BIOLOGICAL RESOURCES ASSESSMENT FOR THE CANNABIS CULTIVATION OPERATION AT 8531 HIGH VALLEY ROAD, CLEARLAKE OAKS, CALIFORNIA

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1. INTRODUCTION

1.1. PROJECT LOCATION AND DESCRIPTION

Natural Investigations Company conducted a biological resources assessment for a cannabis cultivation operation on a 158.22-acre parcel (APN 006-003-34) at 8531 High Valley Road, Clearlake Oaks, California. The proposed cannabis cultivation operation consists of 2 cultivation compounds capable of growing 10.5 acres of Cannabis canopy in total.

The north compound is approximately 12.4 acres in size and will contain 9 discrete cultivation areas ('gardens'). Gardens 1 through 8 will be 1 acre each; Garden 9 is 0.5 acre. The north compound is approximately 3 acres in size and will contain 2 discrete cultivation areas: Gardens 10 and 11 will each be 1 acre. Water will be pumped into tanks; each garden will have two 10,000 gallon tanks. To establish the gardens, the annual grassland habitat will have to be removed and the areas graded.

For this assessment, the Project Area was defined as the cultivation area plus the ancillary facilities, and this 15.5-acre area was the subject of the impact analysis. The entire 158.22-acre property was defined as the Study Area. The Study Area is defined to identify biological resources adjacent to the Project Area, and is the area subject to potential indirect effects from Project implementation.

1.2. PURPOSE AND SCOPE OF ASSESSMENT

This Biological Resources Assessment was prepared to assist in compliance with the California Environmental Quality Act and the state and federal Endangered Species Acts. This assessment also functions to fulfill requirements for obtaining enrollment (a Notice of Applicability) in the State Water Resources Control Board's Order WQ 2019-0007-DWQ General Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities (General Order).

This assessment provides information about the biological resources within the Study Area, the regulatory environment affecting such resources, any potential Project-related impacts upon these resources, and finally, to identify mitigation measures and other recommendations to reduce the significance of these impacts. The specific scope of services performed for this assessment consisted of the following tasks:

- Compile all readily-available historical biological resource information about the Study Area;
- Spatially query state and federal databases for any occurrences of special-status species or habitats within the Study Area and vicinity;
- Perform a reconnaissance-level field survey of the Study Area, including photographic documentation;
- Inventory all flora and fauna observed during the field survey;
- Characterize and map the habitat types present within the Study Area, including any potentiallyjurisdictional water resources;
- Evaluate the likelihood for the occurrence of any special-status species;
- Assess the potential for the Project to adversely impact any sensitive biological resources;
- Recommend mitigation measures designed to avoid or minimize Project-related impacts; and
- Prepare and submit a report summarizing all of the above tasks.

The scope of services does not include other services that are not described in this Section, such as formal aquatic resource delineations or protocol-level surveys for special-status species.

1.3. REGULATORY SETTING

The following section summarizes some applicable regulations of biological resources on real property in California.

1.3.1. Special-status Species Regulations

The United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service implement the Federal Endangered Species Act of 1973 (FESA) (16 USC §1531 et seq.). Threatened and endangered species on the federal list (50 CFR §17.11, 17.12) are protected from "take" (direct or indirect harm), unless a FESA Section 10 Permit is granted or a FESA Section 7 Biological Opinion with incidental take provisions is rendered. Pursuant to the requirements of FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally listed species may be present in the project area and determine whether the proposed project will have a potentially significant impact upon such species. Under FESA, habitat loss is considered to be an impact to the species. In addition, the agency is required to determine whether the project is likely to jeopardize the continued existence of any species proposed to be listed under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC §1536[3], [4]). Therefore, project-related impacts to these species or their habitats would be considered significant and would require mitigation. Species that are candidates for listing are not protected under FESA; however, USFWS advises that a candidate species could be elevated to listed status at any time, and therefore, applicants should regard these species with special consideration.

The California Endangered Species Act of 1970 (CESA) (California Fish and Game Code §2050 *et seq.*, and CCR Title 14, §670.2, 670.51) prohibits "take" (defined as hunt, pursue, catch, capture, or kill) of species listed under CESA. A CESA permit must be obtained if a project will result in take of listed species, either during construction or over the life of the project. Section 2081 establishes an incidental take permit program for state-listed species. Under CESA, California Department of Fish and Wildlife (CDFW) has the responsibility for maintaining a list of threatened and endangered species designated under state law (CFG Code 2070). CDFW also maintains lists of species of special concern, which serve as "watch lists." Pursuant to requirements of CESA, an agency reviewing proposed projects within its jurisdiction must determine whether any state-listed species may be present in the Study Area and determine whether the proposed project will have a potentially significant impact upon such species. Project-related impacts to species on the CESA list would be considered significant and would require mitigation.

California Fish and Game Code Sections 4700, 5050, and 5515 designates certain mammal, amphibian, and reptile species "fully protected", making it unlawful to take, possess, or destroy these species except under issuance of a specific permit. The California Native Plant Protection Act of 1977 (CFG Code §1900 et seq.) requires CDFW to establish criteria for determining if a species or variety of native plant is endangered or rare. Section 19131 of the code requires that landowners notify CDFW at least 10 days prior to initiating activities that will destroy a listed plant to allow the salvage of plant material.

Many bird species, especially those that are breeding, migratory, or of limited distribution, are protected under federal and state regulations. Under the Migratory Bird Treaty Act of 1918 (16 USC §703-711), migratory bird species and their nests and eggs that are on the federal list (50 CFR §10.13) are protected from injury or death, and project-related disturbances must be reduced or eliminated during the nesting cycle. California Fish and Game Code (§3503, 3503.5, and 3800) prohibits the possession, incidental take, or needless destruction of any bird nests or eggs. Fish and Game Code §3511 designates certain bird species "fully protected", making it unlawful to take, possess, or destroy these species except under issuance of a specific permit. The Bald and Golden Eagle Protection Act (16 USC §668) specifically protects bald and golden eagles from harm or trade in parts of these species.

California Environmental Quality Act (CEQA) (Public Resources Code §15380) defines "rare" in a broader sense than the definitions of threatened, endangered, or fully protected. Under the CEQA definition, CDFW can request additional consideration of species not otherwise protected. CEQA requires that the impacts of a project upon environmental resources must be analyzed and assessed using criteria determined by the lead agency. Sensitive species that would qualify for listing but are not currently listed

may be afforded protection under CEQA. The CEQA Guidelines (§15065) require that a substantial reduction in numbers of a rare or endangered species be considered a significant effect. CEQA Guidelines (§15380) provide for assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing. Plant species on the California Native Plant Society (CNPS) Lists 1A, 1B, or 2 are typically considered rare under CEQA. California "Species of Special Concern" is a category conferred by CDFW on those species that are indicators of regional habitat changes or are considered potential future protected species. While they do not have statutory protection, Species of Special Concern are typically considered rare under CEQA and thereby warrant specific protection measures.

1.3.2. Water Resource Protection

Real property that contains water resources are subject to various federal and state regulations and activities occurring in these water resources may require permits, licenses, variances, or similar authorization from federal, state and local agencies, as described next.

The Federal Water Pollution Control Act Amendments of 1972 (as amended), commonly known as the Clean Water Act (CWA), established the basic structure for regulating discharges of pollutants into "waters of the United States". Waters of the US includes essentially all surface waters, all interstate waters and their tributaries, all impoundments of these waters, and all wetlands adjacent to these waters. CWA Section 404 requires approval prior to dredging or discharging fill material into any waters of the US, especially wetlands. The permitting program is designed to minimize impacts to waters of the US, and when impacts cannot be avoided, requires compensatory mitigation. The US Army Corps of Engineers (USACE) is responsible for administering Section 404 regulations. Substantial impacts to jurisdictional wetlands may require an Individual Permit. Small-scale projects may require only a Nationwide Permit, which typically has an expedited process compared to the Individual Permit process. Mitigation of wetland impacts is required as a condition of the CWA Section 404 Permit and may include on-site preservation, restoration, or enhancement and/or off-site restoration or enhancement. The characteristics of the restored or enhanced wetlands must be equal to or better than those of the affected wetlands to achieve no net loss of wetlands.

