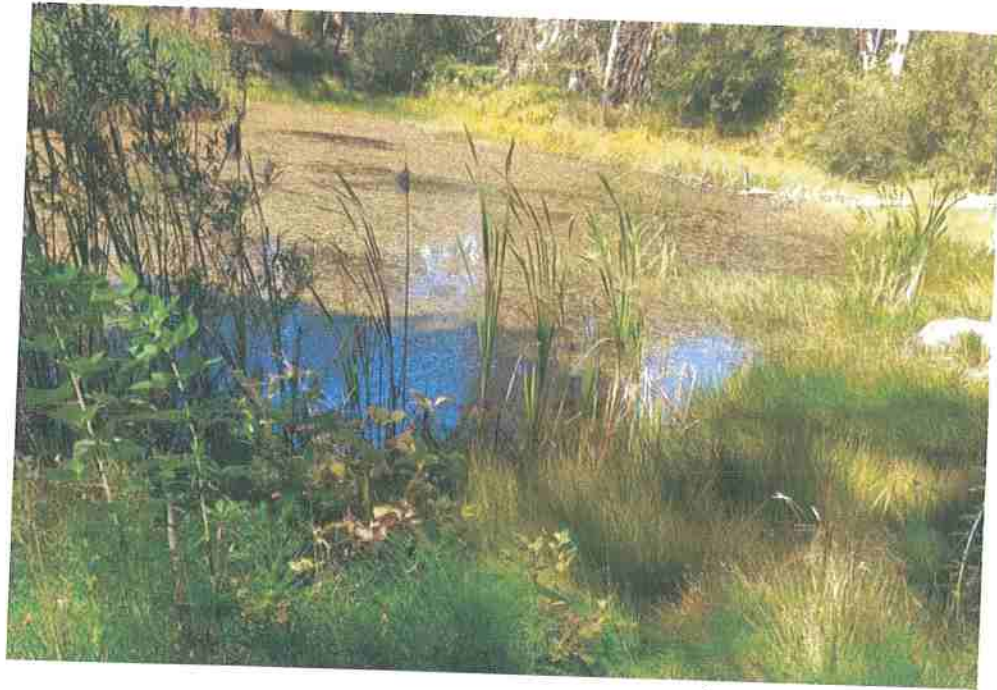


Jurisdictional Wetland Amendment to Biological
Resource Assessment for Highway 36 Homestead
(APN 210-191-050)



October 2019
Prepared
For:
Robert and Aiyana Neely

Prepared By:



TransTerra Consulting

INTEGRATED ENVIRONMENTAL SERVICES

455 I Street Suite 202, Arcata, CA 95521

Introduction

This is an amendment to a Biological Resource Assessment prepared by TransTerra Consultants for the Highway 36 Homestead February 2019. This document focuses on a wetland delineation for APN 210-191-050. A separate wetland assessment was conducted by Mother Earth Engineering for 210-191-049 and is not referenced in this document. Only the area surrounding a man-made pond on the property were examined for jurisdictional wetlands.

Environmental Setting

Project Location

The project area is located off Hwy 36 in Bridgeville (Section 8, T1N, R5E) in Humboldt County, California. The project is located on a 22.23-acre parcel within the U.S. Geological Survey's (USGS) Larabee Valley 7.5-minute quadrangle map. The parcel is zoned unclassified and the land-use code is rural-residential. Elevation is approximately 2500-2750 feet. Property is located in the Van Duzen Watershed. The regional climate is Mediterranean in nature with warm summers and cool winters.

Soil, Topography, Hydrology

Three (3) soil types are mapped in the project area on the Web Soil Survey. The parcel is primarily composed of Highyork-Elkcamp-Airstrip complex (4421), and Pasturerock-Coyoterock-Maneze complex (4426), and Hoagland-Chalkmountain-Pasturerock complex (4417). These soils are not considered hydric and are on moderately to very deep, poorly to well drained soils that formed in colluvium and residuum from various materials. ¹

¹ Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. (Accessed via <https://websoilsurvey.sc.egov.usda.gov/>.)



Figure 1. Soil series results from Web Soil Survey with estimated parcel boundaries.

