live tree, especially ponderosa pine.	No	No	Likely present in Trinity river watershed; no impacts expected
northern spotted owl	T	Old-growth forests or mixed stands of old-growth and mature trees; occasionally in younger forests with patches of big trees	No	No	Likely some habitat in vicinity but project impacts unknown; closest known AC is approximately 1.7 miles to the SW
<b>MAMMALS</b>					
Sonoma tree vole	SSC	North coast fog belt from Oregon border to Sonoma County; in Douglas-fir, redwood & montane hardwood-conifer forests	No	No	No habitat present
California wolverine	ST	Higher elevations of large areas of wilderness required; typically hunting in open and resting/denning in dense vegetation	No	No	Only animal in California documented in Tahoe NF (2008); previous records from 86 years ago
Humboldt marten	CE	Only in the coastal redwood zone from the Oregon border south to Sonoma County	No	No	Some habitat likely available on adjacent USFS land; project will have no impact even if found to be breeding in area

fisher	CT	Intermediate to large-tree stages of coniferous forests and deciduous-riparian areas with high percent canopy closure	No	No	Some habitat likely available on adjacent USFS land; project will have no impact even if found to be breeding in area
Townsend's big-eared bat	SSC	Throughout California in a wide variety of habitats; most common in mesic sites. Typically found in caves, mines, manmade structures	No	No	Some habitat may be present in the form of tree cavities; assume no project impacts unless found to be breeding in the area
<b>HERPETOFAUNA</b>					
western pond turtle	SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation	No	No	Nesting habitat not present/detected in project area; impacts unlikely
Pacific tailed frog	SSC	Occurs in montane hardwood-conifer, redwood, Douglas-fir & ponderosa pine habitats	No	No	Class II creek surveyed is not considered consistent or cool enough for this species
foothill yellow-legged frog	CT	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Apparently will also use shallow/ephemeral mid-elevation ponds	No	No	Rarely encountered far from rocky streams with permanent water; no habitat in surveyed area
northern red-legged frog	SSC	Humid forests, woodlands, grasslands, and stream sides in northwestern California, usually near dense riparian cover. Highly aquatic, little movement from streams/pond	No	No	Potential habitat is present within Trinity river watershed/tributaries; project impacts unlikely
southern torrent salamander	SSC	Coastal redwood, Douglas-fir, mixed conifer, montane riparian, and montane hardwood-conifer habitats; Old growth forests	No	No	Requires cold, well shaded permanent water; stays within splash zone; Class II not permanent, project impacts unlikely
Del Norte salamander	WL	Del Norte, Siskiyou, and Humboldt counties in valley-foothill riparian, montane hardwood-conifer, Douglas fir and redwood habitats. Typically found in moist areas with mossy covered rock, also logs.	No	No	No optimal habitat present, Class II not permanent; project impacts unlikely
<b>FISH</b>					
summer-run steelhead trout	FT	Hatch in gravel bottom of fast flowing streams and rivers; adults migrate to marine environments to mate and can spawn multiple times	No	No	Habitat is present in the Trinity River and watershed; project impacts unlikely
chinook salmon	FT	Hold in large deep pools in home streams typically with bedrock bottom and moderate velocities	No	No	Habitat is present in the Trinity River and watershed; project impacts unlikely

Table 4. Species detected on 8/2/18 at APN 522-282-003

Common Name	Scientific Name	Fed/ State Listing	Detection Method
turkey vulture	<i>Cathartes aura</i>	None	visual
osprey	<i>Pandion haliaetus</i>	WL	visual (4 individuals)
steller's jay	<i>Cyanocitta stelleri</i>	None	auditory & visual
lesser goldfinch	<i>Spinus psaltria</i>	None	visual
hummingbird spp	<i>Trochilidae spp.</i>	None	visual (too fast to ID)
spotted towhee	<i>Pipilo maculatus</i>	None	visual
chestnut-backed chickadee	<i>Poecile rufescens</i>	None	auditory
red-tailed hawk	<i>Buteo jamaicensis</i>	None	auditory
flycatcher spp	<i>Tyrannidae spp.</i>	None	visual (too far to identify)
gray squirrel	<i>Sciurus griseus</i>	None	visual
stripped skunk	<i>Mephitis mephitis</i>	None	visual
red-breasted sapsucker	<i>Sphyrapicus ruber</i>	None	visual (holes on trees)
black-tailed deer	<i>Odocoileus hemionus</i>	None	scat

### ***Species Accounts***

#### **Osprey**

*Regulatory Status:* The osprey is species on the California state watch-list.

*Habitat Requirements and Natural History:* This species occurs in open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching. Breeds/nests January through August.

*Potential for Occurrence within the Project Area:* This species occurs in ocean shores, bays, freshwater lakes, and larger streams.

*Direct Effects:* No direct effects are expected as no trees will be removed for the project development, and foraging habitat is present in surrounding area but not directly on property.

*Indirect Effects:* No indirect effects are expected.

*Determination:* It is determined that the project will have no effect on the osprey.

#### **Fisher**

*Regulatory Status:* The west coast population of fisher is a Federal and State Proposed Candidate Threatened species, and a State Species of Special Concern.

*Habitat Requirements and Natural History:* This species occurs in intermediate to large-tree stages of coniferous forests and deciduous-riparian habitats with a high canopy closure. Breeds February through May.

*Potential for Occurrence within the Project Area:* Assume nighttime foraging can/will occur in the project vicinity; Some habitat likely available on adjacent USFS land including potential breeding habitat.

*Direct Effects:* Even if fisher are denning in the area, project is expected to have no impacts.

*Indirect Effects:* No indirect effects are expected.

*Determination:* Project will have no impact even if found to be breeding in area.

**Cumulative Effects**

No cumulative effects on regulated species are expected from the proposed project .

**Management Recommendations**

1. Any structure requiring lighting (mixed light greenhouses or nurseries) before sunrise or after sunset MUST be covered to avoid any effects on nocturnal wildlife. Further, all attempts to keep noise levels at a minimum during year-round operations will help maintain the quality of habitat for all wildlife species.
2. Monofilament support netting should not be utilized (none was found onsite)
3. No rodenticide of any kind should be utilized on site

**V. Results and Discussion: Plants**

**Special Status Species**

No potential habitat for special status plants or special status plant populations were detected within the project footprint. The mixed evergreen forest matrix and forest-edge habitat surrounding the project site could provide habitat for some special status plants (Table 5), but this area will not be impacted by the project.

A total of 54 plant taxa were detected on site. A comprehensive list can be found in Appendix B.

Table 5. Summary of Findings for Special Status Plant Species

Scientific Name	Common Name	CRPR	Habitat	Micro Habitat	Species detected?	Habitat present?
<i>Allium siskiyouense</i>	Siskiyou onion	4.3	Lower montane coniferous forest, Upper montane coniferous forest	rocky, sometimes serpentinite	No	No-usually at higher elevations, no serpentinite
<i>Antennaria suffrutescens</i>	evergreen everlasting	4.3	Lower montane coniferous forest (serpentinite)		No	No-usually at higher elevations, no serpentinite
<i>Arnica cernua</i>	serpentine arnica	4.3	Lower montane coniferous forest (serpentinite)		No	No-usually at higher elevations, no serpentinite
<i>Astragalus umbraticus</i>	Bald' Mountain milk-vetch	2B.3	Cismontane woodland, Lower montane coniferous forest	sometimes roadside	No	Yes-possible along access road and in forest but would be outside of impact area
<i>Bensoniella oregona</i>	bensoniella	1B.1	Bogs and fens, Lower montane coniferous forest (openings), Meadows and seeps	mesic	No	No-usually at higher elevations, no meadows bogs or fens
<i>Botrypus virginianus</i>	rattlesnake fern	2B.2	Bogs and fens, Lower montane coniferous forest (mesic), Meadows and seeps, Riparian forest	streams	No	No-usually at higher elevations, no stream sides or riparian forest

<i>Carex arcta</i>	northern clustered sedge	2B.2	Bogs and fens, North Coast coniferous forest (mesic)		No	No- no bogs, fens or true mesic forest conditions
<i>Carex geyeri</i>	Geyer's sedge	4.2	Great Basin scrub, Lower montane coniferous forest		No	No-usually at higher elevations
<i>Carex praticola</i>	northern meadow sedge	2B.2	Meadows and seeps (mesic)		No	No- no meadows seeps or mesic forest conditions
<i>Chrysosplenium glechomifolium</i>	Pacific golden saxifrage	4.3	North Coast coniferous forest, Riparian forest	Streambanks, sometimes seeps, sometimes roadsides	No	No- no riparian areas or seeps
<i>Collomia diversifolia</i>	serpentine collomia	4.3	Chaparral, Cismontane woodland	serpentine, rocky or gravelly	No	Marginal- usually at higher elevations, rocky substrate present
<i>Collomia tracyi</i>	Tracy's collomia	4.3	Broadleafed upland forest, Lower montane coniferous forest	rocky, sometimes serpentine	No	Marginal- usually at higher elevations, rocky substrate present
<i>Coptis laciniata</i>	Oregon goldthread	4.2	Meadows and seeps, North Coast coniferous forest (streambanks)	Mesic	No	No- no streambanks or mesic conditions present
<i>Cornus canadensis</i>	bunchberry	2B.2	Bogs and fens, Meadows and seeps, North Coast coniferous forest		No	No-no fens or mesic conditions
<i>Cypripedium californicum</i>	California lady's-slipper	4.2	Bogs and fens, Lower montane coniferous forest	seeps and streambanks, usually serpentine	No	No- no seeps, streambanks or serpentine
<i>Cypripedium montanum</i>	mountain lady's-slipper	4.2	Broadleafed upland forest, Cismontane woodland, Lower montane coniferous forest, North Coast coniferous forest		No	Marginal- usually at higher elevations, forest habitat outside impact area
<i>Epilobium oregonum</i>	Oregon fireweed	1B.2	Bogs and fens, Lower montane coniferous forest, Meadows and seeps, Upper montane coniferous forest	mesic	No	No-usually at higher elevations, no mesic conditions
<i>Epilobium septentrionale</i>	Humboldt County fuchsia	4.3	Broadleafed upland forest, North Coast coniferous forest	sandy or rocky	No	Yes-possible along access road but would be outside of impact area
<i>Erythranthe trinitensis</i>	pink-margined monkeyflower	1B.3	Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Upper montane coniferous forest	Often serpentine, often roadsides	No	No- usually at higher elevations, no serpentine
<i>Erythronium citrinum</i> var. <i>citrinum</i>	lemon-colored fawn lily	4.3	Chaparral, Lower montane coniferous forest	usually serpentine	No	Marginal- usually at higher elevations, no serpentine
<i>Erythronium oregonum</i>	giant fawn lily	2B.2	Cismontane woodland, Meadows and seeps	sometimes serpentine, rocky, openings	No	Marginal- possible in forested area but unlikely due to closed canopy-also would be outside impact area
<i>Erythronium revolutum</i>	coast fawn lily	2B.2	Bogs and fens, Broadleafed upland forest, North Coast coniferous forest	Mesic, streambanks	No	No-no streambanks or mesic conditions