Under CWA Section 401, every applicant for a federal permit or license for any activity which may result in a discharge to a water body must obtain State Water Quality Certification that the proposed activity will comply with State water quality standards. The California State Water Resources Control Board is responsible for administering CWA Section 401 regulations.

Section 10 of the Rivers and Harbors Act of 1899 requires approval from USACE prior to the commencement of any work in or over navigable Waters of the US, or which affects the course, location, condition or capacity of such waters. Navigable waters of the United States are defined as waters that have been used in the past, are now used, or are susceptible to use, as a means to transport interstate or foreign commerce up to the head of navigation. Rivers and Harbors Act Section 10 permits are required for construction activities in these waters.

California Fish and Game Code (§1601 - 1607) protects fishery resources by regulating "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." CDFW requires notification prior to commencement, and issuance of a Lake or Streambed Alteration Agreement, if a proposed project will result in the alteration or degradation of "waters of the State". The limit of CDFW jurisdiction is subject to the judgment of the Department; currently, this jurisdiction is interpreted to be the "stream zone", defined as "that portion of the stream channel that restricts lateral movement of water" and delineated at "the top of the bank or the outer edge of any riparian vegetation, whichever is more landward". CDFW reviews the proposed actions and, if necessary, submits to the applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by the CDFW and the applicant is the

Streambed Alteration Agreement. Projects that require a Streambed Alteration Agreement may also require a CWA 404 Section Permit and/or CWA Section 401 Water Quality Certification.

For construction projects that disturb one or more acres of soil, the landowner or developer must obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, 2009-0009-DWQ).

The State Water Resources Control Board's Order WQ 2019-0007-DWQ General Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities protects receiving water bodies from water-quality impacts associated with cannabis cultivation using a combination of Best Management Practices, buffer zones, sediment and erosion controls, site management plans, inspections and reporting, and regulatory oversight.

1.3.3. Tree Protection

At the State level, in areas inside timberland, any tree removal is subject to the conditions and requirements set forth in the Z'berg-Nejedly Forest Practice Act and the California Forest Practice Rules. If development of a project will result in the removal of commercial tree species, one of the following permits is needed: Less than 3 Acre Conversion Exemption; Christmas Tree; Dead, Dying or Diseased, Fuelwood, or Split Products Exemption; a Public Agency, Public and Private Utility Right of Way Exemption; a Notice of Exemption from Timberland Conversion Permit for Subdivision; or an Application for Timberland Conversion Permit.

Lake County does not have a specific ordinance protecting native trees. However, under the Cannabis Ordinance 3084, Section 4, Subsection iii) Prohibited Activities (a) Tree Removal, Lake County restricts tree removal as follows:

"The removal of any commercial tree species as defined by the California Code of Regulations section 895.1, Commercial Species for the Coast Forest District and Northern Forest District, and the removal of any true oak species (Quercus species) or Tan Oak (Notholithocarpus species) for the purpose of developing a cannabis cultivation site should be avoided and minimized. This shall not include the pruning of any such tree species for the health of the tree or the removal of such trees if necessary for safety or disease concerns."

During the permitting process, Lake County requires mitigation for the removal of protected trees; typical mitigation is tree replacement at a ratio of 2:1 or 3:1.

2. ENVIRONMENTAL SETTING

The Study Area is located within the Inner North Coast Range geographic subregion, which is contained within the Northwestern California geographic subdivision of the larger California Floristic Province (Baldwin et al. 2012). This region has a Mediterranean-type climate, characterized by distinct seasons of hot, dry summers and wet, moderately-cold winters. The Study Area and vicinity is in Climate Zone 7 - California's Gray Pine Belt, defined by hot summers and mild but pronounced winters without severe winter cold or high humidity (Sunset, 2020).

The topography of the Study Area is mountainous, and consists of the west-facing slopes of a ridge crest. The slopes drain directly to Clear Lake. A small portion of the property drains east down Sulphur Canyon into Long Valley. The elevation ranges from approximately 2,600 feet to 3,050 feet above mean sea level. The Property is undeveloped land used for livestock ranging. It is surrounded by Mendocino National forest. The surrounding land uses are private estates, timberland, recreation, and grazing land.

3. METHODOLOGY

3.1. PRELIMINARY DATA GATHERING AND RESEARCH

Prior to conducting the field survey, the following information sources were reviewed:

- Any readily-available previous biological resource studies pertaining to the Study Area or vicinity
- United States Geologic Service (USGS) 7.5 degree-minute topographic quadrangles of the Study Area and vicinity
- Aerial photography of the Study Area
- California Natural Diversity Database (CNDDB), electronically updated monthly by subscription
- USFWS species list (IPaC Trust Resources Report).

3.2. FIELD SURVEY

Consulting biologist Tim Nosal, Ms. conducted a reconnaissance-level field survey on March 20, 2020.

A variable-intensity pedestrian survey was performed, and modified to account for differences in terrain, vegetation density, and visibility. All visible fauna and flora observed were recorded in a field notebook, and identified to the lowest possible taxon. Survey efforts emphasized the search for any special-status species that had documented occurrences in the CNDDB within the vicinity of the Study Area and those species on the USFWS species list (Appendix 1).

When a specimen could not be identified in the field, a photograph or voucher specimen (depending upon permit requirements) was taken and identified in the laboratory using a dissecting scope where necessary. Plant specimens difficult to identify were sent to botanist Margriet Wetherwax (U.C. Berkeley Jepson Herbarium). Tim Nosal holds CDFW Plant Voucher Specimen Permit 2081(a)-16-102-V. Taxonomic determinations were facilitated by referencing museum specimens or by various texts, including the following: Powell and Hogue (1979); Pavlik (1991); (1993); Brenzel (2012); Stuart and Sawyer (2001); Lanner (2002); Sibley (2003); Baldwin et al. (2012); Calflora (2020); CDFW (2020b,c); NatureServe 2020; and University of California at Berkeley (2020a,b).

The locations of any special-status species sighted were marked on aerial photographs and/or georeferenced with a geographic positioning system (GPS) receiver. Habitat types occurring in the Study Area were mapped on aerial photographs, and information on habitat conditions and the suitability of the habitats to support special-status species was also recorded. The Study Area was also informally assessed for the presence of potentially-jurisdictional water features, including riparian zones, isolated wetlands and vernal pools, and other biologically-sensitive aquatic habitats

3.3. MAPPING AND OTHER ANALYSES

Locations of species' occurrences and habitat boundaries within the Study Area were digitized to produce the final habitat maps. The boundaries of potentially jurisdictional water resources within the Study Area were identified and measured in the field, and similarly digitized to calculate acreage and to produce informal delineation maps. Geographic analyses were performed using geographical information system software (ArcGIS 10, ESRI, Inc.). Vegetation communities (assemblages of plant species growing in an area of similar biological and environmental factors), were classified by Vegetation Series (distinctive associations of plants, described by dominant species and particular environmental setting) using the CNPS Vegetation Classification system (Sawyer and Keeler-Wolf, 1995). Informal wetland delineation methods consisted of an abbreviated, visual assessment of the three requisite wetland parameters (hydrophytic vegetation, hydric soils, hydrologic regime) defined in the US Army Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory, 1987). Wildlife habitats were classified according to the CDFW's California Wildlife Habitat Relationships System (CDFW, 2020c). Species' habitat requirements and life histories were identified using the following sources: Baldwin et al. (2012); CNPS (2020), Calflora (2020); CDFW (2020a,b,c); and University of California at Berkeley (2020a,b).

4. RESULTS

4.1. INVENTORY OF FLORA AND FAUNA FROM FIELD SURVEY

All plants detected during the field survey of the Study Area are listed in Appendix 2. The following animals were detected within the Study Area during the field survey: northern Pacific treefrog (*Pseudacris regilla*); sharp-tailed snake (*Contia tenuis*); Botta's pocket gopher (*Thomomys bottae*); Columbian black-tailed deer (*Odocoileus hemionus columbianus*); coyote (*Canis latrans*); acorn woodpecker (*Melanerpes formicivorus*); American robin (*Turdus migratorius*); Anna's hummingbird (*Calypte anna*); common raven (*Corvus corax*); dark-eyed junco (*Junco hyemalis*); pileated woodpecker (*Dryocopus pileatus*); red breasted nuthatch (*Sitta canadensis*); red-shouldered hawk (*Buteo lineatus*); spotted towhee (*Pipilo maculatus*); Stellar's jay (*Cyanocitta stelleri*); and common songbirds.