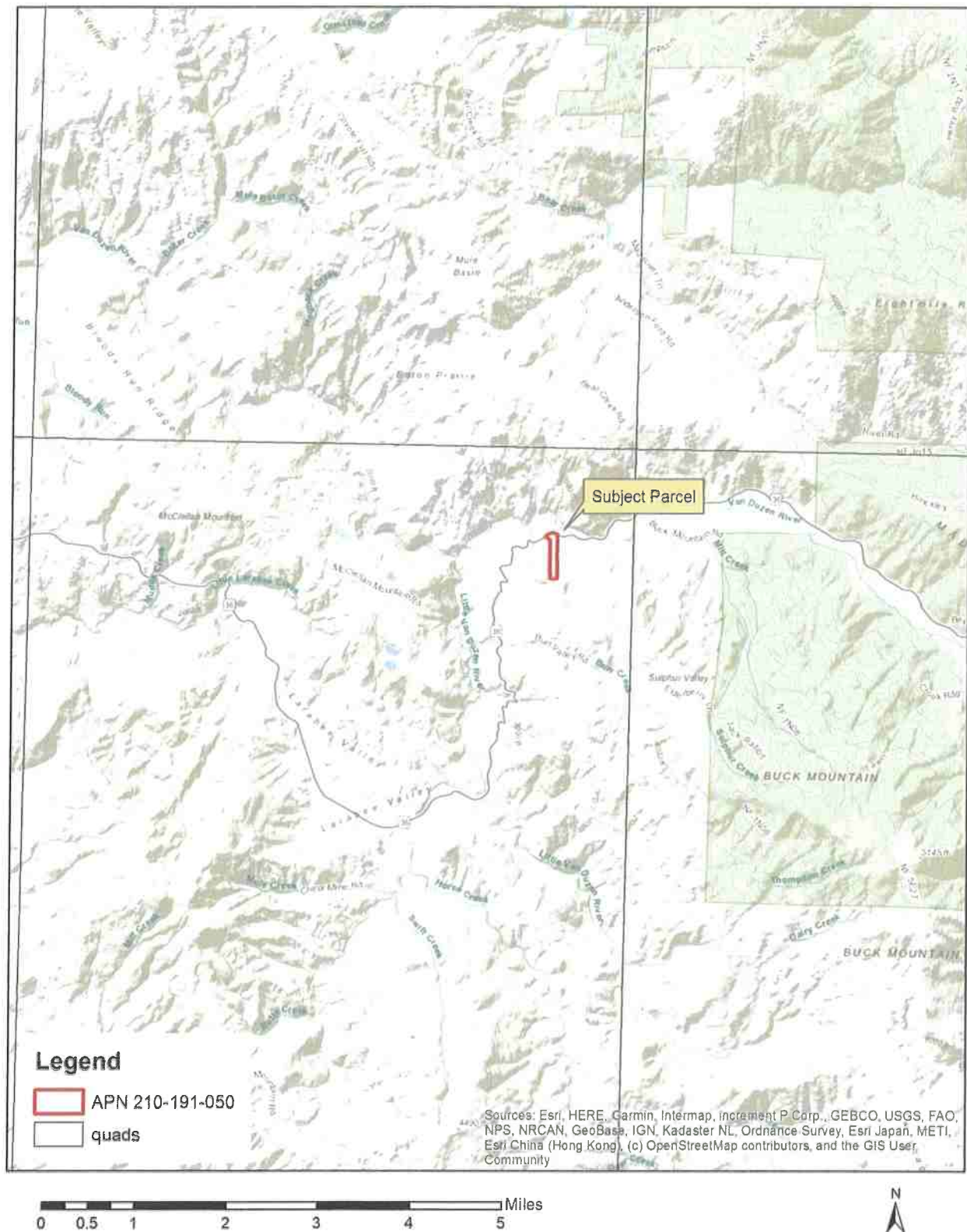


Figure 2. Project location. Map created using ArcMap 10.6.

The property is situated in Mill Creek-Van Duzen Watershed which is located in the Van Duzen Watershed. The property is primarily composed of sloping at 0 to 30% with elevation around 2700-3000 feet above sea level. Per the Humboldt GIS layer, the Streamside Management Area of an unnamed tributary off of the Van Duzen River bisects the property. The Streamside Management Area buffer is located to the northeastern edge of the parcel. The NWI and Humboldt GIS layers only show wetlands adjacent to the tributary on the property.

The area is mapped as possessing high levels of instability in the Humboldt County GIS database, being located near the Eaton Roughs fault zone. Historic landslides, potential liquefaction, and other hazards are not mapped in or adjacent to the parcel on the Humboldt GIS database.