<i>Eucephalus vialis</i>	wayside aster	1B.2	Lower montane coniferous forest, Upper montane coniferous forest	gravelly	No	No-usually found at higher elevations
<i>Gilia capitata ssp. pacifica</i>	Pacific gilia	1B.2	Coastal bluff scrub, Chaparral (openings), Coastal prairie, Valley and foothill grassland		No	Marginal- possible but unlikely on gravelly cut banks, would be outside impact area
<i>Glyceria grandis</i>	American manna grass	2B.3	Bogs and fens, Meadows and seeps, Marshes and swamps (streambanks and lake margins)		No	No--no fens, seeps, streambanks
<i>Liamna latibracteata</i>	California globe mallow	1B.2	Chaparral (montane), Lower montane coniferous forest, North Coast coniferous forest (mesic), Riparian scrub (streambanks)	Often in burned areas	No	Marginal-possible along roadside openings would be out of impact area
<i>Kopsiopsis hookeri</i>	small groundcone	2B.3	North Coast coniferous forest		No	Marginal-possible within forest, would be outside of impact area
<i>Lewisia cotyledon var. howellii</i>	Howell's lewisia	3.2	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest	rocky	No	Marginal-possible in gravelly cut bank, would be outside of impact area.
<i>Lilium kelloggii</i>	Kellogg's lily	4.3	Lower montane coniferous forest, North Coast coniferous forest	Openings, roadsides	No	Marginal-possible along access road
<i>Lilium pardalinum ssp. vollmeri</i>	Vollmer's lily	4.3	Bogs and fens, Meadows and seeps (mesic)		No	No-no seeps, bogs or mesic conditions
<i>Lilium rubescens</i>	redwood lily	4.2	Broadleafed upland forest, Chaparral, Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest	Sometimes serpentinite, sometimes roadsides	No	Marginal-possible along access road
<i>Listera cordata</i>	heart-leaved twayblade	4.2	Bogs and fens, Lower montane coniferous forest, North Coast coniferous forest		No	Yes- possible in forest, would be outside of impact area
<i>Lycopodium clavatum</i>	running-pine	4.1	Lower montane coniferous forest (mesic), Marshes and swamps, North Coast coniferous forest (mesic)	often edges, openings, and roadsides	No	Marginal-possible along access road or in forested area-would be outside of impact area
<i>Micranthes marshallii</i>	Marshall's saxifrage	4.3	Riparian forest	rocky streambanks	No	No-no streambanks
<i>Microseris borealis</i>	northern microseris	2B.1	Bogs and fens, Lower montane coniferous forest, Meadows and seeps	mesic	No	No-no seeps, bogs or mesic conditions

<i>Mielichhoferia elongata</i>	elongate copper moss	4.3	Broadleafed upland forest, Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Meadows and seeps, Subalpine coniferous forest	Metamorphic rock, usually acidic, usually vernal mesic, often roadsides, sometimes carbonate	No	Marginal-potential habitat on rocky outcrops outside of impact area
<i>Mitellastracaulescens</i>	leafy-stemmed mitrewort	4.2	Broadleafed upland forest, Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest	mesic, sometimes roadsides	No	No-no streams or mesic conditions
<i>Montia howellii</i>	Howell's montia	2B.2	Meadows and seeps, North Coast coniferous forest, Vernal pools	vernal mesic, sometimes roadsides	No	Marginal-possible along access road but no good areas for vernal pooling identified
<i>Oenothera wolffii</i>	Wolf's evening-primrose	1B.1	Coastal bluff scrub, Coastal dunes, Coastal prairie, Lower montane coniferous forest	sandy, usually mesic	No	Marginal- Possible along gravel bar along Trinity River but would be well outside impact area
<i>Piperia candida</i>	white-flowered rein orchid	1B.2	Broadleafed upland forest, Lower montane coniferous forest, North Coast coniferous forest	sometimes serpentinite	No	Yes - possible in forested area but would be outside impact
<i>Pityopus californicus</i>	California pinefoot	4.2	Broadleafed upland forest, Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest	mesic	No	Yes - possible in forested area but would be outside impact
<i>Platanthera stricta</i>	slender bog-orchid	4.2	Lower montane coniferous forest, Meadows and seeps	mesic	No	No- no meadows, seeps ore mesic conditions
<i>Pleuropogon refractus</i>	nodding semaphore grass	4.2	Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest, Riparian forest	Mesic	No	No- no mesic conditions riparian forest or seeps
<i>Ptilidium californicum</i>	Pacific fuzz wort	4.3	Lower montane coniferous forest, Upper montane coniferous forest	Usually epiphytic on trees, fallen and decaying logs, and stumps; rarely on humus over boulders	No	No-usually found at higher elevations
<i>Ramalina thrausta</i>	angel's hair lichen	2B.1	North Coast coniferous forest	On dead twigs and other lichens	No	Yes-possible in forested area but outside impact area
<i>Ribes laxiflorum</i>	trailing black currant	4.3	North Coast coniferous forest	sometimes roadside	No	Marginal-usually found closer to the coast
<i>Rosa gymnocarpa var. serpentina</i>	Gasquet rose	1B.3	Chaparral, Cismontane woodland	Serpentinite. Often roadsides, sometimes ridges, streambanks, and openings.	No	No- no serpentinite

<i>Sanguisorba officinalis</i>	great burnet	2B.2	Bogs and fens, Broadleafed upland forest, Meadows and seeps, Marshes and swamps, North Coast coniferous forest, Riparian forest	often serpentinite	No	No- no serpentinite or marshes, swamps, mesic conditions
<i>Sanicula tracyi</i>	Tracy's sanicle	4.2	Cismontane woodland, Lower montane coniferous forest, Upper montane coniferous forest	openings	No	Marginal-possible in forest but unlikely due to dense canopy. would be outside impact area
<i>Sedum laxum ssp. flavidum</i>	pale yellow stonecrop	4.3	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Upper montane coniferous forest	Serpentinite or volcanic	No	No- no serpentinite or volcanic rock
<i>Sidalcea malachroides</i>	maple-leaved checkerbloom	4.2	Broadleafed upland forest, Coastal prairie, Coastal scrub, North Coast coniferous forest, Riparian woodland	Often in disturbed areas	No	Marginal-possible along access road or in forest edge but would be outside impact area
<i>Sidalcea malviflora ssp. patula</i>	Siskiyou checkerbloom	1B.2	Coastal bluff scrub, Coastal prairie, North Coast coniferous forest	often roadcuts	No	Marginal-possible along access road or in forest edge but would be outside impact area
<i>Sidalcea oregana ssp. eximia</i>	coast checkerbloom	1B.2	Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest		No	Marginal-possible along access road or in forest edge but would be outside impact area
<i>Tauschia glauca</i>	glaucous tauschia	4.3	Lower montane coniferous forest (gravelly, serpentinite)		No	Marginal-possible along access road but would be outside impact area- no serpentinite
<i>Thermopsis robusta</i>	robust false lupine	1B.2	Broadleafed upland forest, North Coast coniferous forest		No	Marginal- usually found at higher elevations but possible along access road
<i>Tiarella trifoliata var. trifoliata</i>	trifoliolate laceflower	3.2	Lower montane coniferous forest, North Coast coniferous forest	edges, moist shady banks, streambanks	No	No- no streambanks or mesic conditions
<i>Trillium ovatum ssp. oettingeri</i>	Salmon Mountains wakerobin	4.2	Lower montane coniferous forest, Riparian scrub, Upper montane coniferous forest	Mesic	No	No- usually found at higher elevations
<i>Vaccinium scoparium</i>	little-leaved huckleberry	2B.2	Subalpine coniferous forest (rocky)		No	No- usually found at higher elevations

### Natural Communities

No sensitive natural communities were found within the project area.

### Discussion

This project seeks to permit an existing *Cannabis* cultivation development seeking no expansion. Hence, all major impacts to vegetation have already occurred. The steep terrain and inaccessibility of the surrounding area will limit any further potential impacts my walking or vehicle use. Therefore, we find that

the project is to have little to no impact or cumulative effects on special status plants or sensitive natural communities. No further surveys are considered necessary or recommended.

## VI. References Cited

- Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken [editors]. 2012. *The Jepson Manual: Vascular Plants of California, 2nd edition, thoroughly revised and expanded*. University of California Press, Berkeley, CA.
- California Department of Fish and Wildlife (CDFW 1). 2018. *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*. The Resources Agency, Department of Fish and Wildlife, Sacramento, CA.
- California Department of Fish and Wildlife (CDFW 2). 2018. *California Sensitive Natural Communities*. The Resources Agency, Department of Fish and Wildlife, Sacramento, CA.
- California Native Plant Society (CNPS 1), Rare Plant Program. 2018. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.45). Website <http://www.rareplants.cnps.org>. Accessed July 30, 2018).
- California Native Plant Society (CNPS 2). 2018. A Manual of California Vegetation, Online Edition. <http://www.cnps.org/cnps/vegetation/>; searched on July 30, 2018. California Native Plant Society, Sacramento, CA
- California Natural Diversity Database (CNDDDB). 2018. RareFind 5 [Internet]. California Department of Fish and Wildlife [Version 5.2.14]. Accessed July 30, 2018.
- Holland, R.F. Unpublished report 1986. *Preliminary Descriptions of the Terrestrial Plant Communities of California*. State of California, The Resources Agency, Department of Fish and Game, Natural Heritage Division, Sacramento, CA.
- Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. The National Wetland Plant List: 2016 wetland ratings. *Phytoneuron* 2016-30: 1-17. Published 28 April 2016.
- Natural Resources Conservation Service (NRCS). 2018. United States Department of Agriculture. Web Soil Survey. Available online at the following link: <https://websoilsurvey.sc.egov.usda.gov/>. Accessed July 30, 2018.
- State of California. 2001. *California Environmental Quality Act Guidelines*. Office of Planning and Research, Articles 5, 7, 9, 10 & 20.

Appendix A (Pictures Taken July 31, 2018)



Photo 1. *Cannabis* cultivation terrace, looking south



Photo 2. *Cannabis* cultivation terrace, looking southeast from above



Photo 3. Access road, looking north



Photo 4. Terrace fill-slope, looking north



Photo 5. Mixed evergreen forest below access road, looking north



Photo 6. Mixed evergreen forest below terrace, looking southeast.

**Appendix B. Overall List of Vascular Plant Species Detected Within and Around Project Area.**

Scientific Name	Common Name	Family	Status
<b>Trees</b>			
<i>Alnus rhombifolia</i>	White alder	BETULACEAE	native
<i>Arbutus menziesii</i>	Madrone	ERICACEAE	native
<i>Notholithocarpus densiflorus var. densiflorus</i>	Tanoak	FAGACEAE	native
<i>Quercus chrysolepis</i>	Gold cup live oak	FAGACEAE	native
<i>Quercus kelloggii</i>	California black oak	FAGACEAE	native
<i>Pinus lambertiana</i>	Sugar pine	PINACEAE	native
<i>Pseudotsuga menziesii var. menziesii</i>	Douglas fir	PINACEAE	native
<i>Acer macrophyllum</i>	Bigleaf maple	SAPINDACEAE	native
<i>Ailanthus altissima</i>	Tree of heaven	SIMAROUBACEAE	invasive
<b>Shrubs</b>			
<i>Baccharis pilularis ssp. pilularis</i>	Coyote brush	ASTERACEAE	native
<i>Ceanothus integerrimus c.f.</i>	Deer brush	RHAMNACEAE	native
<i>Rubus armeniacus</i>	Himalayan blackberry	ROSACEAE	invasive
<b>Vines/Shrubs</b>			
<i>Toxicodendron diversilobum</i>	Poison oak	ANACARDIACEAE	native
<i>Lonicera hispidula</i>	Pink honeysuckle	CAPRIFOLIACEAE	native
<i>Whipplea modesta</i>	Modesty	HYDRANGEACEAE	native
<i>Rubus ursinus</i>	California blackberry	ROSACEAE	native
<i>Vitis californica</i>	California wild grape	VITACEAE	native
<b>Annual and Perennial Herbs</b>			
<i>Daucus carota</i>	Carrot	APIACEAE	invasive
<i>Carduus pycnocephalus</i>	Italian thistle	ASTERACEAE	invasive
<i>Cichorium intybus</i>	Chicory	ASTERACEAE	non-native