4.2. VEGETATION COMMUNITIES AND WILDLIFE HABITAT TYPES

4.2.1. Terrestrial Vegetation Communities

General vegetation communities occurring in the Study Area were mapped (see Exhibits). More specifically, the following terrestrial natural communities occur in the Study Area (as categorized by CDFW 2019):

- 87.010.00 *Pinus ponderosa* (Ponderosa Pine Forest)
- 37.101.10 Adenostoma fasciculatum Ceanothus cuneatus (Chamise chaparral)
- 42.020.03 *Elymus caput-medusae* (Medusahead grassland)
- 45.560.00 *Juncus* sp. (Rush marshes)

These vegetation communities are discussed here and are delineated in the Exhibits.

Ponderosa Pine Forest. Much of the Study Area is characterized by forest habitat, dominated by ponderosa pine (*Pinus ponderosa*) with California black oak (*Quercus kelloggii*) also prominent. Numerous additional tree species were observed sharing the canopy including Douglas-fir (*Pseudotsuga menziesii*), knobcone pine (*Pinus attenuata*), sugar pine (*Pinus lambertiana*), canyon live oak (*Quercus chrysolepis*), interior live oak (*Quercus wislizeni*) and California bay (*Umbellularia californica*). The understory was highly variable, with little vegetation where the canopy was dense, and shrubs and grasses common where openings were found. Typical understory plants include common manzanita (*Arctostaphylos manzanita* ssp. *manzanita*), poison-oak (*Toxicodendron diversilobum*), California fescue (*Festuca californica*), hedgehog dogtail grass (*Cynosurus echinoides*), blue wildrye (*Elymus glaucus*), sweet pea (*Lathyrus* sp.) and wavy leaved soap plant (*Chlorogalum pomeridianum*). This vegetation can be classified as "87.010.00 *Pinus ponderosa* (Ponderosa Pine Forest) (CDFW 2019)" or as the Holland Type "Upland Coast Range Ponderosa Pine Forest".

Chaparral (Chamise): Habitat dominated by evergreen shrubs is found within a small region along the western edge of the Study Area. The warm west-facing slopes are vegetated with chamise (*Adenostoma fasciculatum*) as the dominant shrub with California scrub oak (*Quercus berberidifolia*) and wedge leaf ceanothus (*Ceanothus cuneatus*). The dense cover of the shrubs is not favorable to the growth of many herbs however, the following plants were observed in openings and along the edge of the chaparral: California fescue, bedstraw (*Galium* sp.), blue wildrye and spearleaf mountain dandelion (*Agoseris retrorsa*). This type of chaparral can be classified as "37.101.10 *Adenostoma fasciculatum* – *Ceanothus cuneatus*" (CDFW 2019) or as the Holland Type "Chamise chaparral".

Annual Grassland: The numerous openings within the ponderosa pine forest are vegetated with annual grassland habitat. This vegetation is comprised largely of non-native grasses and native

and non-native herbs including medusahead (*Elymus caput-medusae*), yellow star-thistle (*Centaurea solstitialis*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), fillaree (*Erodium* spp.), slender wild oat (*Avena barbata*) and clarkia (*Clarkia* sp.). This vegetation can be classified as the "87.010.00 42.020.03 *Elymus caput-medusae* (Medusahead grassland) (CDFW 2019)" or as the Holland Type "Non-native Grassland".

Freshwater Marsh: Four wetlands were observed within the Study Area. A wetland near the center of the parcel is supported by flow from a spring. The other three wetlands appear to be supported by seeps. Freshwater marsh vegetation is found downhill from the spring and each seep. The composition of the vegetation within each wetland is variable, but typically includes rush (*Juncus* sp.), coyote brush (*Baccharis pilularis*), hedge nettle (*Stachys ajugoides*), bull thistle (*Cirsium vulgare*) and stinging nettles (*Urtica dioica ssp. holosericea*). Willows (*Salix* sp.), giant chain fern (*Woodwardia fimbriata*) and California mugwort (*Artemisia douglasiana*) are present at the spring. This vegetation can be classified as "45.560.00 *Juncus* sp. (Rush marshes) (CDFW 2019)" or as the Holland Type "Coastal and Valley Freshwater Marsh".

4.2.2. Wildlife Habitat Types

Wildlife habitat types were classified using CDFW's Wildlife Habitat Relationship System. The Study Area contains the following wildlife habitat types: Montane Hardwood-Conifer; Montane Chaparral; Mixed Chaparral; Annual Grassland; Fresh Emergent Wetland.

4.2.3. Critical Habitat and Special-status Habitat

No special-status habitats were detected within the Study Area during the field survey. No critical habitat for any federally-listed species occurs within the Study Area. The CNDDB reported no special-status habitats within the Project Areas or Study Area. The CNDDB reported the following special-status habitats in a 10-mile radius outside of the Study Area: Clear Lake Drainage Cyprinid/ Catostomid Stream; Clear Lake Drainage Seasonal Lakefish Spawning Stream; Coastal and Valley Freshwater Marsh and Great Valley Mixed Riparian Forest.

4.2.4. Habitat Plans and Wildlife Corridors

Wildlife movement corridors link remaining areas of functional wildlife habitat that are separated primarily by human disturbance, but natural barriers such as rugged terrain and abrupt changes in vegetation cover are also possible. Wilderness and open lands have been fragmented by urbanization, which can disrupt migratory species and separate interbreeding populations. Corridors allow migratory movements and act as links between these separated populations.

No fishery resources exist in or near the Study Area. Although there are no designated wildlife corridors, the open space within the Study Area provides unrestricted animal movement. The Study Area is not located within any adopted Habitat Conservation Plan or Natural Community Conservation Plan.

4.3. LISTED SPECIES AND OTHER SPECIAL-STATUS SPECIES

For the purposes of this assessment, "special status" is defined to be species that are of management concern to state or federal natural resource agencies, and include those species that are:

- Listed as endangered, threatened, proposed, or candidate for listing under the Federal Endangered Species Act;
- Listed as endangered, threatened, rare, or proposed for listing, under the California Endangered Species Act of 1970;
- Designated as endangered or rare, pursuant to California Fish and Game Code (§1901);
- Designated as fully protected, pursuant to California Fish and Game Code (§3511, §4700, or §5050);
- Designated as a species of special concern by CDFW;

- Plants considered to be rare, threatened or endangered in California by the California Native Plant Society (CNPS); this consists of species on Lists 1A, 1B, and 2 of the CNPS Ranking System; or
- Plants listed as rare under the California Native Plant Protection Act.

4.3.1. Reported Occurrences of Listed Species and Other Special-status Species

A list of special-status plant and animal species that have occurred within the Study Area and vicinity was compiled based upon the following:

- Any previous and readily-available biological resource studies pertaining to the Study Area;
- Informal consultation with USFWS by generating an electronic Species List (Information for Planning and Conservation website at https://ecos.fws.gov/ipac/); and
- A spatial query of the CNDDB.

The CNDDB was queried and any reported occurrences of special-status species were plotted in relation to the Study Area boundary using GIS software (see exhibits). The CNDDB reported no special-status species occurrences within the Project Area or Study Area. Within a 10-mile buffer of the Study Area boundary, the CNDDB reported several special-status species occurrences, summarized in the following table.

A USFWS species list was generated online using the USFWS' IPaC Trust Resource Report System (see Appendix 1). This list is generated using a regional and/or watershed approach and does not necessarily indicate that the Study Area provides suitable habitat. The following listed species should be considered in the impact assessment:

- Mammals
 - o Fisher (West Coast DPS) (Pekania pennanti) Proposed Threatened
- Birds
 - Northern Spotted Owl (Strix occidentalis caurina) Threatened
- Amphibians
 - California Red-legged Frog (Rana draytonii) Threatened
- Fishes
 - Delta Smelt (Hypomesus transpacificus) Threatened
- Flowering Plants
 - o Burke's Goldfields (Lasthenia burkei) Endangered

Migratory birds should also be considered in the impact assessment.