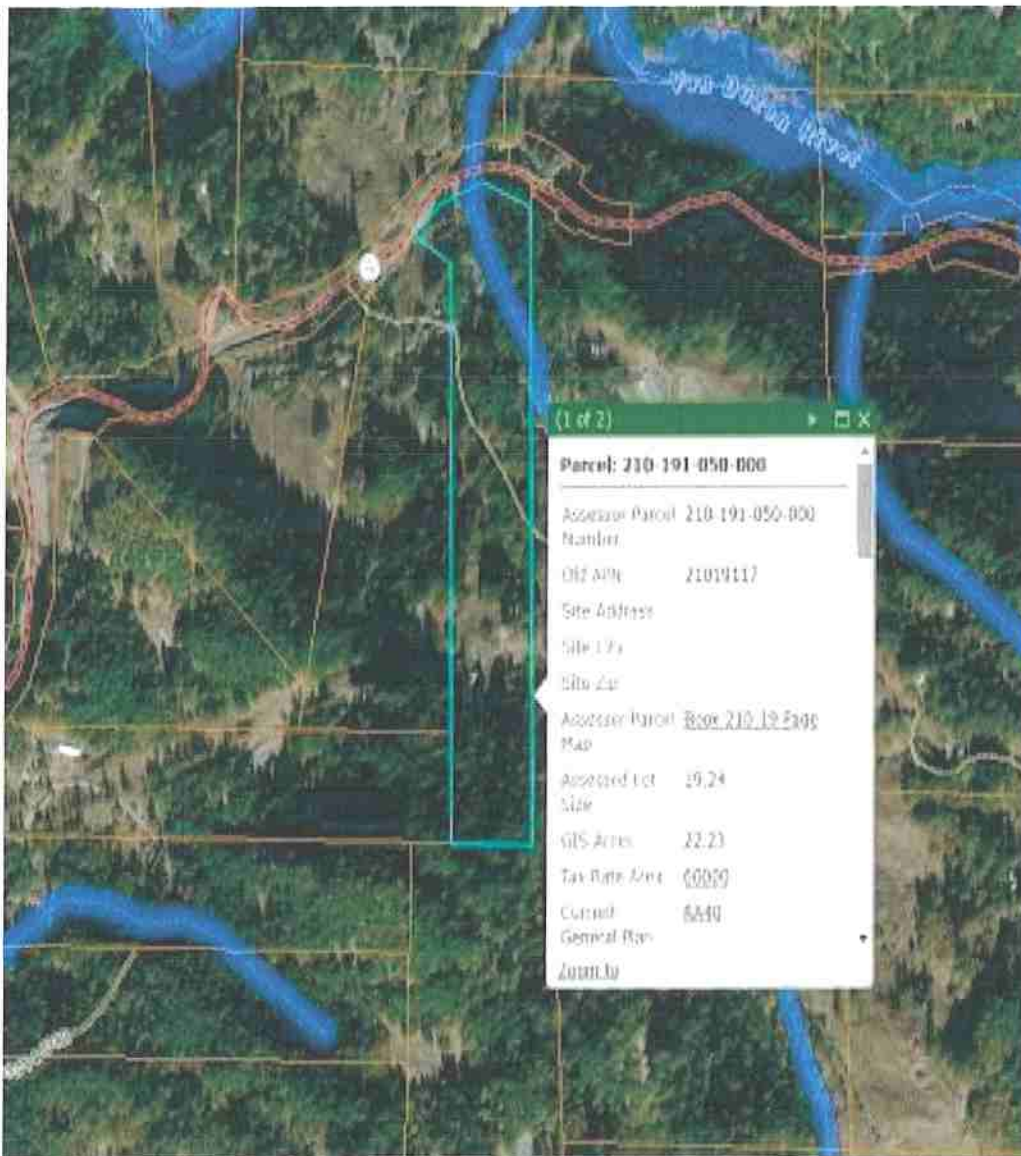


Figure 3. Streamside Management Areas (SMA) and National Wetland Inventory (NWI) wetlands mapped in and adjacent to the project site ²

² Humboldt County GIS layer. (Accessed via: <http://webgis.co.humboldt.ca.us/HCEGIS2.0/>)

Methods

A jurisdictional wetland delineation was conducted by Tamara Camper of TransTerra Consulting on September 15, 2019. The investigation was conducted after trace amounts of rain and 0.44 inches in the month of September¹. Conditions were mostly sunny. Only the area near the pond as requested by the client were examined. Wetland delineation was performed using the USACE Regional Supplement to the Corps of the Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)².