<i>Cirsium vulgare</i>	Bullthistle	ASTERACEAE	invasive
<i>Crepis capillaris</i>	Smooth hawksbeard	ASTERACEAE	non-native
<i>Erigeron canadensis</i>	Canada horseweed	ASTERACEAE	native
<i>Helminthotheca echioides</i>	Bristly ox-tongue	ASTERACEAE	invasive
<i>Lactuca serriola</i>	Prickly lettuce	ASTERACEAE	invasive
<i>Sonchus asper</i>	Spiny sowthistle	ASTERACEAE	invasive
<i>Brassica rapa</i>	Common mustard	BRASSICACEAE	invasive
<i>Acmispon wrangelianus</i>	Chilean trefoil	FABACEAE	native
<i>Vicia sativa</i>	Spring vetch	FABACEAE	non-native
<i>Mentha pulegium</i>	Pennyroyal	LAMIACEAE	invasive
<i>Lysimachia arvensis</i>	Scarlet pimpernel	MYRSINACEAE	non-native
<i>Plantago lanceolata</i>	Ribwort	PLANTAGINACEAE	invasive
<i>Polygonum aviculare</i>	Prostrate knotweed	POLYGONACEAE	non-native
<i>Rumex crispus</i>	Curly dock	POLYGONACEAE	invasive

#### **Grasses and Graminoids**

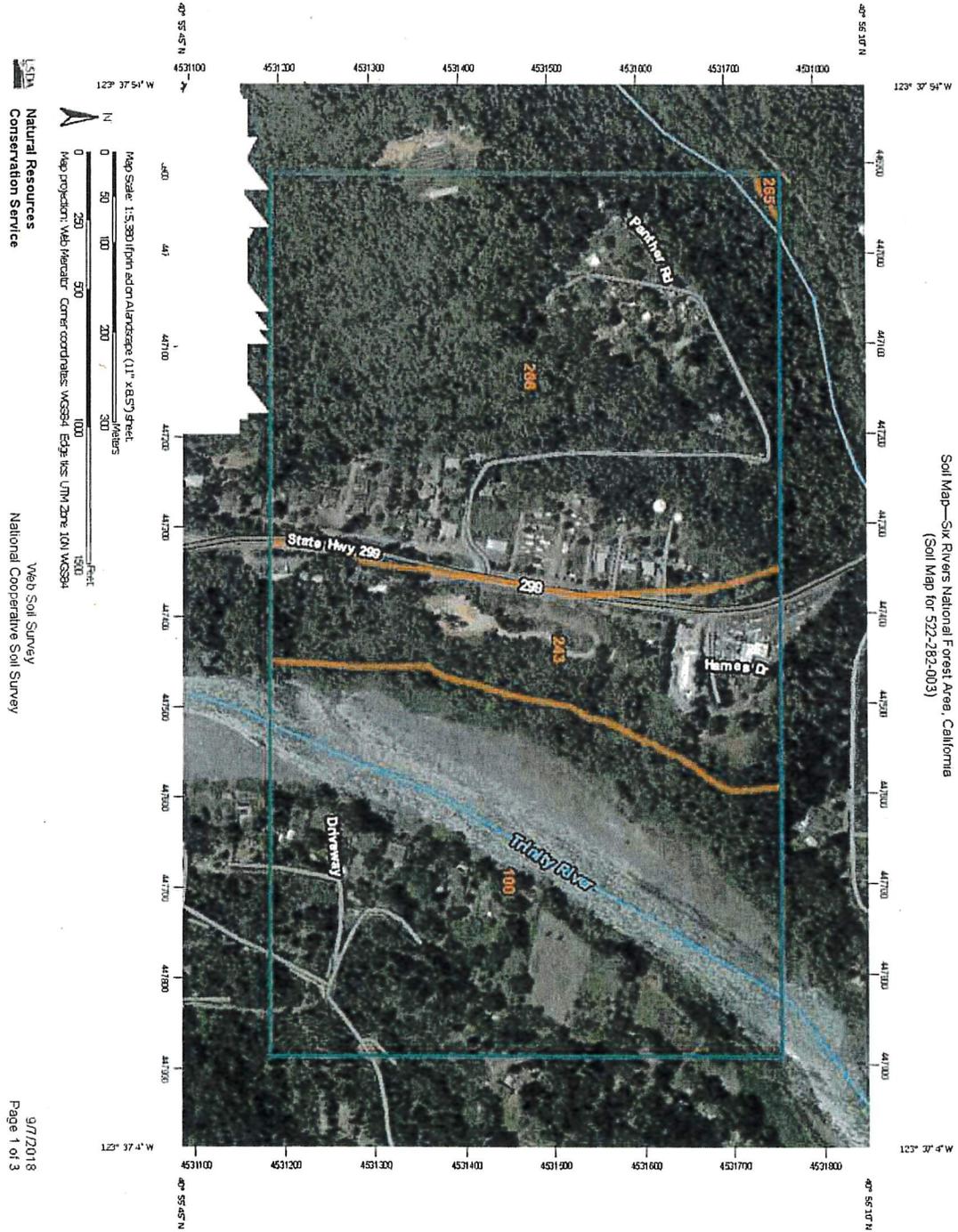
<i>Juncus bufonius</i>	Common toad rush	JUNCACEAE	native
<i>Aira caryophylllea</i>	Silvery hairgrass	POACEAE	invasive
<i>Avena sativa</i>	Wild oat	POACEAE	non-native
<i>Briza maxima</i>	Rattlesnake grass	POACEAE	invasive
<i>Bromus carinatus</i>	California brome grass	POACEAE	native
<i>Bromus hordeaceus</i>	Soft chess	POACEAE	invasive
<i>Cynodon dactylon</i>	Bermuda grass	POACEAE	invasive
<i>Danthonia californica</i>	California oatgrass	POACEAE	native
<i>Elymus glaucus</i>	Blue wildrye	POACEAE	native
<i>Festuca arundinacea</i>	Reed fescue	POACEAE	invasive
<i>Festuca perennis</i>	Italian rye grass	POACEAE	invasive
<i>Gastridium phleoides</i>	Nit grass	POACEAE	non-native

<i>Hordeum vulgare</i>	Common barley	POACEAE	non-native
<i>Phalaris aquatica</i>	Harding grass	POACEAE	invasive

**Ferns**

<i>Polysticum munitum</i>	Sword fern	DRYOPTERIDACEAE	Native
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# Appendix C. NRCS Soils Map of Project Area (NRCS, 2018)



### MAP LEGEND

- Area of Interest (AOI)
  - Area of Interest (AOI)
- Soils
  - Soil Map Unit Polygons
  - Soil Map Unit Lines
  - Soil Map Unit Points
- Special Point Features
  - Blowout
  - Borrow Pit
  - Clay Spot
  - Closed Depression
  - Gravel Pit
  - Gravelly Spot
  - Landfill
  - Lava Flow
  - Marsh or swamp
  - Mine or Quarry
  - Miscellaneous Water
  - Perennial Water
  - Rock Outcrop
  - Saline Spot
  - Sandy Spot
  - Severely Eroded Spot
  - Sinkhole
  - Slide or Slip
  - Sodic Spot
- Water Features
  - Streams and Canals
- Transportation
  - Rails
  - Interstate Highways
  - US Routes
  - Major Roads
  - Local Roads
- Background
  - Aerial Photography
- Spot Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

**Warning:** Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

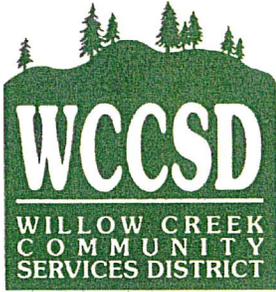
Soil Survey Area: Six Rivers National Forest Area, California  
Soil Area Data: Version 11, Oct 3, 2017  
Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 10, 2014—Mar 13, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres In AOI	Percent of AOI
100	Typic Xerofluvents-Riverwash association, 2 to 10 percent slopes	54.3	39.1%
243	Maymen family-Rock outcrop, metasedimentary complex, 60 to 80 percent slopes	21.1	15.2%
265	Clallam-Hugo-Holland families association, deep, dry, 35 to 70 percent slopes	0.2	0.1%
266	Clallam-Hugo-Holland families association, deep, 35 to 70 percent slopes	63.3	45.6%
<b>Totals for Area of Interest</b>		<b>138.8</b>	<b>100.0%</b>



May 21, 2019

Tyler Thompson  
Rustic Farms  
PO Box 143  
Burnt Ranch, CA 95527

**RE: Water use at 39675 Hwy 299 (APN 522-282-003)**

Mr. Thompson,

Your property at 39675 Hwy 299 in Willow Creek has an existing 5/8" water meter on the Willow Creek Community Services District water system. Your average annual water usage is approximately 30,000 cubic feet.

*224,415.58  
gallons*

I understand you have inquired if this meter can continue to be used at this rate for your agricultural business. This is acceptable to the Willow Creek Community Services District.

Please note that the WCCSD has a Drought Ordinance in its Board Policy. In the event of a drought, the water usage may be restricted per the policy (see attached).

Please let me know if you have any additional questions.

Sincerely,

A handwritten signature in blue ink that reads "Susan O'Gorman". The signature is fluid and cursive, with the first name "Susan" being more prominent than the last name "O'Gorman".

Susan O'Gorman  
General Manager

## Section 7 - Shortage of Water Priorities (Ord. #44 3.14.2014) (amended 4.30.15)

If for any reason, the Willow Creek Community Services Districts water is significantly depleted, the following priorities for water usage shall be followed.

1. District residential and small business customers will be our top priority.
2. Livestock watering.
3. Agricultural usage.
4. Commercial, Industrial, Golf Courses and Park Systems.

## SECTION 7A - DROUGHT CONDITIONS

1. If the Willow Creek Community Services District experiences drought conditions and the watershed is stressed from low rainfall. The District will impose the following water restrictions, if the Albert E Hodgson Water Treatment Facility is not able to pump and treat a minimum of 2.25 CFS (Cubic Feet Second) during peak usage from the confluences of the Willow Creek.
2. The Willow Creek Community Services District will follow all of the Governors executive orders of said document.
3. Governor may require a percentage of mandatory reduction of water usage (To be determined), **2015 will be 25%.**
4. No watering or washing down of driveways.
5. Washing vehicles with nozzles on hoses only.
6. No wasting water by prolonged leaks (must be repaired within 72 hours of notification).
7. Turning auto sprinklers off during rain storms and for two days after.
8. Ornamental fountains must have a recirculation water pump.
9. Water days may be restricted (If necessary).
10. No watering of public street medians with potable water that have ornamental turf.
11. Potable water sold within the WCCSD boundaries to water tenders will be limited to one load per week (up to 3,000 gallons per load) for residential use per parcel. This will be by permit only.  
Exception for water tenders will be for emergency services vehicles.
12. **Public Notice of Hearing:** Said Board of Directors shall, pursuant to Section 6061 of California Government Code, publish said hearing date at least seven days prior to vote on Emergency Drought Conditions.
13. Implementation of SECTION 7A, the Board of Directors will by majority vote; **State a Declaration of Emergency Drought Conditions in the Willow Creek Watershed.**

14. Such vote shall be enacted for that current calendar year only. If conditions exist continuously said Board of Directors shall vote each calendar year thereafter.
15. The Willow Creek Community Services District will restrict the water usage of our Park System up to 95 percent (to be determined by the General Manager).
16. The WCCSD will ask for volunteer water consumption decrease of up to 20 percent of normal monthly use for all customers first.
17. If volunteer usage fails to reach water usage goals, the following steps will be implemented.
  - A. Residential customers may be restricted up to 50 percent (to be determined by the General Manager) of normal household water usage. In particular warm outdoor watering season (May to October). All usage will be based on monthly average.
  - B. Residents will be restricted of no watering of lawns and gardens.
  - C. Livestock watering will be restricted to watering and care of animals only.
  - D. 1" to 3" Commercial, Industrial, large business and Agricultural meters will be restricted up to 75 percent (to be determined by the General Manager) and will be restricted of no watering of lawns. All usage will be based on a monthly average.
  - E. The District will restrict fire hydrant usage to emergency household water (dwellings, non-agriculture) for out of District and will also allow for the use of all fire departments and public emergency services.
  - F. Water will not be sold from hydrants for agriculture, commercial or personal use during drought conditions for non-emergency.
  - G. Customers not in compliance (water restrictions) with ORDINANCE NUMBER 44 will be subject to termination of service. However not before a written notice of non-compliance and the WCCSD working with the customer to rectify said non-compliance. This will be determined by the General Manager.
  - H. Customer service will not be restored without written agreement of compliance of ORDINANCE NUMBER 44 and acceptance of said agreement by the General Manager.
  - I. Said customer shall pay all costs that were occurred by the Willow Creek Community Services District for enforcing ORDINANCE NUMBER 44.
8. Appeal process: Customer may appeal noncompliance of ORIDANCE NUMBER 44 by following board policy protocol.
9. WCCSD customers will be given a 96 hour public notice (News outlets, WCCSD website and US Mail) if SECTION 7A is to be implemented.