Table 1. Special-status Species Reported by CNDDB in the Vicinity of the Study Area

Common Name Scientific Name	Status*	General Habitat	Microhabitat
Red-bellied newt Taricha rivularis	CSSC	Found in coastal woodlands and redwood forests along the coast of Northern California	A stream or river dweller. Larvae retreat into vegetation and under stones during the day.
Foothill yellow-legged frog Rana boylii	CCT/CSSC	Partly-shaded, shallow streams & riffles with a rocky substrate in a variety of habitats.	Need at least some cobble-sized substrate for egg-laying. Need at least 15 weeks to attain metamorphosis.
Double-crested cormorant Phalacrocorax auritus	WL	Colonial nester on coastal cliffs, offshore islands, & along lake margins in the interior of the state.	Nests along coast on sequestered islets, usually on ground with sloping surface, or in tall trees along lake margins.
Great blue heron Ardea herodias		Colonial nester in tall trees, cliffsides, and sequestered spots on marshes.	Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, wet meadows.
Osprey Pandion haliaetus	WL	Ocean shore, bays, fresh-water lakes, and larger streams.	Large nests built in tree-tops within 15 miles of a good fish-producing body of water.
Western yellow-billed cuckoo Coccyzus americanus occidentalis	FT/CE	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems.	Nests in riparian jungles of willow, often mixed with cottonwoods, w/ lower story of blackberry, nettles, or wild grape.
Tricolored blackbird Agelaius tricolor	CT/CSSC	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California.	Requires open water, protected nesting substrate, & foraging area with insect prey within a few km of the colony.
Clear Lake hitch Lavinia exilicauda chi	СТ	Found only in Clear Lake, Lake Co, and associated ponds. Spawns in streams flowing into Clear Lake.	Adults found in the limnetic zone. Juveniles found in the nearshore shallow-water habitat hiding in the vegetation.
Sacramento perch Archoplites interruptus	CSSC	Historically found in the sloughs, slow- moving rivers, and lakes of the Central Valley.	Prefers warm water. Aquatic vegetation is essential for young. Tolerates wide range of physio-chemical water conditions.
Silver-haired bat Lasionycteris noctivagans	CSSC	Primarily a coastal & montane forest dweller feeding over streams, ponds & open brushy areas.	Roosts in hollow trees, beneath exfoliating bark, abandoned woodpecker holes & rarely under rocks. Needs drinking water.
Townsend's big-eared bat Corynorhinus townsendii	CSSC	Throughout California in a wide variety of habitats. Most common in mesic sites.	Roosts in the open, hanging from walls & ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.
Pallid bat Antrozous pallidus	CSSC	Deserts, grasslands, shrublands, woodlands & forests. Most common in open, dry habitats with rocky areas for roosting.	Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.
North American porcupine Erethizon dorsatum	CSSC	Coast ranges, Klamath Mountains, southern Cascades, Modoc Plateau, Sierra Nevada and Transverse Ranges.	Montane conifer and wet meadow habitats.
Humboldt marten Martes caurina humboldtensis	CE/CSSC	Occurs only in the coastal redwood zone from the Oregon border south to Sonoma County.	Associated with late-successional coniferous forests, prefer forests with low, overhead cover.
Fisher - West Coast DPS Pekania pennanti	CT/CSSC	Intermediate to large-tree stages of coniferous forests & deciduous-riparian areas with high percent canopy closure.	Uses cavities, snags, logs & rocky areas for cover & denning. Needs large areas of mature, dense forest.
American badger Taxidea taxus	CSSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Needs sufficient food, friable soils & open, uncultivated ground. Preys on burrowing rodents. Digs burrows.
Western pond turtle Emys marmorata	CSSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams & irrigation ditches, usually with aquatic vegetation, be	Need basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying

An isopod Calasellus californicus	CSSC	Known from Lake, Napa, Marin, Santa Cruz and Santa Clara Counties.	
Brownish dubiraphian riffle beetle Dubiraphia brunnescens	CSSC	Aquatic; known only from the NE shore of Clear Lake, Lake County.	Inhabits exposed, wave-washed willow roots.
Obscure bumble bee Bombus caliginosus	CSSC	Open grassy coastal prairies and Coast Range meadows. Nesting occurs underground as well as above ground in abandoned bird nests.	Food plants include Ceanothus, Cirsium, Clarkia, Keckiella, Lathyrus, Lotus, Lupinus, Rhododendron, Rubus, Trifolium, and Vaccinium.
Blennosperma vernal pool andrenid bee Andrena blennospermatis	CSSC	This bee is oligolectic on vernal pool Blennosperma.	Bees nest in the uplands around vernal pools.
Borax Lake cuckoo wasp Hedychridium milleri	CSSC	Endemic to Central California. Only collection is from the type locality.	External parasite of wasp and bee larva.
Big-scale balsamroot Balsamorhiza macrolepis	1B.2	Chaparral, valley and foothill grassland, cismontane woodland.	Sometimes on serpentine. 90-1555 m.
Small-flowered calycadenia Calycadenia micrantha	1B.2	Chaparral, valley and foothill grassland, meadows and seeps.	Rocky talus or scree; sparsely vegetated areas. Occasionally on roadsides; sometimes on serpentine. 5-1500 m.
Greene's narrow-leaved daisy Erigeron greenei	1B.2	Chaparral.	Serpentine and volcanic substrates, generally in shrubby vegetation. 80-1005 m.
Burke's goldfields Lasthenia burkei	FE/CE/1B.1	Vernal pools, meadows and seeps.	Most often in vernal pools and swales. 15-600 m.
Colusa layia Layia septentrionalis	1B.2	Chaparral, cismontane woodland, valley and foothill grassland.	Scattered colonies in fields and grassy slopes in sandy or serpentine soil. 145-1095m.
Bent-flowered fiddleneck Amsinckia lunaris	1B.2	Cismontane woodland, valley and foothill grassland.	50-500m.
Serpentine cryptantha Cryptantha dissita	1B.2	Chaparral.	Serpentine outcrops. 330-730m.
Mayacamas popcornflower Plagiobothrys lithocaryus	1A	Meadows? Valley and foothill grassland, cismontane woodland, chaparral?	Moist sites. 285-450m.
Watershield Brasenia schreberi	2B.3	Freshwater marshes and swamps.	Aquatic from water bodies both natural and artificial in California.
Raiche's manzanita Arctostaphylos stanfordiana ssp. raichei	1B.1	Chaparral, lower montane coniferous forest.	Rocky, serpentine sites. Slopes and ridges. 450-1000 m.
Konocti manzanita Arctostaphylos manzanita ssp. elegans	1B.3	Chaparral, cismontane woodland, lower montane coniferous forest.	Volcanic soils. 395-1615 m.
Anthony Peak lupine Lupinus antoninus	1B.2	Upper montane coniferous forest, lower montane coniferous forest.	Open areas with surrounding forest; rocky sites. 1220-2285 m.
Napa bluecurls Trichostema ruygtii	1B.2	Cismontane woodland, chaparral, valley and foothill grassland, vernal pools, lower montane coniferous forest.	Often in open, sunny areas. Also has been found in vernal pools. 30-590m.
Woolly meadowfoam Limnanthes floccosa ssp. floccosa	4.2	Chaparral, cismontane woodland, valley and foothill grassland, vernal pools.	Vernally wet areas, ditches, and ponds. 60-1335 m.
Glandular western flax Hesperolinon adenophyllum	1B.2	Chaparral, cismontane woodland, valley and foothill grassland.	Serpentine soils; generally found in serpentine chaparral. 150-1315 m.