Points 1 and 2 were located in the man-made pond area. The wetland observation point (Point 1) was chosen based upon obvious hydrology. The pit was excavated as close to the water as possible while still being dry enough to obtain a good core sample. The area was an excavated pond. The closest, undisturbed upland area was investigated next at Point 2. The Avenza Program on an Iphone 8 was used for GPS points and tracking, and ArcMap was used to create the wetland map and buffers. Streams were mapped by other consulting firm staff and were not included in the scope of this survey. Visual examination of the inlets and outlets to the pond as well as nearby stream channel associated with the pond were examined. The stream areas were delineated using the top of bank according to current cannabis ordinances, though the Ordinary High Water mark was visible. The "Riparian Drip Line" was not appropriate for measurement as the area was primarily mixed evergreen forest without riparian forest and the area was also disturbed.

Results and Discussion

The manmade pond area was 0.23 acres of perennial PEM wetland that was inundated at the time of the survey and contained hydrophytic vegetation and aquatic invertebrates. There was an additional .17 acres of seasonal PEM along the perimeter of the perennial wetland. This area appeared to be inundated through the winter/rainy season. The pond appeared to be unlined and was fed via a stream diversion. Two corrugated plastic culverts carried water through a levee on the upslope side. The historic stream channel above the culverts and levees was well defined and appeared to be a seasonal channel approximately 2-3 feet wide and 1-2 feet deep with a silty/rocky channel typical of streams in the area. The area immediately surrounding the pond had an indistinct boundary due to the disturbance of soils and hydrology. The areas immediately below and above the levee were somewhat braided but were still more representative of a disturbed stream channel than a wetland area, though they contained hydrophytic vegetation and very gentle slopes. The current stream channel is likely far less distinct and more braided than the original stream channel. The area below the road/levee was hummocky with unlevel ground and more dense brush and woody debris.

Though manmade, the wetland area is hydrologically connected to the Van Duzen River, within the jurisdiction of USACE, NCRWQB, and CDFW and must be considered for the Humboldt County SMA policies.

Vehicle access appears to be the only activity currently within the buffer. Aerial imagery available on Google Earth indicates pond construction occurred around 2008-2009 and cannabis cultivation occurred within the 100' buffer historically (~40' east of the pond) for a number of years between 2011-2018. A small dock was installed in 2012. Aerial imagery indicates recent grading and other activities in the historic cultivation area.

¹ National Weather Service Data for Eureka, CA accessed via (<https://w2.weather.gov/climate/index.php?wfo=eka>)

² USACE Regional Supplement to the Corps of the Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0) (Accessed via https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1046494.pdf)

Recommendations

Policies regarding cannabis and on-stream ponds vary and agency personnel may recommend pond removal, road decommissioning or restoring the stream channel. This activity would alter the hydrology of the area and impact species currently utilizing the wetland. Impacts could include indirect effects as well as direct mortality. Temporary impacts to water quality are also likely. The ponded areas were stable and water quality impacts were not observed. Agency personnel from CDFW can provide technical assistance regarding the potential benefits of stream restoration against preservation of the pond, which is providing valuable habitat for aquatic species and any additional permits or environmental work required. Though no special status species were observed either during the delineation or the BRA assessment, protocol level surveys were not conducted. American Bullfrogs were not observed in the pond. If decommissioning is required, pre-construction reconnaissance surveys should follow the guidelines set forth in the Humboldt County Cannabis Program EIR, CDFW Survey and Monitoring Protocols and Guidelines³, USFWS Endangered Species Program⁴ and CNPS Botanical Survey Guidelines⁵. If cannabis activities resume on the property, the areas within the 100' buffer should be restored, and cannabis cultivation should occur in areas outside of the buffer. Waste associated with cannabis cultivation was located within the buffer area including plastic bags/sheeting. These areas should be cleaned up and waste should be properly disposed of or repurposed in an appropriate area.