**From:** carroll@timberlandresource.com  
**Sent:** Wednesday, October 31, 2018 8:39 AM  
**To:** tmcauliffe@timberlandresource.com  
**Subject:** FW: EPIMS - Lake or Streambed Alteration Notification Not Required - EPIMS-01923-R1

**From:** epims.support@wildlife.ca.gov <epims.support@wildlife.ca.gov>  
**Sent:** Wednesday, October 31, 2018 8:19 AM  
**To:** carroll@timberlandresource.com  
**Subject:** EPIMS - Lake or Streambed Alteration Notification Not Required - EPIMS-01923-R1

\*\*\*\* Do Not Respond to This Email \*\*\*\*

The following Cannabis Cultivation Self-Certification was received:  
Notification Number: EPIMS-01923-R1  
Name: Holly Hayes-Rustic Farms  
Program Area: Region 1

The California Department of Fish and Wildlife (CDFW) reviewed your Cannabis Cultivation Self-Certification (Self-Certification) that indicates the following:

1. Your project does not or will not result in **diversion or obstruction of water** from any river, stream, or lake; or use water from a source other than a municipal/public water supply.
- 2.
3. Your project does not or will not result in **disturbance to land or vegetation** in or adjacent to any river, stream, or lake, including those that are periodically dry.
- 4.
5. Your project does not or will not result in **deposition of any material** in or adjacent to any river, stream, or lake, including those that are periodically dry.

Based upon the information you provided in your Self-Certification, your project is not subject to the notification requirements pursuant to Fish and Game Code section 1602.

This letter and your submitted Self-Certification serve as **written verification that a Lake or Streambed Alteration Agreement is not required** for the activities described in your Self-Certification. A copy of this email, your submitted Self-Certification form, and all information and attachments submitted to CDFW must be available at all times at the project site. Please note that this written verification is not valid without this email and your submitted Self-Certification.

To print the required documents:

1. Print this email.
- 2.
3. Log into EPIMS at <https://EPIMS.wildlife.ca.gov>
- 4.
5. Click on "My Permit Applications".
- 6.
7. Click on "Archived Applications".
- 8.
9. Select the "Project Title" listed at the top of this email.

10.
  - o Verify the "ID" matches the "Notification Number" listed at the top of the email.
- 11.
12. The document will open in a separate browser tab/window.
- 13.
14. Use the steps normally used to print from the browser (i.e. Explorer, Chrome, Firefox, etc.).

If you change your project so that it differs materially from the project you described in your Self-Certification, you will need to submit a new Self-Certification.

Please note that you are responsible for complying with all applicable local, state, and federal laws in completing your work. This letter does not relieve you or any person acting on your behalf from complying with other applicable statutes in the Fish and Game Code including, but not limited to, sections 2050 et seq. (threatened and endangered species), section 3503 (bird nests and eggs), and section 3503.5 (birds of prey).

If you have questions, please contact the CDFW Region Office where the project is located. Please refer to the Notification number provided above.

You may log into EPIMS at:  
<https://EPIMS.wildlife.ca.gov>

**CALIFORNIA DEPARTMENT OF  
FISH and WILDLIFE**



**Application**

**00055 - Cannabis Cultivation LSA Notification - Region 1 - Pre-Application**

01923 - Holly Hayes-Rustic Farms  
Region 1

Status: Submitted

Submitted Date: 07/17/2018 1:42 PM

**Applicant Information**

**Applicant Proposing Project:**

First Name\* Chris Victor Carroll  
First Name Middle Name Last Name

Title: Registered Professional Forester #2628

Email\*: carroll@timberlandresource.com

Address\*: 165 South Fortuna

\* Fortuna California 95540  
City State/Province Postal Code/Zip

Phone\*: 707-725-1897  
Phone Ext.

Identify the CDFW Region where most of your activities will take place.

Region of Interest\*: Region 1

You may include additional contact information, i.e., consultant/business associate/translator.

Contact Name:  
First Name Last Name

Email:

Phone:

**Organization Information**

Organization Name\*: Timberland Resource Consultants

Organization Type: Business

Organization Website: http://timberlandresource.com

Address:\* 165 South Fortuna Blvd

\* Fortuna California 95540  
 City State/Province Postal Code/Zip

Phone:\* 707-725-1897

Ext.

Fax: 707-725-0972

E-mail Address\* trc@timberlandresource.com

### APPLICANT PROPOSING PROJECT

---

Name\* Holly Hayes  
 First Name Middle Initial Last Name

Business/Agency

Mailing Address\* PO Box 143

City\* Burnt Ranch California 95527  
 State\* Zip\*

Email\* holls318@yahoo.com

### CONTACT PERSON

---

Same as 'Applicant  
 Proposing Project'\* No

Name\* Chris Carroll  
 First Name Middle Initial Last Name

Business/Agency Timberland Resource Consultants

Mailing Address\* 165 S. Fortuna Blvd.

City\* Fortuna California 95540  
 State\* Zip\*

Email\* carroll@timberlandresource.com

### PROPERTY OWNER

---

Same as 'Applicant  
 Proposing Project'\* Yes

Name\*

First Name

Middle Initial

Last Name

City\*

State\*

Zip\*

**SITE DESCRIPTION**

Address or description of Project location	Name of river, stream, or lake affected by the project	What water body is the river, stream, or lake tributary to?	Describe Other:	Is the river or stream segment affected by the project listed in the state or federal Wild and Scenic Rivers Acts?	Identify the river or stream affected by the project.	County
See 1600 Addendum-Complete.	Trinity River	Klamath River		No		Humboldt County

**ASSESSOR'S PARCEL NUMBER**

Project Name	APN
Holly Hayes - Rustic Farms	622-282-003

**PROJECT GPS COORDINATES (DECIMAL DEGREES)**

Project Name	Latitude	Longitude
Holly Hayes - Rustic Farms	40.931928	-123.623744

**MAPS**

Description of Map Attachment	Attach Maps
Attachment contains: Location, USGS, DOQ, and CNDDDB maps.	1600 Maps.pdf

**PROJECT DETAILS**

- Include any structures (e.g., rip-rap, culverts) that will be placed or modified in or near the stream, river, or lake, and any channel clearing.
- Specify volume, and dimensions of all materials and features (e.g., rip-rap fields) that will be used or installed.
- If water will be diverted or extracted, specify the purpose or use.
- Describe both permanent and temporary impacts to the channel and/or riparian habitat.

**Describe the project in detail\*** See 1600 Addendum-Complete.

This field is limited to 5,000 characters.

List all equipment and machinery used to complete the project. List any lubricants, solvents, chemicals, or other materials not normally found on construction sites that will be present in the project area in addition to the equipment and machinery used to complete the project.

**Describe equipment and machinery to be used\*** No equipment or machinery will be required for this project.

This field is limited to 5,000 characters.

**ADDITIONAL PROJECT DETAILS**

Indicate if water is to be present during the proposed work period in the stream, river, or lake.

**Water present?\*** No

If water is being diverted, a plan to divert water around the project site and dewater the work site must be included with the notification, and should specify the method, volume, rate, and timing of the diversion of the water around the work site.

**Will the project require work in the wetted portion of the channel?\*** No

**ATTACHMENTS**

Attachment Description	Attachment
1600 Addendum containing details about the property, maps, aerial imagery, and photos.	1600 Addendum-Complete.pdf
Plot Plan for the property.	PLOT PLAN_522-282-003_2018_04_30.pdf
The final Water Resource Protection Plan that was written by TRC.	WRPP-Final_TRC191.pdf

**SELF CERTIFICATION SURVEY**

**Does or will your project result in diversion or obstruction of water from any river, stream, or lake; or withdraw or use water from any river, stream, or lake?**

*This includes, but is not limited to, redirection of stream flow, on-stream reservoirs or other water impoundments, withdrawal of water by pump or gravity flow, and withdrawal or use of water from private well(s) adjacent to a stream or lake.*

**Result in diversion or obstruction?\*** No

**Does or will your project result in disturbance to land or vegetation in or adjacent to, any river, stream or lake, including those that are periodically dry?**

*This includes, but is not limited to, stream crossing construction, bank stabilization, gravel removal, and vegetation removal or trimming.*

Result in disturbance to land or vegetation?\* No

Does or will your project result in deposition of any material in or adjacent to any river stream or lake, including those that are periodically dry?

*This includes, but is not limited to, stream crossing construction, bank stabilization, and on-stream reservoirs or other water impoundments.*

Result in deposition of any material?\* No

**SELF-CERTIFICATION ACKNOWLEDGMENT**

---

I hereby acknowledge that:

- 1. The project as described in this self-certification will/may substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.
- 2 Notification will be submitted.

The information contained in this certification is, to the best of my knowledge and belief, true, accurate, and complete.

Notification Is Required

Signature\*

First and Last Name

Date

I hereby certify under penalty of law that:

- 1. Implementation of the project as described in this self-certification will not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.
- 2 I have the authority to make the aforesaid certification on behalf of the applicant.

The information contained in this certification is, to the best of my knowledge and belief, true, accurate, and complete.

Self-Certification that Notification is Not Required Yes

Signature\*

Chris Carroll  
First and Last Name

07/17/2018  
Date

## 1600 Addendum

This 1600 Notification is for a Cannabis Cultivation Project located in Willow Creek, on the property known as 39675 State Highway 36. The Applicant seeks a Zoning Clearance Certificate (APPS# 11138) for approximately 6,500 ft<sup>2</sup> of pre-existing full sun outdoor cannabis cultivation. The water on the property is sourced from the Willow Creek Community Service District. The property has an interim permit for 5,417 ft<sup>2</sup> of outdoor cultivation.

The project does not involve any of the following activities:

1. substantially divert or obstruct the natural flow of any river, stream or lake;
2. substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake; or
3. deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

However, this Notification is being submitted pursuant to Business and Professions Code 26060.1(b)(3), which requires that every license for cultivation issued by the CDFG must comply with Section 1602 of the Fish and Game Code or receive written verification from the CDFW that a Lake or Streambed Alteration (LSA) Agreement is not required. Compliance with Section 1602 of the Fish and Game Code requires all prospective licensees to submit an LSA notification to the CDFW regional office serving the area where the activity will occur. Upon receipt of a complete LSA notification, CDFW will determine if an LSA Agreement is required.

**Water Source:** The Willow Creek Community Services District provides water to the property for the cultivation of cannabis. Per <http://www.willowcreekcsd.com/water-services/>, the Willow Creek Community Services District (WCCSD) owns and operates a 22-mile public water system that serves water to approximately 934 service connections, with a population of 1,743 people. Per STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2017-0023-DWQ, SECTION 3 – NUMERIC AND NARRATIVE INSTREAM FLOW REQUIREMENTS (INCLUDING GAGING), the Applicant is not subject to the instream flow requirements and forbearance period.