Two-carpellate western flax Hesperolinon bicarpellatum	1B.2	Serpentine chaparral.	Serpentine barrens at edge of chaparral. 60-1005 m.
Marsh checkerbloom Sidalcea oregana ssp. hydrophila	1B.2	Meadows and seeps, riparian forest.	Wet soil of streambanks, meadows. 1100-2300 m.
Brandegee's eriastrum Eriastrum brandegeeae	1B.1	Chaparral, cismontane woodland.	On barren volcanic soils; often in open areas. 425-840 m.
Tracy's eriastrum Eriastrum tracyi	3.2	Chaparral, cismontane woodland.	Gravelly shale or clay; often in open areas. 315-760 m.
Baker's navarretia Navarretia leucocephala ssp. bakeri	1B.1	Cismontane woodland, meadows and seeps, vernal pools, valley and foothill grassland, lower montane coniferous forest.	Vernal pools and swales; adobe or alkaline soils. 5-1740 m.
Few-flowered navarretia Navarretia leucocephala ssp. pauciflora	FE/CT/1B.1	Vernal pools.	Volcanic ash flow, and volcanic substrate vernal pools. 400-855 m.
Rincon Ridge ceanothus Ceanothus confusus	1B.1	Closed-cone coniferous forest, chaparral, cismontane woodland.	Known from volcanic or serpentine soils, dry shrubby slopes. 75-1065 m.
Bolander's horkelia Horkelia bolanderi	1B.2	Lower montane coniferous forest, chaparral, meadows, valley and foothill grassland.	Grassy margins of vernal pools and meadows. 450-1100 m.
Boggs Lake hedge- hyssop Gratiola heterosepala	CE/1B.2	Marshes and swamps (freshwater), vernal pools.	Clay soils; usually in vernal pools, sometimes on lake margins. 10-2375 m.
Indian Valley brodiaea Brodiaea rosea	CE/3.1	Closed cone coniferous forest, chaparral, cismontane woodland, valley and foothill grassland.	Serpentinite endemic. 335-1450 m
Eel-grass pondweed Potamogeton zosteriformis	2B.2	Marshes and swamps.	Ponds, lakes, streams. 0-1860 m.

*Definitions of Status Codes: FE = Federally listed as endangered; FT = Federally listed as threatened; FPE = Federally proposed for listing as endangered; FPT = Federally proposed for listing as threatened; FC = Candidate for Federal listing; MB = Migratory Bird Act; CE = California State listed as endangered; CT = California State listed as threatened; CSSC = California species of special concern; CR = California rare species; CFP = California fully protected species; CNPS (California Native Plant Society) List 1A = Plants presumed extinct in California by CNPS; CNPS List 1B = CNPS designated rare or endangered plants in California and elsewhere; and CNPS List 2 = CNPS designated rare or endangered plants in California, but more common elsewhere. Global Ranking: G1 = Critically Imperiled; G2 = Imperiled; G3 = Vulnerable. State Ranking: S1 = Critically Imperiled; S2 = Imperiled; S3 = Vulnerable.

^{**}Copied verbatim from CNDDB, unless otherwise noted.

4.3.2. Listed Species or Special-status Species Observed During Field Survey

During the field survey, no special-status species were detected within the Project Area or the surrounding Study Area.

4.3.3. Potential for Listed Species or Special-status Species to Occur in the Study Area

The non-native grasslands within the Study Area have a low potential for harboring special-status plant species due to the dominance of aggressive non-native grasses and forbs. Watercourses and wetlands within the Study Area have a low to moderate potential to sustain aquatic special-status species. The pine forest and chaparral habitats have a moderate potential to sustain special-status plant species.

4.4. POTENTIALLY-JURISDICTIONAL WATER RESOURCES

The USFWS National Wetland Inventory reported riverine water features within the Study Area (see Exhibits); these are ephemeral channels.

An informal assessment for the presence of potentially-jurisdictional water resources within the Study Area was also conducted during the field survey. For purposes of this biological site assessment, non-wetland waters were classified using the California Forest Practice Rules. The California Forest Practice Rules define a Class I watercourse as 1) a watercourse providing habitat for fish always or seasonally, and/or 2) providing a domestic water source; a Class II watercourse is 1) a watercourse capable of supporting non-fish aquatic species, or 2) a watercourse within 1000 feet of a watercourse that seasonally or always has fish present; a Class III watercourse is a watercourse with no aquatic life present and that shows evidence of being capable of transporting sediment to Class I and Class II waters during high water flow conditions.

The field survey determined that the Project Area does not contain any channels or wetlands. The following water features were detected within the larger Study Area during the field survey (see Exhibits):

- 3 unnamed ephemeral channels (Class III watercourses)
- · wetlands in poorly drained areas of pasture
- 1 spring and adjacent wetlands

There are no vernal pools or other isolated wetlands in the Study Area.

5. IMPACT ANALYSES AND MITIGATION MEASURES

This section establishes the impact criteria, then analyzes potential Project-related impacts upon the known biological resources within the Study Area, and then suggests mitigation measures to reduce these impacts to a less-than-significant level.

5.1. IMPACT SIGNIFICANCE CRITERIA

The significance of impacts to biological resources depends upon the proximity and quality of vegetation communities and wildlife habitats, the presence or absence of special-status species, and the effectiveness of measures implemented to protect these resources from Project-related impacts. As defined by CEQA, the Project would be considered to have a significant adverse impact on biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a special-status species in local or regional plans, policies, or regulations, or by USFWS or CDFW
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by USFWS or CDFW

- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species
 or with established native resident or migratory wildlife corridors, or impede the use of native wildlife
 nursery sites
- Conflict with any county or municipal policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved governmental habitat conservation plan.

5.2. IMPACT ANALYSIS

The following discussion evaluates the potential for Project-related activities to adversely affect biological resources. The Project boundaries were digitized and then overlaid on the habitat map using GIS to quantify potential impacts. Historical aerial photos were also analyzed for changes in land use.

5.2.1. Potential Direct / Indirect Adverse Effects Upon Special-status Species

 Will the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

To establish the gardens, the annual grassland habitat will have to be removed and the areas graded. The non-native grasslands within the Study Area have a low potential for harboring special-status plant species due to the dominance of aggressive non-native grasses and forbs. During the field survey, no special-status species were detected within the Project Area or the surrounding Study Area. Therefore, project implementation is not expected to impact special-status species. If project implementation requires the removal of pine forest or chaparral habitats, which have a moderate potential to sustain special-status plant species, this would be a potentially significant impact.

Note that a PG&E transmission line crosses the Study Area. PG&E may require vegetation management activities such as tree removal as part of ongoing transmission line maintenance operations.

The Study Area contains suitable nesting habitat for various bird species because of the presence of trees and poles. However, no nests or nesting activity was observed in the project area during the field survey. Trees must be inspected for the presence of active bird nests before tree felling or ground clearing. If active nests are present in the project area during construction of the project, CDFW should be consulted to develop measures to avoid "take" of active nests prior to the initiation of any construction activities. Avoidance measures may include establishment of a buffer zone using construction fencing or the postponement of vegetation removal until after the nesting season, or until after a qualified biologist has determined the young have fledged and are independent of the nest site.

Recommended Mitigation Measures

If cannabis cultivation activities require the removal of pine forest or chaparral habitat, a rare plant (botanical) survey should be performed before vegetation clearing and grading are performed.

5.2.2. Potential Direct / Indirect Adverse Effects Upon Special-status Habitats or Natural Communities or Corridors

• Will the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

The Study Area is not within any designated listed species' critical habitat. The Project Areas do not contain any special-status habitats. The surrounding Study Area contains special-status habitats: a spring, wetlands, and ephemeral channels. Project implementation will not directly impact any special-status habitats. Indirect impacts, such as increased sedimentation, are discusses in the next section.

Recommended Mitigation Measures

No mitigation is necessary.

5.2.3. Potential Direct / Indirect Adverse Effects On Jurisdictional Water Resources

• Will the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

There are no water resources in the Project Areas. There are several water resources within the Study Area: a spring, wetlands, and ephemeral channels. Potential adverse impacts to water resources could occur during <u>construction</u> by modification or destruction of stream banks or riparian vegetation, the filling of wetlands, or by increased erosion and sedimentation in receiving water bodies due to soil disturbance. However, the cultivation areas have been designed to avoid watercourses. Because of these avoidance measures, no direct impacts to water resources are expected.

If the total area of ground disturbance from installation of the cultivation operation is 1 acre or more, the Cultivator must enroll for coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, 2009-0009-DWQ). Implementation of a stormwater pollution prevention plan, and erosion control plan, along with regular inspections, will ensure that construction activities do not pollute receiving waterbodies.

Potential adverse impacts to water resources could occur during <u>operation</u> of cultivation activities resources by discharge of sediment or other pollutants (fertilizers, pesticides, human waste, etc.) into receiving waterbodies. However, the project proponent must file a Notice of Intent and enroll in Cannabis Cultivation Order WQ 2019-0007-DWQ. Compliance with this Order will ensure that cultivation operations will not significantly impact water resources by using a combination of Best Management Practices (BMPs), buffer zones, sediment and erosion controls, site management plans, inspections and reporting, and regulatory oversight.