³ California Department of Fish and Wildlife Survey and Monitoring Protocols and Guidelines (Accessed via <https://www.wildlife.ca.gov/conservation/survey-protocols>)

⁴ USFWS Arcata Fish and Wildlife Office Endangered Species Program (Accessed via <https://www.fws.gov/arcata/es/default.htm>)

⁵ California Native Plant Society (CNPS) Botanical Survey Guidelines (Accessed via https://cnps.org/wp-content/uploads/2018/03/cnps_survey_guidelines.pdf)

Table 1. Plant species observed on-site (BRA notes additional species may be on data sheets)

<i>Circaea alpina</i> subsp. <i>pacifica</i>	Enchanter's nightshade	Onagraceae
<i>Acer macrophyllum</i>	Bigleaf maple	Sapindaceae
<i>Achillea millefolium</i>	Common yarrow	Asteraceae
<i>Agrostis capillaris</i>	Colonial bent	Poaceae
<i>Arrhenatherum elatius</i>	Tall oat grass	Poaceae
<i>Artemisia douglasiana</i>	Mugwort	Asteraceae
<i>Athyrium filix-femina</i> var. <i>cyclosorum</i>	Lady fern	Woodsiaceae
<i>Baccharis pilularis</i>	Coyote brush	Asteraceae
<i>Berberis aquifolium</i>	Tall Oregon-grape	Berberidaceae
<i>Bryoria</i> sp.		Parmeliaceae
<i>Callitriche</i> sp.	Water-starwort	Plantaginaceae
<i>Chlorogalum pomeridianum</i>	Soap plant	Agavaceae
<i>Cirsium vulgare</i>	Bull thistle	Asteraceae
<i>Corylus cornuta</i> var. <i>californica</i>	California hazelnut	Betulaceae
<i>Certrudasia</i> sp.		Cryptaceae
<i>Dichelostemma capitatum</i>	Blue dicks	Themidaceae
<i>Dicranum</i> sp.		Dicranaceae
<i>Eleocharis macrostachya</i>	Creeping spike-rush	Cyperaceae
<i>Equisetum arvense</i>	Common horsetail	Equisetaceae
<i>Erodium</i> sp.	Storksbill or filaree	Geraniaceae
<i>Fragaria vesca</i>	Wood strawberry	Rosaceae
<i>Fraxinus latifolia</i>	Oregon ash	Oleaceae
<i>Galium aparine</i>	Goose grass	Rubiaceae
<i>Holcus lanatus</i>	Common velvet grass	Poaceae
<i>Holodiscus discolor</i>	Oceanspray	Rosaceae
<i>Iris</i> sp.	Iris	Iridaceae
<i>Juncus effusus</i>	Soft or lamp rush	Juncaceae
<i>Lemna minor</i>	Common duckweed	Araceae
<i>Madia gracilis</i>	Slender tarweed	Asteraceae
<i>Mentha pulegium</i>	Pennyroyal	Lamiaceae
<i>Parmelia</i> sp.		Parmeliaceae
<i>Perideridia</i> sp.	Yampah	Apiaceae
<i>Plagiomnium</i> sp.		Mniaceae
<i>Polystichum munitum</i>	Western sword fern	Dryopteridaceae
<i>Prunella vulgaris</i>	Common self-heal	Lamiaceae
<i>Pseudotsuga menziesii</i> var. <i>menziesii</i>	Douglas-fir	Pinaceae
<i>Quercus garryana</i>	Oregon oak	Fagaceae
<i>Ribes</i> sp.	Currant or gooseberry	Grossulariaceae
<i>Rosa californica</i>	California rose	Rosaceae
<i>Rubus leucodermis</i>	Whitebark raspberry	Rosaceae
<i>Rumex acetosella</i>	Sheep sorrel	Polygonaceae
<i>Salix sitchensis</i>	Sitka willow	Salicaceae
<i>Saxifraga</i> sp.	Saxifrage	Saxifragaceae
<i>Smilacina racemosa</i>	False lily of the valley	Ruscaceae
<i>Symphoricarpos albus</i> var. <i>laevigatus</i>	Common snowberry	Caprifoliaceae
<i>Torilis arvensis</i>	Tall sock-destroyer	Apiaceae
<i>Toxicodendron diversilobum</i>	Poison oak	Anacardiaceae
<i>Trillium albidum</i>	Giant white trillium	Melanthiaceae
<i>Typha latifolia</i>	Broadleaf cattail	Typhaceae
<i>Usnea cornuta</i>		Parmeliaceae
<i>Usnea scabrata</i>		Parmeliaceae
<i>Vicia americana</i> var. <i>americana</i>	American vetch	Fabaceae
<i>Viola</i> sp.	Violet	Violaceae