The instream flow requirements and forbearance period shall not apply to retail water suppliers, as defined in Section 13575 of the Water Code, whose primary beneficial use is municipal or domestic, unless any of the following circumstances are present:

- a. the retail water supplier has 10 or fewer customers and delivers water that is used for cannabis cultivation;
- b. the retail water supplier delivers 10 percent or more of the diverted water to one or more cannabis cultivator(s) or cannabis cultivation site(s), as established by an assessor's parcel number;
- c. 25 percent or more of the water delivered by the retail water supplier is used for cannabis cultivation; or
- d. a cannabis cultivator and the retail water supplier are affiliates, as defined in California Code of Regulations, title 23, section 2814.20.

None of the above conditions exist relative to this notification and therefore the Applicant is not subject to instream flow requirements and forbearance period.

## Remediation Plan

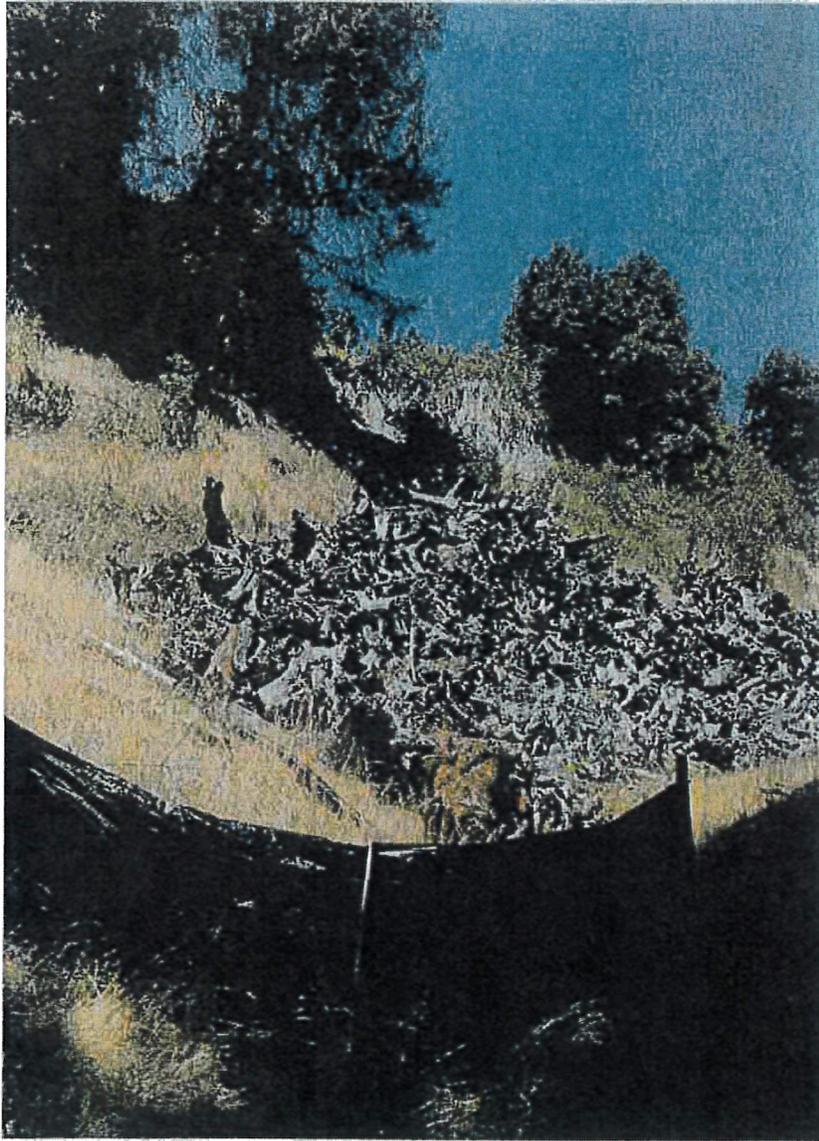
The Applicant is enrolled into California Regional Water Quality Control Board North Coast Region Order No. 2015-0023, Waiver of Waste Discharge Requirements and General Water Quality Certification for Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effects in the North Coast Region. A Water Resource Protection Plan was prepared for the Applicant by Timberland Resource Consultants in September 2016, and a copy of the WRPP is attached. The WRPP identified one legacy stream crossing and no surface water diversions on the property. The legacy stream crossing is described in the WRPP as follows:

*The stream crossing at Site 7 consists of a dirt ford crossing on a Class III watercourse. The road on which the crossing is located is a decommissioned historic legacy road. The crossing's current condition is that of a steep hillside watercourse and crossing. The ford crossing has eroded away the fill prism of the road, stabilized naturally, and has become vegetated. The crossing shows no current sign of excessive erosion or sediment discharge.*

The legacy stream crossing identified in the WRPP was associated with an old skid road used approximately 60-70 years ago as depicted on the WRPP Map. The skid road and crossing are located on very steep slopes (65-75%) that lead without flattening to the Trinity River. This site has stabilized and is vegetated with second growth timber and extremely dense black berry. A 100+ foot segment of the skid road located directly north of the crossing washed away decades ago. Consequently, accessing this crossing site would require significant reconstruction of the skid road, which is located on inner gorge/debris slide slopes above the Trinity River. Treating the crossing is infeasible, impractical, and would result in significant sediment discharge to the Trinity River. Based upon my evaluation conducted in association with this notification, there are no sites located on the property that are jurisdictional to CDFW per the California Fish and Game Code Section 1600.

All mitigation measures listed in the WRPP to address potential discharges have been implemented and no FGC 5650 violations exist. As described in the WRPP, the cut bank above the cultivation site has significantly eroded in the past (2011) prior to the use of the old landing for cannabis cultivation. Recent erosion occurred in the winter of 2016. Past erosion events have been traced to drainage runoff from Highway 299, and from a buried culvert that discharges at the top of the cut bank. The source of water coming from the culvert is unknown, but it only carries water in the winter period. As shown on the WRPP Map, storm water runoff from this culvert, and the cultivation site itself, was collected in the inside ditch of the cultivation site and discharged above the head of the Class III watercourse. This past condition has been corrected. The cut bank has been stabilized with large woody debris revetment, and the Applicant has installed a flex pipe from the upper culvert down to the inside ditch. A French drain has been constructed in the inside ditch of the cultivation site, which conveys storm water through a flex pipe down past the fill slope away from the Class III watercourse. Additional measures such as installation of silt fencing, wattles, and mulching have significantly reduced erosion relative to pre-cultivation conditions.

## Photographs



Picture 1: Stabilized cut bank with slit fencing and flex pipe. Photo date 7-14-2018

## Photographs



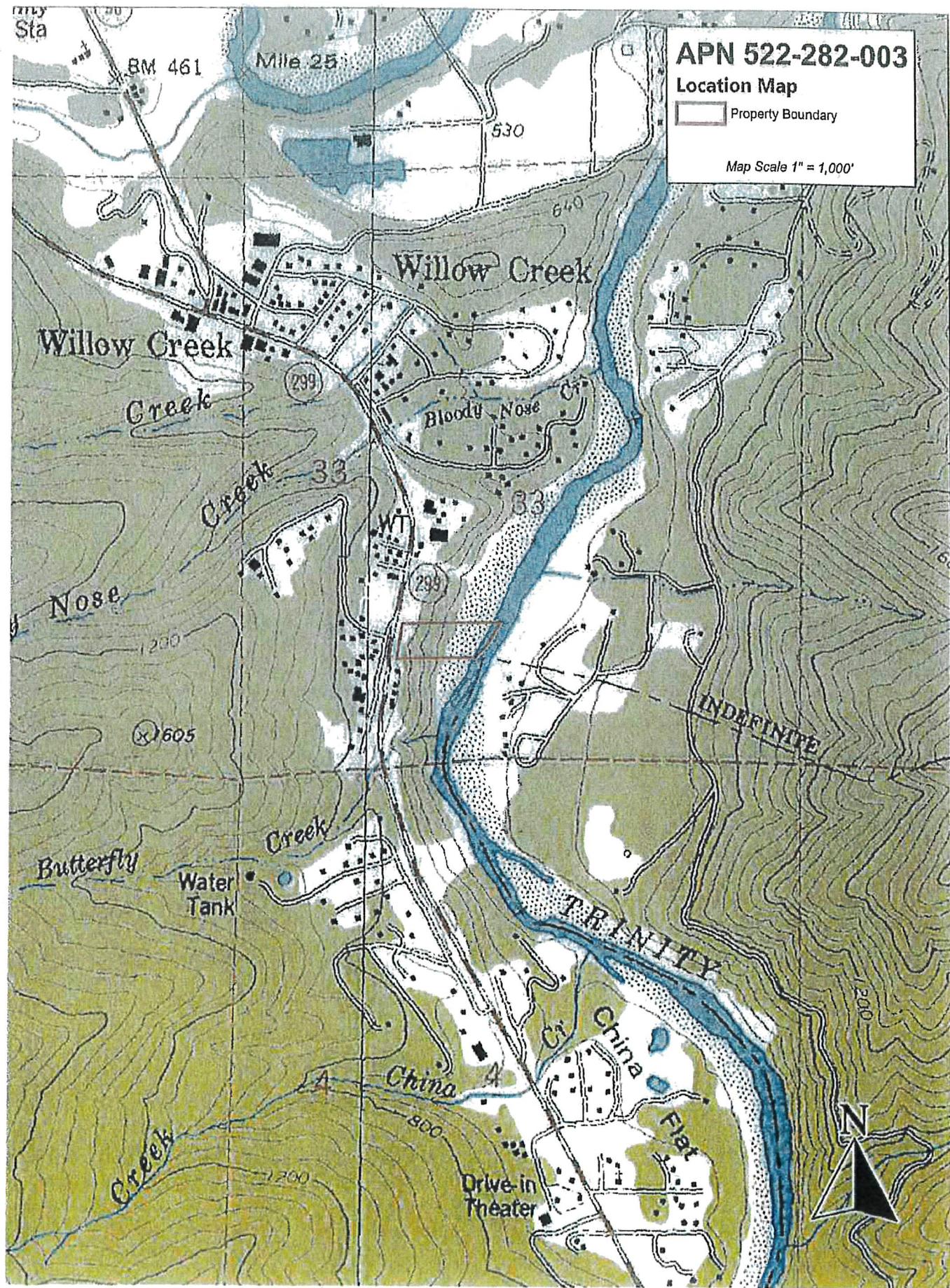
Picture 2: Legacy skid road crossing looking upstream. Stream is to grade and heavily vegetated. Photo date 7-14-2018