Cultivators who enroll in the State Water Board's Waste Discharge Requirements for Cannabis Cultivation Order WQ 2019-0007-DWQ must comply with the Minimum Riparian Setbacks, as summarized in the following table. The Project would be considered to have a significant adverse impact on jurisdictional water resources if it would be non-compliant with these requirements. The minimum riparian setbacks apply to all land disturbance, cannabis cultivation activities, and facilities (e.g., material or vehicle storage, diesel powered pump locations, water storage areas, and chemical toilet placement). The proposed project is not compliant with the setback requirements of Cannabis Cultivation Order WQ 2019-0007-DWQ. Portions of the planned cultivation compounds may need to be relocated to comply

with this Order. It is recommended that a formal delineation of jurisdictional waters be performed before construction work, or ground disturbance, is performed near any wetland or drainage.

Minimum Riparian Setbacks

Common Name	Watercourse Class	Distance
Perennial watercourses, waterbodies (e.g. lakes, ponds), or springs		150 ft.
Intermittent watercourses or wetlands	=	100 ft.
Ephemeral watercourses	III	50 ft.
Man-made irrigation canals, water supply reservoirs, or hydroelectric canals that support native aquatic species	IV	Established riparian zone vegetation

Recommended Mitigation Measures

The locations and configurations of the cultivation compounds may need to be redesigned to comply with the setback requirements of the Cannabis Cultivation Order.

Note also that the Cannabis Cultivation Order requires that cannabis cultivators located on slopes greater than 30% and less than 50% must submit a Site Erosion and Sediment Control Plan to the Regional Water Board Executive Officer for any cannabis-related land development or alteration.

5.2.4. Potential Impacts to Wildlife Movement, Corridors, etc.

 Will the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Although no mapped wildlife corridors (such as the California Essential Habitat Connectivity Area layer in CNDDB) exist within or near the Study Area, the open space and the stream corridors in the Study Area facilitate animal movement and migrations. While the Study Area may be used by wildlife for movement or migration, the Project would not have a significant impact on this movement because it would not block movement and the majority of the open space in the Study Area would still be available.

Implementation of the proposed project would necessitate erection of security fences around the cultivation compounds. These fences do not allow animal movement and may act as a local barrier to wildlife movement. However, the fenced cultivation areas are surrounded by open space, allowing wildlife to move around these fenced areas. Thus, implementation of the proposed project is a less than significant impact upon wildlife movement. Implementation of the project will not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Recommended Mitigation Measures

No mitigation is necessary.

5.2.5. Potential Conflicts With Ordinances, Habitat Conservation Plans, etc.

• Will the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

 Will the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Construction of the project does not appear to require the removal of trees protected by Lake County and CALFIRE. The project does not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or another approved governmental habitat conservation plan. The Study Area is not within the coverage area of any adopted Habitat Conservation Plan or Natural Community Conservation Plan.

Recommended Mitigation Measures

No mitigation is necessary.