APPENDIX A-Qualifications

Tamara Camner

455 I Street · Arcata, CA 95521 · (707) 845-7483

tami@trans-terra.com · www.linkedin.com/in/tamaracamner/ @itstransterra

Education

December 2007-M.S. Biology, HUMBOLDT STATE UNIVERSITY

December 1999-B.S. Environmental Science WESTERN WASHINGTON UNIVERSITY

RICHARD CHINN 40 HR WETLAND TRAINING DECEMBER 2003

Experience

May 2018-Present-Principal-Environmental Scientist, TRANSTERRA CONSULTING LLC

Principal Owner at TransTerra Consulting. Providing Environmental Consulting Services including Biological Assessments, Rare Species Surveys, Vegetation and Habitat Typing/Mapping, Stream and Wetland Surveys, Environmental Impact Assessments, Permitting, Land Use/Planning, and CEQA/NEPA Documents

November 2011-May 2018-Associate Environmental Planner. CALTRANS

Promoted through increasingly responsible positions based on performance and experience in Humboldt, Del Norte and Mendocino. Served as Coastal Liaison, Restoration Specialist and CEQA/NEPA Coordinator. Developed programmatic interagency guidelines, workload coordination, permit process training, budgets, contracts, and internal process efficiency. Wrote and reviewed environmental documents including EAs and IS-MNDs, BAs, Section 7 and 10 consultations, oversaw and conducted biological/wetland surveys, mitigation and monitoring work and reporting.

October 2008-November 2011-Biologist/Environmental Planner, STREAMLINE PLANNING CONSULTANTS

Provided natural resource and policy expertise for a wide range of public and private projects affecting natural resources. Conducted stream/riparian assessments, botanical surveys, wetland delineation, impact assessments and mitigation/monitoring reports in accordance with CEQA, FPR, ESA, NEPA, the Water Quality Act, Coastal Act and other relevant laws for private landowners. Assisted with consultation, coordination and permit applications for listed species. Developed alternatives and mitigation design and negotiated sensitive and complex issues with multiple stakeholders.

March 2003-November 2008-Owner-Biologist. CAMPER CONSULTING

Provided botanical/wildlife surveys, wetland delineation, impact assessments and mitigation reports in accordance with CEQA and other relevant laws for private landowners. Extensive experience working on commercial and private timberlands for THP/NTMP work.

January 2001-March 2003-Wildlife Technician, CAMPBELL TIMBERLAND MANAGEMENT

Developed a botanical program including the coordination and conduction of botanical surveys, impact assessments, mitigation reports, monitoring studies. Maintained public relations and relationships with state and federal agency personnel. Developed and maintained GIS and other databases for survey findings. Assisted with NSO, anadromous fish and amphibian monitoring, surveying and habitat analysis.

March 2000-October 2000-Fisheries Technician, MENDOCINO REDWOOD COMPANY

Conducted anadromous fish and amphibian monitoring, surveying and habitat analysis. Utilized dive counts, electrofishing, sediment sampling, fish trapping, insect sampling and water quality monitoring to assess impacts to salmonids and other aquatic species in conjunction with the Department of Fish and Wildlife.

May 1998-January 1999-Botanical Propagation Specialist. SKAGIT ROSE FARMS

Identified, propagated and maintained an inventory of native plants of the Northwest Coastal Region. Researched and developed interpretive gardens of native plant ecosystems

Response to Planning Departments Review Response to Nov.13,2018 Letter



1. Soils Report-R-2 soils report with A.M. Baird in process.
2. Arch study done and submitted to county.
3. Delineation for property requested on 7-27-19 to Trans Terra Consulting completed. Submittal to Humboldt County Planning for Army Corp Engineers for approval?
4. Operation Plan Update
 - A. The property owner has applied for a well permit to try for a well. If this scenario will satisfy the water usage for both farms if we get water 5 gallons a minute or better.
 - B. If the well doesn't work then the property owner will install rain water storage containers to and/or water holding tanks to satisfy the forbearance period. (required gallons)
5. We are no longer using the pond water for irrigation. Neighboring property owner request not necessary.
6. LSA has been submitted and paid for. Waiting for rough draft from CDFW.
7. Cultivation Operations plan
 - A. Employees will use their own transportation and no one will live onsite.
 - B. Onsite parking to be marked on map
 - C. Anticipated trips per day 1-2 vehicles
 - D. Soils management plan to be developed by Pacific Water Shed

-No one will be living on the property. Employees will be using the cabin on parcel # 210-191-049 that has pg&e power, permitted septic facilities, water filtration systems for drinking water.