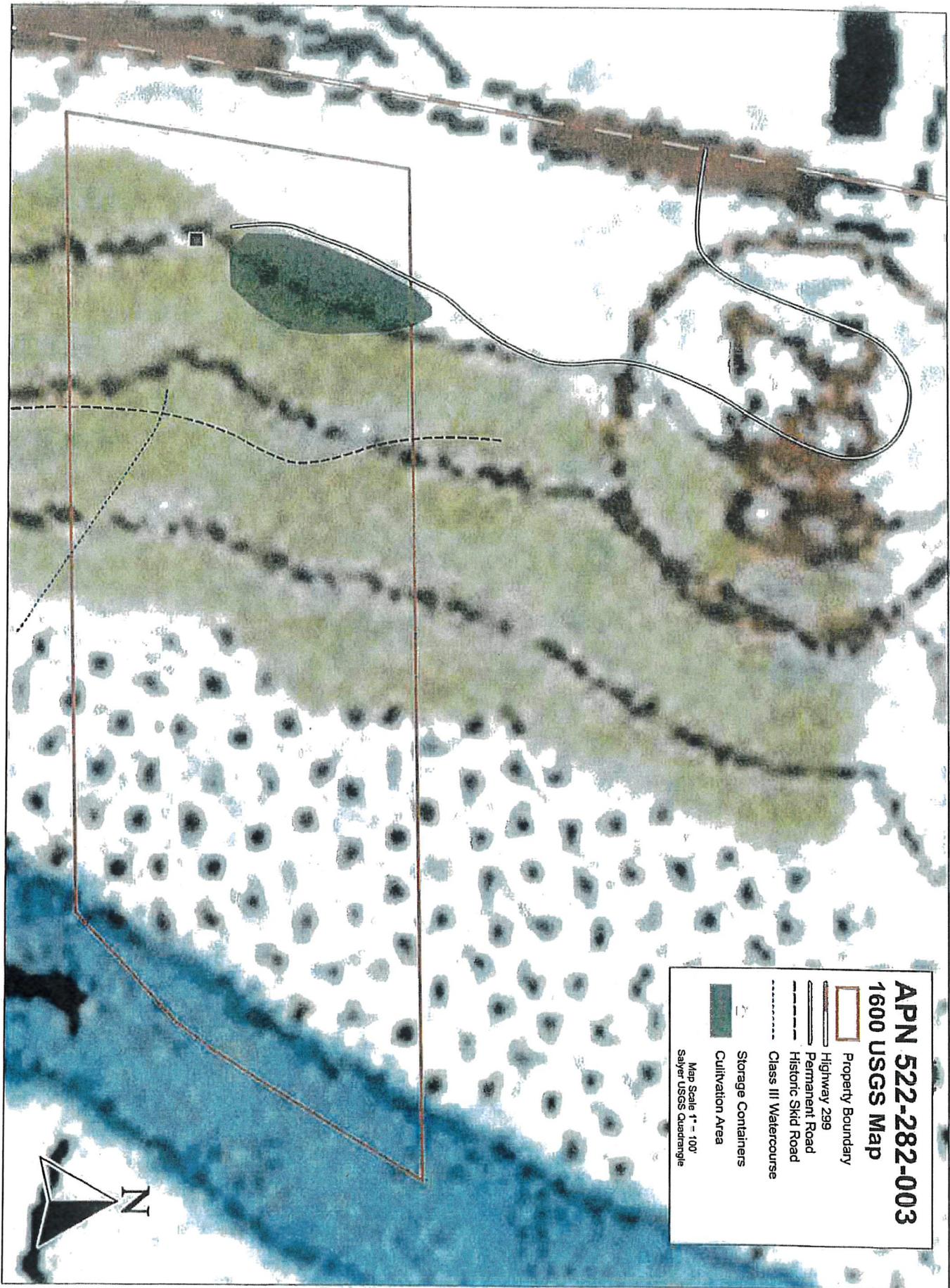
## Photographs

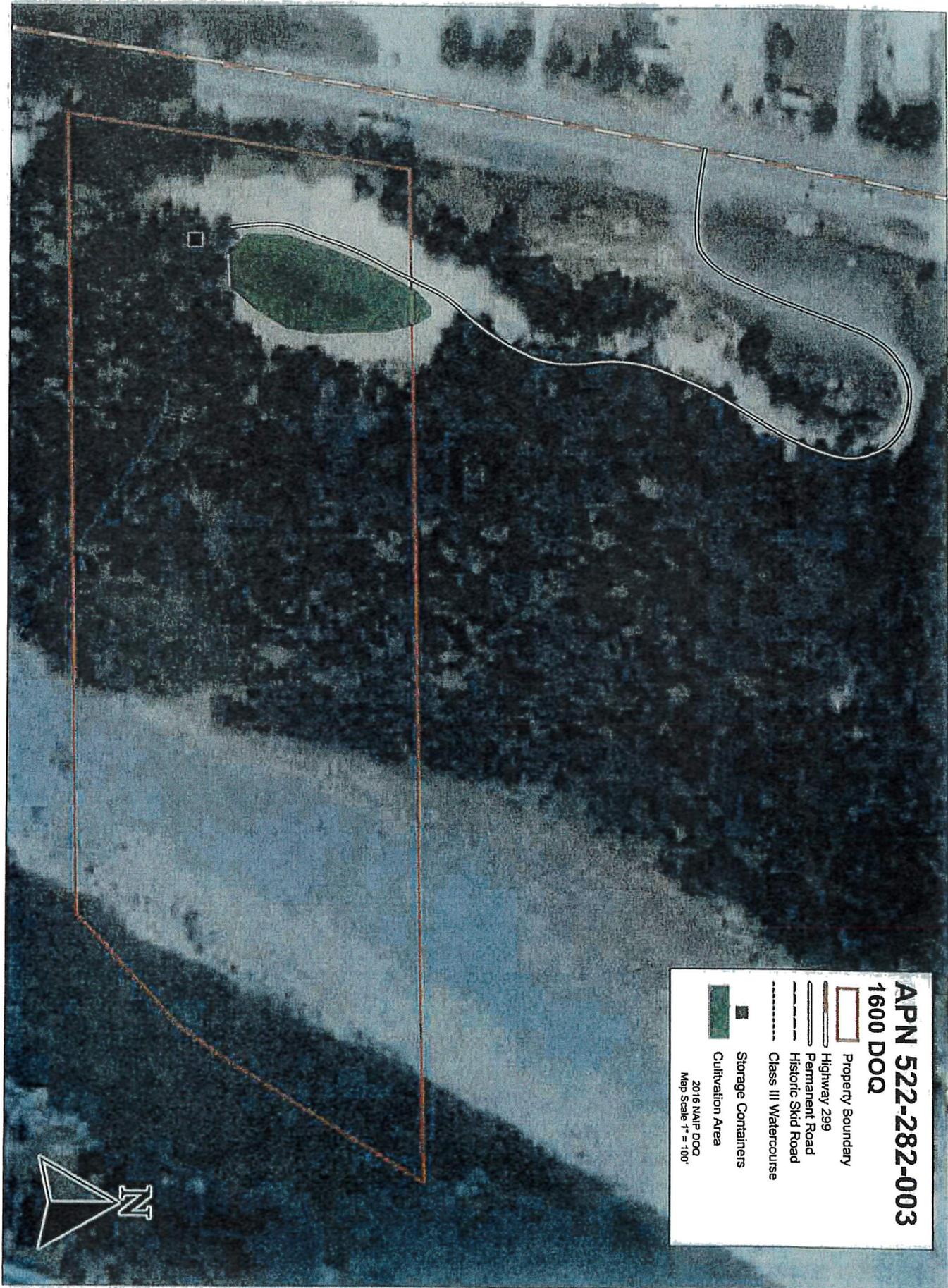


Picture 3: Legacy skid road crossing looking downstream. Photo date 7-14-2018

## **ADDITIONAL INFORMATION**



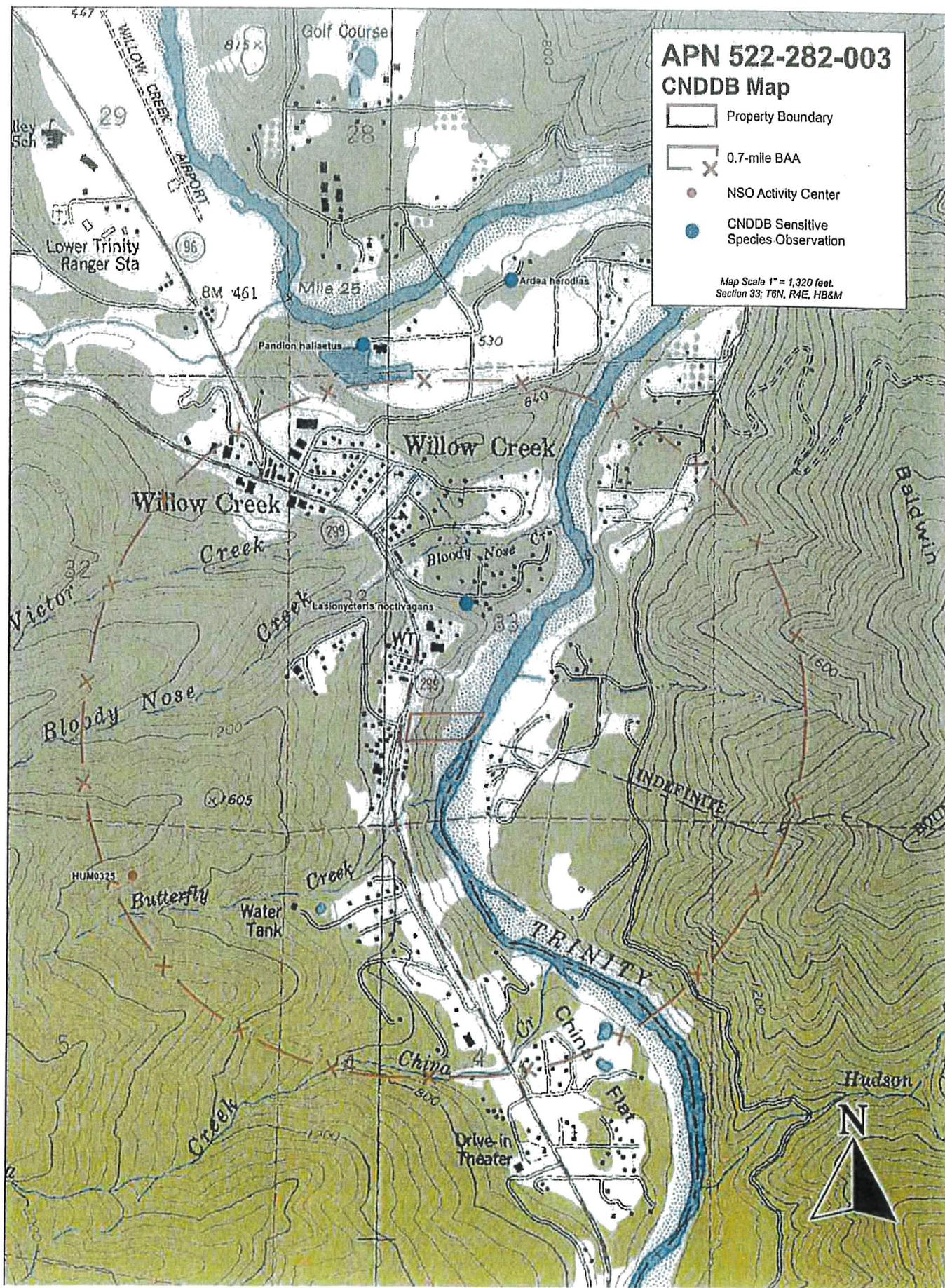


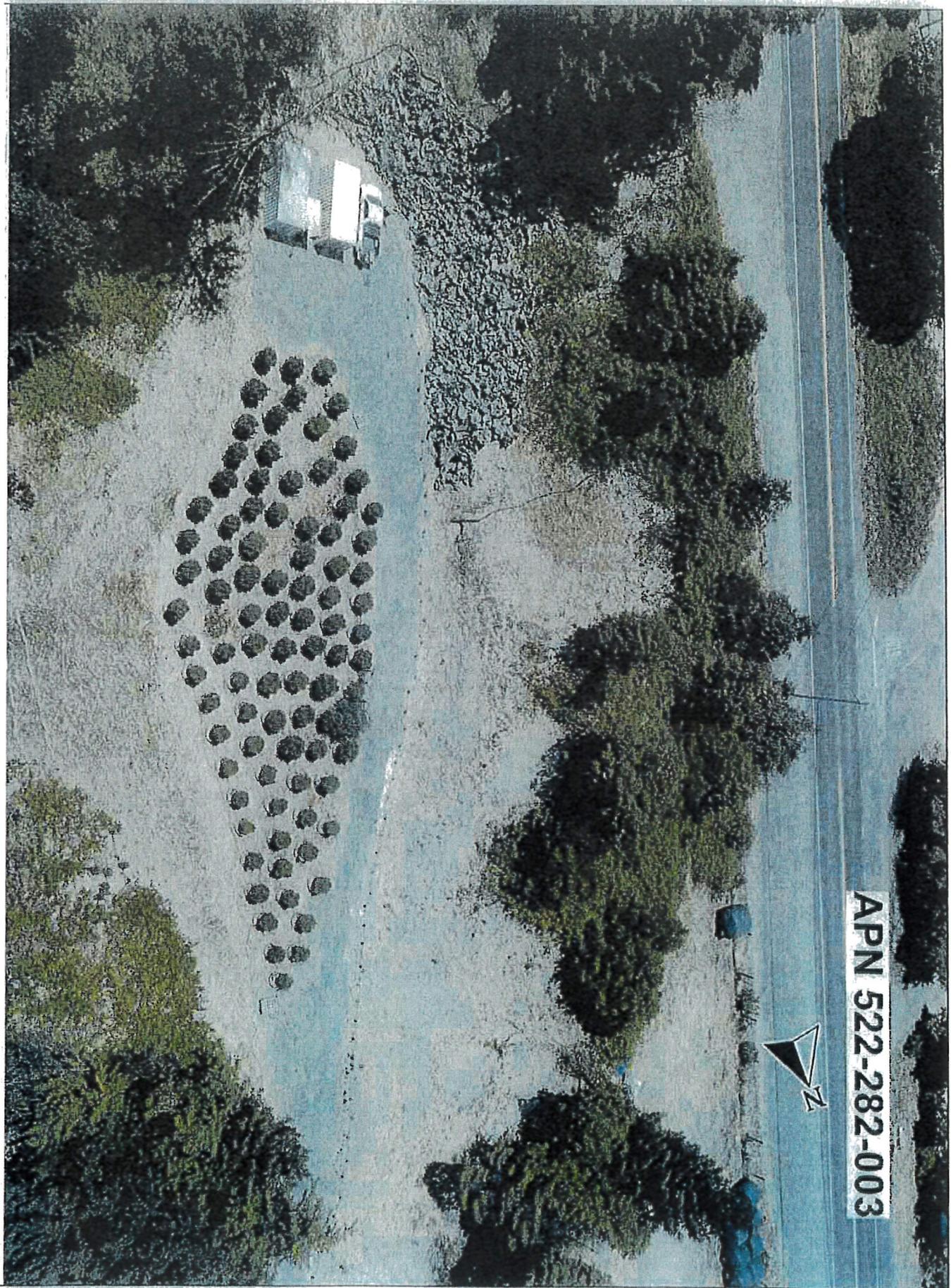


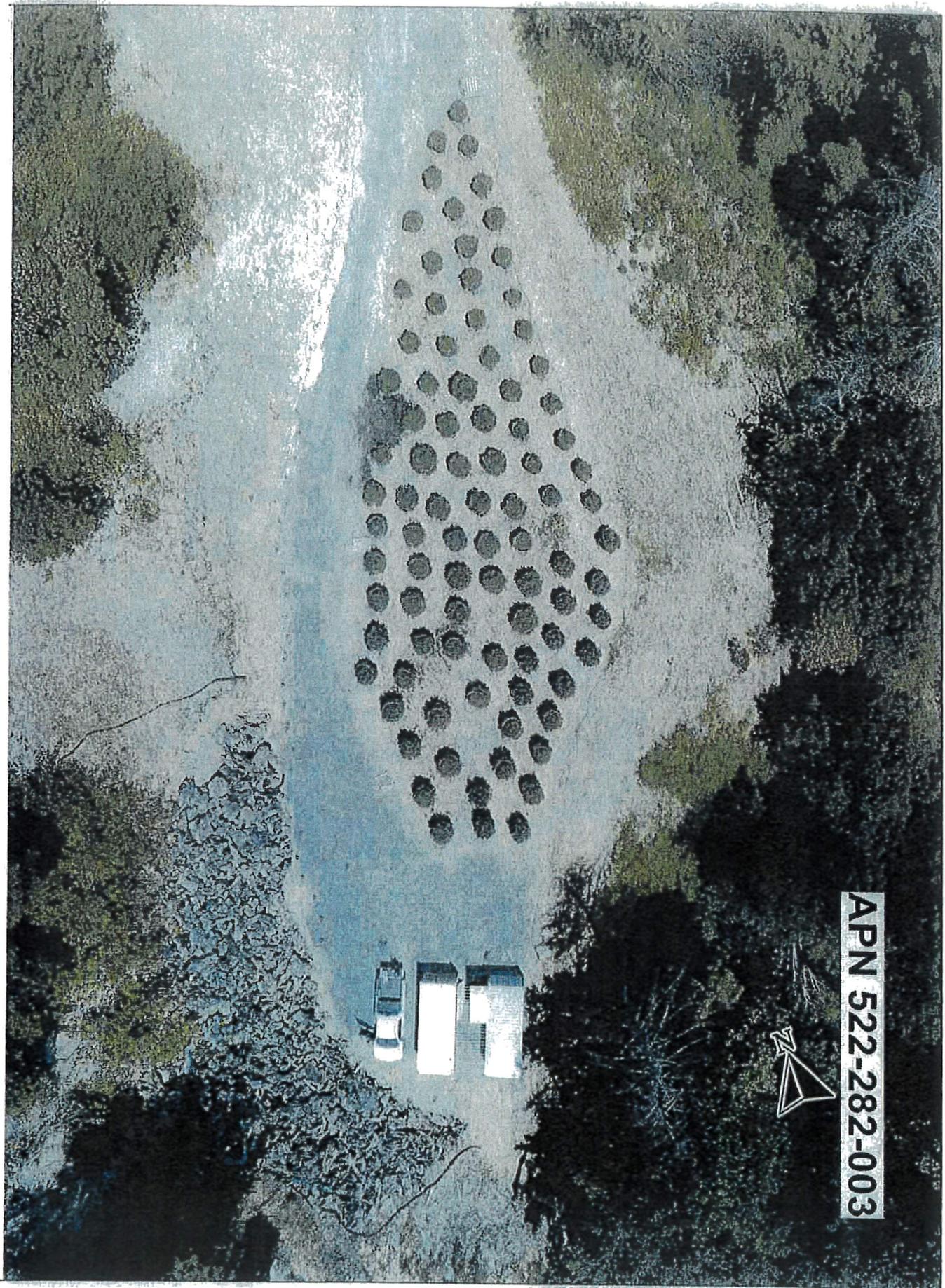
# APN 522-282-003 CNDDDB Map

-  Property Boundary
-  0.7-mile BAA
-  NSO Activity Center
-  CNDDDB Sensitive Species Observation

Map Scale 1" = 1,320 feet.  
Section 33; T6N, R4E, HB&M

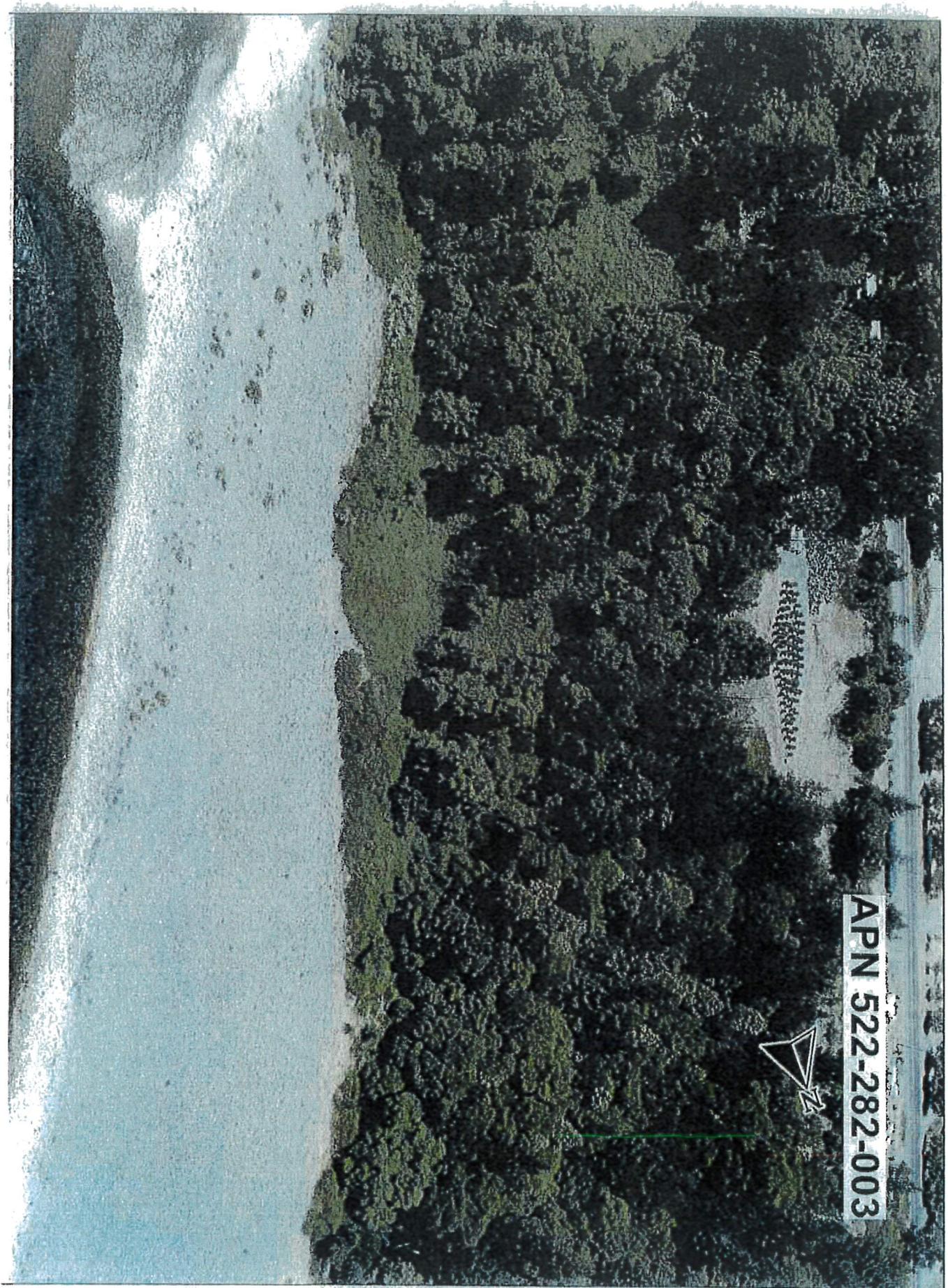






APN 522-282-003







B&B Portable Toilets LLC  
 P.O. Box 1329  
 Blue Lake, CA 95525  
 (707) 445-0830

Tyler Thompson  
 P O Box 143  
 Burnt Ranch, CA 95527

Invoice Date: Aug 02, 2018  
 Customer #: 001645 - 000003  
 PO Number:  
 Invoice #: 59261

Invoice Total: \$ 15.40  
 Pmts/Adj.:  
 Balance Due: \$ 15.40



# INVOICE

Date	Description	Unit Rate	Quantity	Amount
Jul 28, 2018	(3) Tyler Thompson, 39675 State Highway 299, Willow Creek, CA, 95573			
Jul 28, 2018	Standard Unit	\$ 40.00	1.00	\$ 14.29
	Rental On-Call (Jul 19, 2018 - Jul 28, 2018)	7.75 %	7.75 %	\$ 1.11
	Humboldt County			

The cleaning service is provided at the option of the Lessee.  
 Recurring charges for cleaning service are automatically billed  
 to the account unless otherwise notified by the Lessee.