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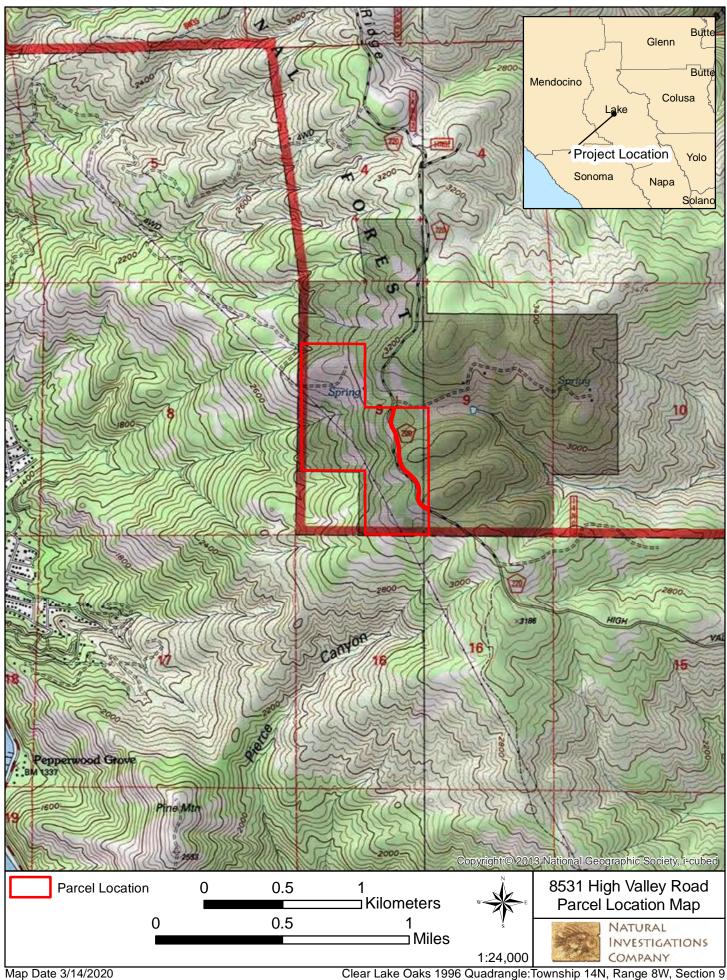
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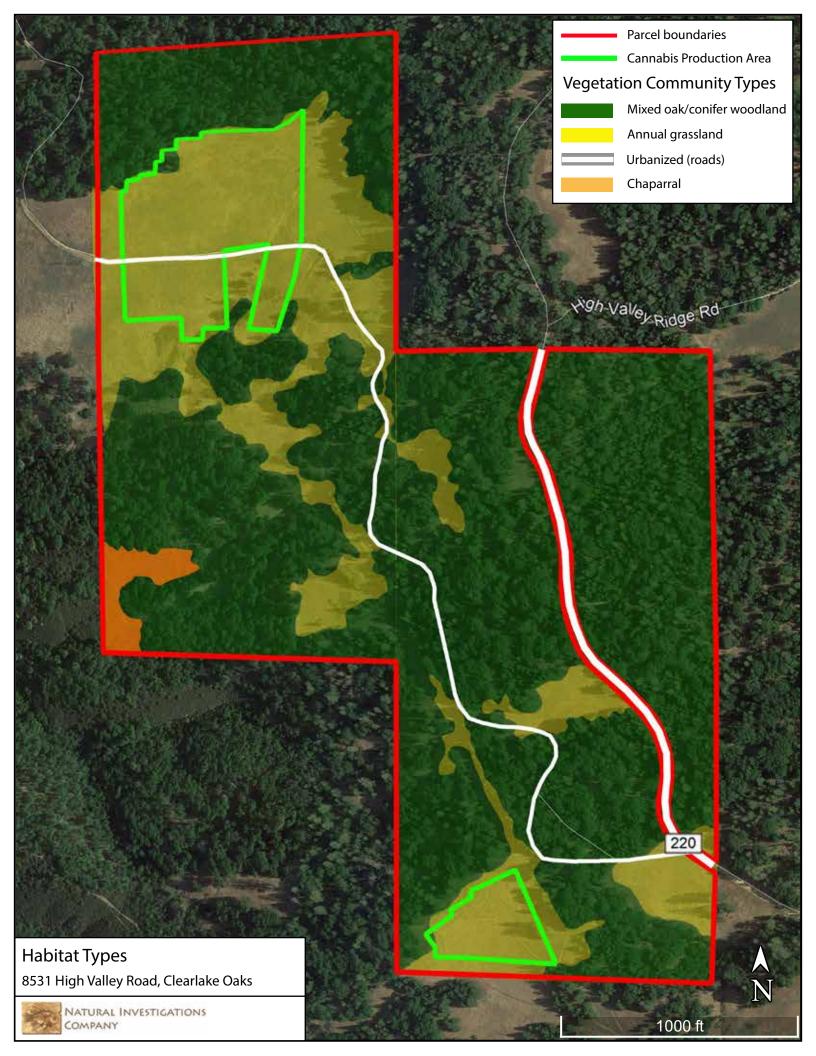
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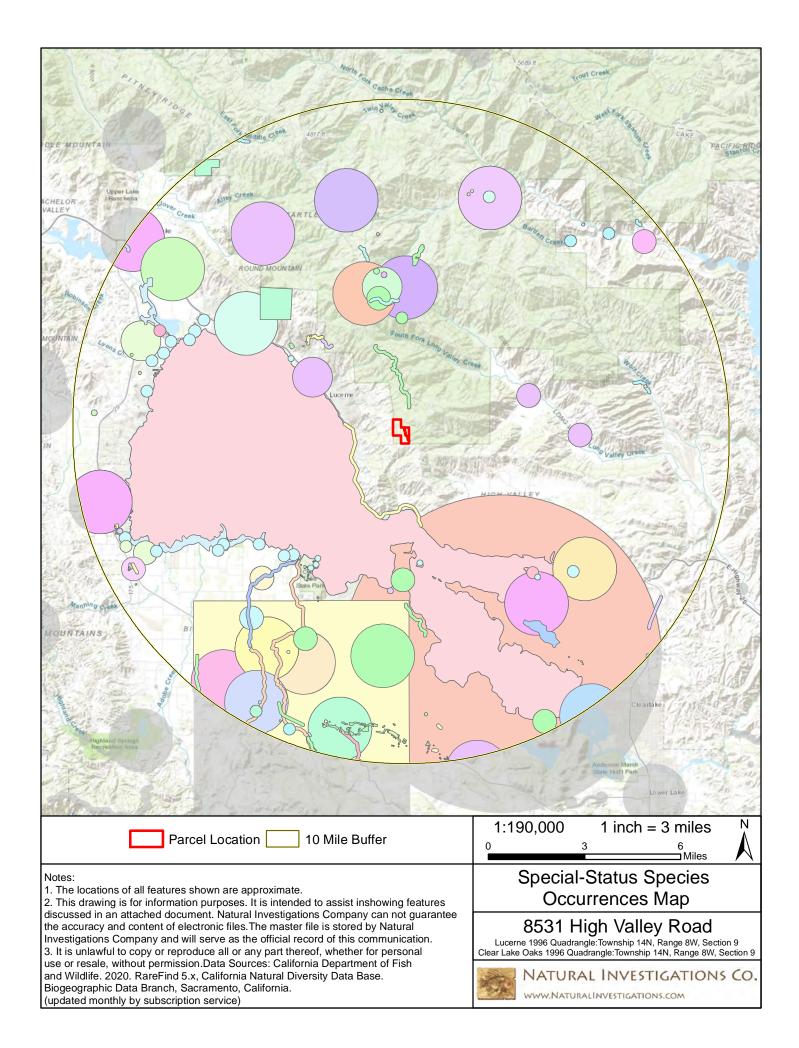
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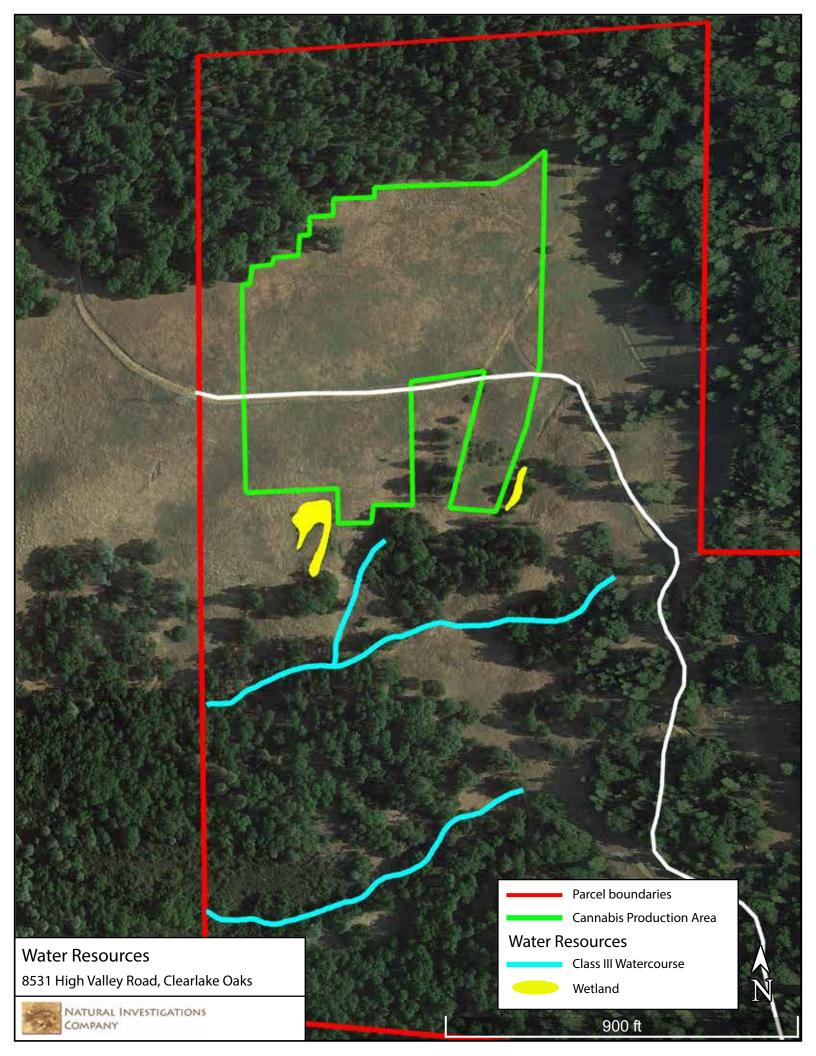
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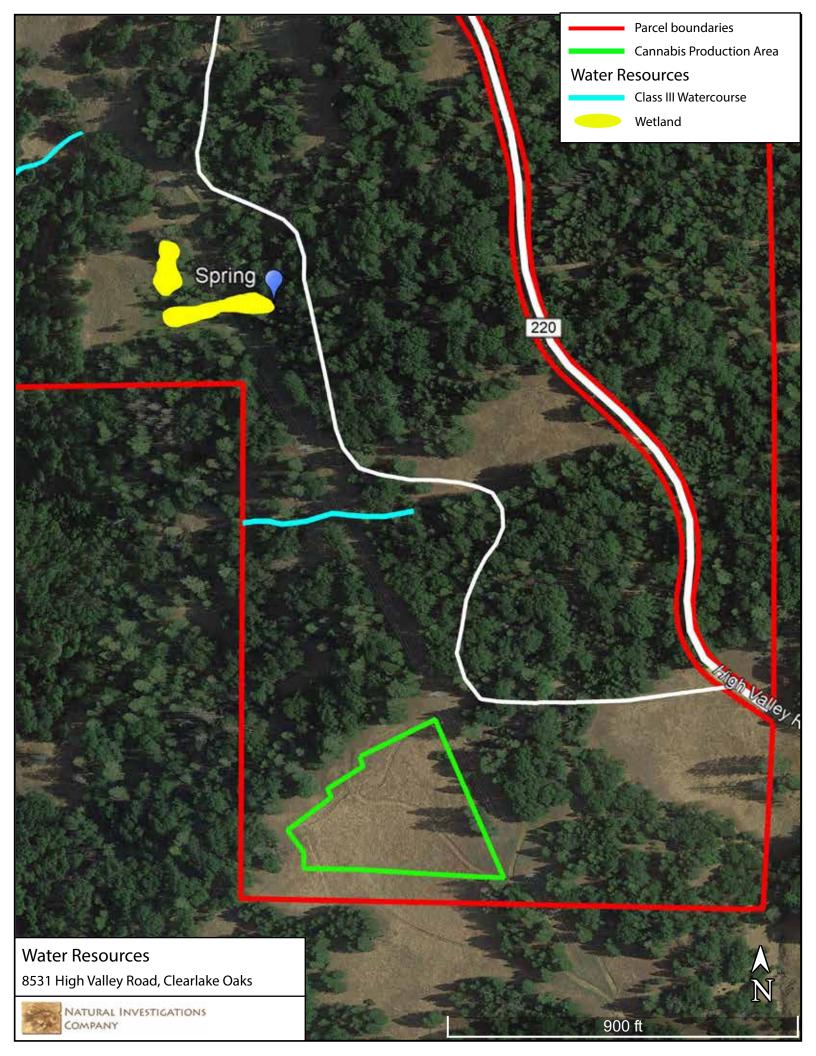
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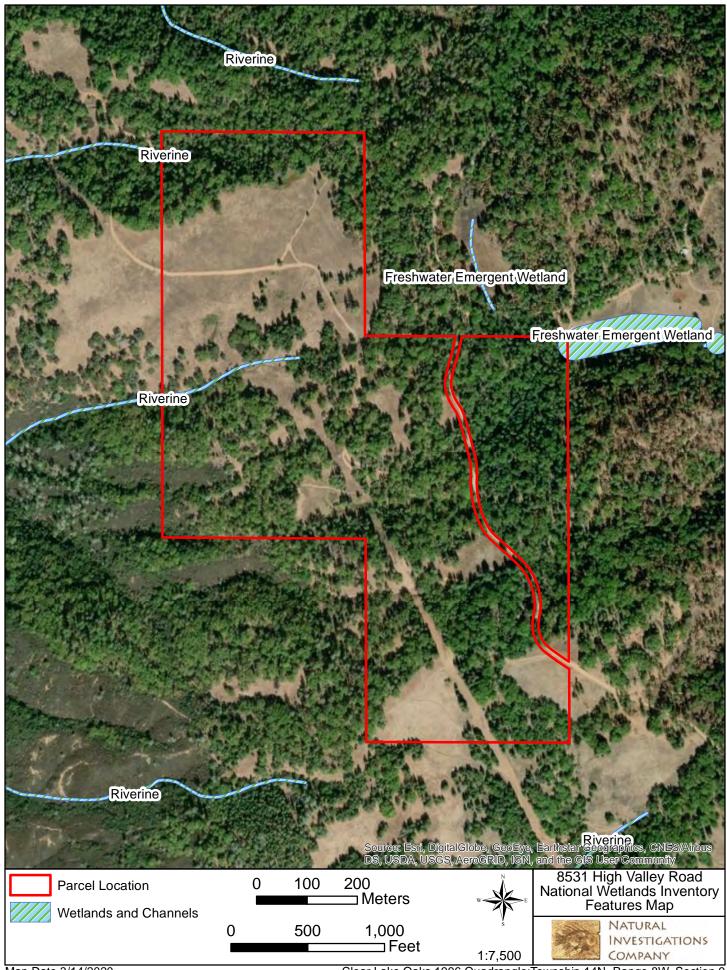