- The current building (ag exempt) will be used for drying and vegging.
8. Owner will create a turn out for Cal-Fire and access for PG&E (See map)
9. Processing to be handled off site in an approved facility.
10. No generators will be used and no fuel will be stored onsite. Property owner is applying for PG&E to do a power drop there.
11. Need to clarify what space is used for propagation.
12. Addressed in #7.
13. LSA changes have been addressed and resubmitted to
14. Removal of water bladder.
15. Sewage problems will be no longer a problem for day time employees. There will be a port-a-potty serviced by Six Rivers B&B at the site. The cabin on adjacent property will be utilized 210-191-049 has a permitted septic system that can be used.
16. Eliminated the water bladder.

Operations Manual Addendum 2-6-2020

East Side Hwy36Homestead, LLC



*Hwy 36 Homestead, LLC to replace where ever Tree Pham is used

Page 11:

Executive Summary

Hwy36Homestead, LLC is a sole member, for profit, entity designed to conduct agricultural activities within the State of California.

The Project Sponsor is proposing 17,230 sq. ft. of cultivation in the for of 1 outdoor cultivation area located on Parcel No. 210-191-050 totaling 24.04 acres. There is a 120sq. ft. fertilizer and pesticide shed used for storing products when not in use. There is a 120 sq. ft. shed used for fuel and equipment storage. The Project site currently features a 960 sq. ft. agricultural building that will be used for propagation and drying. PG&E power will support the Project.

Water is to be sourced from a well that is going to be drilled at APN#210-191-049 or water will be drafted during the winter months from supporting neighboring property at APN# 210-191-049. Same property owners have both properties. The Currently on site there is (2) 1,500 gallon water tanks. The one (1) 20,000 gallon bladder will be removed. Project needs will be 170,000 gallons water storage or use water during season from a well to be drilled.

The Property Owners have initiated the Wast Discharge (WWD) enrollments to facilitate compliance with the North Coast Regional Water Quality Control Board (NCRWQCB). The Initial Statement of Water Diversion and Use (ISDU) has been filed to support the applicant's rights to water diversion/use.

An LSA has been filed for California Department of Fish and Game (CDFW) for replacement of the culvert to 100 year standards.

Project timeline (2020)

Phase 1

- Well to be drilled and determined if water supply is enough for forbearance period for project.
- Install 2-3 more 5,000 gallon water tanks to support project and 2 mixer tanks for fertilizers.
- Develop hoopouses structures.
- Develop turn-a-round and clear new road/parking area as designated on map.
- Put in PG&E power to Ag exempt building.

Phase 2 (2021)

- If well is not sufficient, enough water storage will be added to support the project in 5,000 gallon tanks.

Project Overview

The Project concerns Parcel No. 210-191-050 in Bridgeville, California that is seeking permitting for a pre-existing outdoor medical cannabis cultivation with the phased approach to development. The Project proposal would feature one cultivation area totaling 19,500 sq ft (16,800 sq feet flower space and 2,700 sq.ft. vegging space). The request for additional vegging space is requested because the size of the plants for the second round need to be larger at lease 3 feet in diameter (covers are pulled over hoopouses and it is necessary for the replacement plants to be larger in size or they will not cover the canopy of the garden before going to flower. Supplemental light is not used). Applicant seeks approval if 19,500sq ft. of cultivation. The property falls within the allowable zoning and property specification requirements of the local jurisdiction's commercial cannabis approval program.

Location Description

The proposed Project would occur on legal parcel No. 210-191-050, in the northwest and southwest quarters of the northwest quarter Section 8, Township 1 North, Range 5East, Humboldt Meridian.

Zoning

The property features zoning FR and the following characteristics:

- GIS acres:24.05
- Costal Zone:outside
- 100 Year flood zone:outside
- Alquist-Priolo Fault Hazard zone:outside
- FEMA FIRM Flood Rating & Panel Number: Not Applicable.
- Slope:>15% in most cultivation areas.
- Relative Slope Stability (Per General Plan Geologic maps): High Instability

Soil Ratings

As per Humboldt County's Ordinance No. 2544, because the project is pre-existing, no prime agricultural soil rating requirement pertain.