Current	30 Day	60 Day	90 Day	Over 120	Balance Due
\$ 15.40	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 15.40

PLEASE RETURN LOWER PORTION WITH YOUR PAYMENT



B&B Portable Toilets LLC  
 P.O. Box 1329  
 Blue Lake, CA 95525

Customer #: 001645 - 000003  
 Invoice #: 59261  
 Invoice Date: Aug 02, 2018  
 Invoice Total: \$ 15.40  
 Due Date: Aug 30, 2018  
 Balance Due: \$ 15.40

Please Write in Amount of Payment Enclosed

**ATTACHMENT 5**

**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	✓	Comments	Attached
Division Environmental Health	✓	Conditional Approval	Attached
Public Works, Land Use Division	✓	Conditional Approval	Attached
CalFIRE	✓	Comments	Attached
California Department of Fish & Wildlife	✓	Conditional Approval	Attached
County Counsel	✓	Comments	On file and confidential
California Department of Transportation, District 1 (Caltrans)	✓	Conditional Approval	Attached
Northwest Information Center	✓	Further Study	On file and confidential
Tsnungwe Tribe	✓	Approval	On file and confidential
Hoopa Valley Tribe		No response	
Willow Creek Community Services District		No response	
Klamath-Trinity Unified School District		No response	
Humboldt County Agricultural Commissioner		No response	
Humboldt County District Attorney		No response	
North Coast Regional Water Quality Control Board		No response	
State Water Resources Control Board – Division of Water Rights		No response	



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



8/30/2017

**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, Hoopa Valley Tribe, Tsnungwe Council, Regional Water Quality Control Board, Humboldt County District Attorney, Humboldt County Agriculture Commissioner, California Division of Water Resources, Willow Creek Community Services District Community Services District, Klamath Trinity Joint Unified School District School District

**Applicant Name** Rustic Farms LLC **Key Parcel Number** 522-282-003-000  
**Application (APPS#)** 11138 **Assigned Planner** Cannabis Planner (CPOD) (707) 445-7541 **Case Number(s)** SP16-156

522-282-003

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 9/14/2017** 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: \_\_\_\_\_

DATE: 11-1-17 PRINT NAME: Gustaf Dumler



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.: 11138 (44984)  
Parcel No.: 522-282-003  
Case No.: SP116-154

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: See photos @ SP116-154 - folder 522-282-003  
- A notice of nuisance has been issued on the adjacent parcel of which access comes through. Applicant will request release of notice of nuisance.

Name: Gustin Dumlac

Date: 11-1-17

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.



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

DEH received  
9-1-17

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

**Project Referred To The Following Agencies:**

1718-0534

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, Hoopa Valley Tribe, Tsnungwe Council, Regional Water Quality Control Board, Humboldt County District Attorney, Humboldt County Agriculture Commissioner, California Division of Water Resources, Willow Creek Community Services District Community Services District, Klamath Trinity Joint Unified School District School District

**Applicant Name** Rustic Farms LLC **Key Parcel Number** 522-282-003-000

**Application (APPS#)** 11138 **Assigned Planner** Cannabis Planner (CPOD) (707) 445-7541 **Case Number(s)** SP16-156

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

**Comments:**

DEH recommends approval with the following conditions:

- (1) **No processing can be approved** until an acceptable site suitability report can establish potential for onsite waste treatment system.
- (2) **An invoice, or equivalent documentation, is provided to DEH** to confirm the continual use of portable toilets to serve the needs of cultivation staff prior to reissuance of annual permit.

\*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.

\*

2746



DEPARTMENT OF PUBLIC WORKS  
**COUNTY OF HUMBOLDT**

MAILING ADDRESS: 1106 SECOND STREET, EUREKA, CA 95501-0579  
AREA CODE 707

ARCATA-EUREKA AIRPORT TERMINAL  
MCKINLEYVILLE  
FAX 839-3596

839-5401

PUBLIC WORKS BUILDING  
SECOND & L ST., EUREKA  
FAX 445-7409

ADMINISTRATION 445-7491  
BUSINESS 445-7652  
ENGINEERING 445-7377  
FACILITY MAINTENANCE 445-7493

NATURAL RESOURCES 445-7741  
NATURAL RESOURCES PLANNING 267-9540  
PARKS 445-7651  
ROADS & EQUIPMENT MAINTENANCE 445-7421

CLARK COMPLEX  
HARRIS & H ST., EUREKA  
FAX 445-7388

LAND USE 445-7205

**LAND USE DIVISION INTEROFFICE MEMORANDUM**

TO: Cliff Johnson, Senior Planner, Planning & Building Department

FROM: Kenneth M. Freed, Assistant Engineer

DATE: 10-09-2018

RE:

Applicant Name	RUSTIC FARMS LLC
APN	522-282-003
APPS#	11138
CASE#	SP16-156

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:

Applicant has submitted a road evaluation report, dated 07/30 /2018, with Part A -Box 2 checked, certifying that the road is equivalent to a road Category 4 standard.

Project fronts STATE HWY 299. Review Item #1 on Exhibit C

// END //

Exhibit "C"

Additional Review is Required by Planning & Building Staff

APPS # 11138

All of the following questions are to be answered by Planning and Building Department staff. No further involvement with the Department of Public Works is required for these items; however Public Works staff is available to answer any questions that may arise.

- 1. ROADS - PART 1. Does the project take access from a series of non-county maintained roads that connect directly to a State Highway (36, 96, 101, 255, 299, etc...)?

[X] YES [ ] NO

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 take 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?

[X] 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).

reference sent to Caltrans

- 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 [X] 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 [X] 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 [X] 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.

**Exhibit "C"**

**Additional Review is Required by Planning & Building Staff**

**The applicant shall conduct all operations consistent with the ALUCP and in a manner that does not attract flocks of birds. Open ponds shall not be permitted.**

6. **AIRPORT – PART 2 (County Code Section 333).** Is the project is located within the County Code Section 333 GIS layer **AND** is the project proposing to construct (or permit) a fence, building or other structure?  YES  NO

If YES, the applicant shall submit a completed *Airspace Certification Form* prior to the project being presented to the Zoning Administrator or the Planning Commission for approval.

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

**DEPARTMENT OF FORESTRY AND FIRE PROTECTION**

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



Ref: 7100 Planning  
Date: September 12, 2017

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

**Attention:** Cannabis Planner (CPOD)  
**Applicant:** Rustic Farms, LLC  
**APN:** 522-282-003-000  
**Area:** Willow Creek  
**Case Numbers:** SP16-156

**Humboldt County Application #:** 11138  
**Type of Application:** Special Permit  
**Date Received:** 9/1/2017  
**Due Date:** 9/15/2017

**Project Description:** Applicant seeks a Special Permit for 6,089 square feet of existing outdoor cannabis cultivation. The water source comes from Willow Creek Community Services District, there is no water storage. Drying and processing will take place on-site. Power is provided by generators, PG&E service has been requested.

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.

**Laney, Megan**

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**From:** HUU CEQA@CALFIRE <HUUCEQA@fire.ca.gov>  
**Sent:** Tuesday, September 12, 2017 12:06 PM  
**To:** Planning Clerk  
**Subject:** FW: SP; 522-282-003; willow creek; rustic farms

Chris Ramey  
Battalion Chief, Fire Planning

**CAL FIRE**

Humboldt-Del Norte Unit  
C: 707-599-6442  
Duty Days: Tues-Fri

**From:** Poli, Chris@CALFIRE  
**Sent:** Monday, September 11, 2017 2:20 PM  
**To:** HUU CEQA@CALFIRE <HUUCEQA@fire.ca.gov>  
**Subject:** SP; 522-282-003; willow creek; rustic farms

It appears that an unpermitted conversion took place on this parcel in 2010-2011. CAL FIRE cannot support this project at this time.

**Chris Poli**

**Forester I - RPF #2930**



Trinidad Resource Management

Humboldt-Del Norte Unit

P.O. Box 749

Trinidad, CA 95570

Office [\(707\) 677-0761](tel:7076770761)

Cell [\(707\) 599-0609](tel:7075990609)

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

- The Department has no comment at this time.
- Suggested conditions attached.
- Applicant needs to submit additional information. List of Items attached.
- Recommend denial.
- Other comments.

# 11138

Forester Comments:

No comments

Battalion Chief Comments:

Summary:



California Department of Fish and Wildlife  
CEQA: Project Referral Comments



Applicant: Rustic Farms		Date: 5/21/19	
APPS No.: 11138	APN: 522-282-003	DFW CEQA No.: 2017-0659	Case No.: SP
<input type="checkbox"/> New	<input checked="" type="checkbox"/> Existing	Proposed: <input type="checkbox"/> Mixed-light (SF):	<input checked="" type="checkbox"/> Outdoor (SF): 6,500 <input type="checkbox"/> Indoor

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.

**Please note the following information and requested conditions of approval:**

- A Self Certification (EPIMS-01923) pursuant to the California Department of Fish and Wildlife Environmental Permit Information Management System (EPIMS) has been approved.
- 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.
- 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.
- 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 for all generators and greenhouse 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 Fisher - West Coast DPS (*Pekania pennanti*), Silver-haired Bat (*Lasionycteris noctivagans*), Chinook Salmon (*Oncorhynchus tshawytscha*), Coho Salmon (*O. kisutch*), Steelhead Trout (*O. mykiss*), Coastal Rainbow Trout (*O. mykiss irideus*), Green Sturgeon (*Acipenser medirostris*), White Sturgeon (*A. transmontanus*), Pacific Lamprey (*Entosphenus tridentatus*), Foothill Yellow-legged Frog (*Rana boylei*), Pacific Giant Salamander (*Dicamptodon tenebrosus*), and amphibians, reptiles, aquatic invertebrates, mammals, birds, and other aquatic and riparian species.

Thank you for the opportunity to comment on this Project.

Sincerely,

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

**DEPARTMENT OF TRANSPORTATION**

DISTRICT 1, P.O. BOX 3700  
PHONE (707) 441-4693  
FAX (707) 445-6314  
TTY 711  
www.dot.ca.gov



*Making Conservation  
a California Way of Life.*

September 18, 2018

1-HUM-299-PM 39.45  
Rustic Farms, App# 11138  
APN: 522-282-003

Elizabeth Kernahan  
Planning & Building Department  
County of Humboldt  
3015 H Street  
Eureka, CA 95501

Dear Ms. Kernahan:

Thank you for giving Caltrans the opportunity to review and comment on the proposed Rustic Farms Special Permit to bring a 6,089 square-foot cannabis cultivation into compliance. The project is located adjacent to the east or north side of State Route 299 in the unincorporated community of Willow Creek. We offer the following comment:

- It appears the applicant will use an existing road approach on the adjacent parcel to the north (APN 522-272-006) to access SR-299, located at post mile 38.45 (approximate). The applicant will need to submit proof of ownership/easement with a copy of the current Caltrans encroachment permit for the private road approach. If they do NOT have ownership/easement rights, then they may, with the property owner's written permission, apply for an encroachment permit on behalf of the owner as an authorized agent of the property owner. Ensuring that the encroachment is currently permitted enables Caltrans or the County to notify the encroachment permit holder of maintenance issues or potential hazards in need of repair as a condition of continued use.
- If the current parcel-owner does not have an approved encroachment permit, the District is willing to issue a fee-exempt permit to document the current owner as the responsible owner of an existing commercial road approach, assuming it meets the Department's current standards.
- Any work within Caltrans Right-of-Way will require an Encroachment Permit from Caltrans. Applications are reviewed for consistency with State standards and are subject to Department approval. To streamline the permit application and review process, we encourage the applicant to consult with our Permit staff prior to submitting an application. Requests for permit applications can be sent to: Caltrans District 1 Permits Office, P.O. Box 3700, Eureka, CA 95502-3700, or requested by phone at (707) 445-6389. For additional information, the Caltrans Permit Manual and Standard Application is available online at: <http://www.dot.ca.gov/hq/traffops/developserv/permits/>.

*"Provide a safe, sustainable, integrated and efficient transportation system  
to enhance California's economy and livability"*

Ms. Elizabeth Kernahan  
9/18/18  
Page 2

Please contact me with questions or for further assistance regarding the above comments at:  
(707) 441-4693, or by email at: <jesse.robertson@dot.ca.gov>.

Sincerely,



JESSE ROBERTSON  
Transportation Planning  
District 1 Caltrans

*"Provide a safe, sustainable, integrated and efficient transportation system  
to enhance California's economy and livability"*