APPENDIX 1: USFWS SPECIES LIST



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Arcata Fish And Wildlife Office 1655 Heindon Road Arcata, CA 95521-4573 Phone: (707) 822-7201 Fax: (707) 822-8411



In Reply Refer To: March 14, 2020

Consultation Code: 08EACT00-2020-SLI-0145

Event Code: 08EACT00-2020-E-00443 Project Name: 8531 High Valley Road

Subject: List of threatened and endangered species that may occur in your proposed project

location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Arcata Fish And Wildlife Office

1655 Heindon Road Arcata, CA 95521-4573 (707) 822-7201

This project's location is within the jurisdiction of multiple offices. Expect additional species list documents from the following office, and expect that the species and critical habitats in each document reflect only those that fall in the office's jurisdiction:

Sacramento Fish And Wildlife Office

Federal Building 2800 Cottage Way, Room W-2605 Sacramento, CA 95825-1846 (916) 414-6600

Project Summary

Consultation Code: 08EACT00-2020-SLI-0145

Event Code: 08EACT00-2020-E-00443

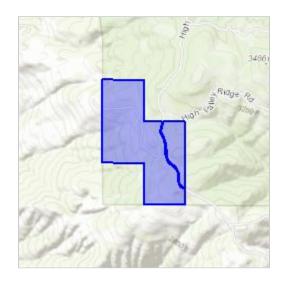
Project Name: 8531 High Valley Road

Project Type: ** OTHER **

Project Description: Bio Assessment

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/39.07651769687621N122.75661621045901W



Counties: Lake, CA

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Fisher <i>Pekania pennanti</i>	Proposed
Population: West coast DPS	Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3651

Birds

NAME STATUS

Northern Spotted Owl Strix occidentalis caurina

Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.

Species profile: https://ecos.fws.gov/ecp/species/1123

Amphibians

NAME STATUS

California Red-legged Frog Rana draytonii

Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.

Species profile: https://ecos.fws.gov/ecp/species/2891

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish And Wildlife Office Federal Building 2800 Cottage Way, Room W-2605 Sacramento, CA 95825-1846 Phone: (916) 414-6600 Fax: (916) 414-6713



In Reply Refer To: March 14, 2020

Consultation Code: 08ESMF00-2020-SLI-1339

Event Code: 08ESMF00-2020-E-04269 Project Name: 8531 High Valley Road

Subject: List of threatened and endangered species that may occur in your proposed project

location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

http://www.nwr.noaa.gov/protected_species_list/species_lists.html

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office

Federal Building 2800 Cottage Way, Room W-2605 Sacramento, CA 95825-1846 (916) 414-6600

This project's location is within the jurisdiction of multiple offices. Expect additional species list documents from the following office, and expect that the species and critical habitats in each document reflect only those that fall in the office's jurisdiction:

Arcata Fish And Wildlife Office

1655 Heindon Road Arcata, CA 95521-4573 (707) 822-7201

Project Summary

Consultation Code: 08ESMF00-2020-SLI-1339

Event Code: 08ESMF00-2020-E-04269

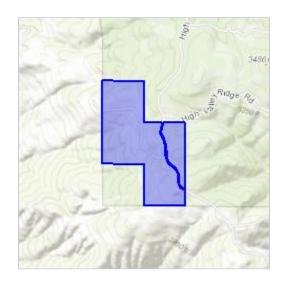
Project Name: 8531 High Valley Road

Project Type: ** OTHER **

Project Description: Bio Assessment

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/39.07651769687621N122.75661621045901W



Counties: Lake, CA

Endangered Species Act Species

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an
office of the National Oceanic and Atmospheric Administration within the Department of
Commerce.

Birds

NAME STATUS

Northern Spotted Owl Strix occidentalis caurina

Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1123

Amphibians

NAME STATUS

California Red-legged Frog Rana draytonii

Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.

Species profile: https://ecos.fws.gov/ecp/species/2891

Species survey guidelines:

https://ecos.fws.gov/ipac/guideline/survey/population/205/office/11420.pdf

Fishes

NAME STATUS

Delta Smelt *Hypomesus transpacificus*

Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.

Species profile: https://ecos.fws.gov/ecp/species/321

Event Code: 08ESMF00-2020-E-04269

Flowering Plants

NAME

Burke's Goldfields Lasthenia burkei

Endangered

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4338

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

APPENDIX 2: CHECKLIST OF PLANTS DETECTED IN THE STUDY AREA

Appendix 2:
Plants Observed at 8531 High Valley Road, Clearlake Oaks on March 20, 2020

Common Name	Scientific Name
Yarrow	Achillea millefolium
Lotus	Acmispon sp.
Chamise	Adenostoma fasciculatum
Giant mountain dandelion	Agoseris grandiflora
Mallory's manzanita (CNPS List 4)	Arctostaphylos malloryi
Common manzanita	Arctostaphylos manzanita ssp. manzanita
California mugwort	Artemisia douglasiana
Narrowleaf milkweed	Asclepias fascicularis
Milkweed	Asclepias sp.
Lady fern	Athyrium filix-femina
Coyote brush	Baccharis pilularis
Winter cress	Barbarea sp.
Brodiaea	Brodiaea sp.
Ripgut brome	Bromus diandrus
Soft chess	Bromus hordeaceus
Mariposa lily	Calochortus sp.
Tolmie's star tulip	Calochortus sp. Calochortus tolmiei
Milk maids	Cardamine californica
Italian thistle	
Wedge leaf ceanothus	Carduus pycnocephalus
	Ceanothus cuneatus
Maltese star thistle	Centaurea melitensis
Yellow star thistle	Centaurea solstitialis
Sticky mouse-eared chickweed	Cerastium glomeratum
Western redbud	Cercis occidentalis
Bull thistle	Cirsium vulgare
Clarkia	Clarkia sp.
Miner's lettuce	Claytonia parviflora
Pacific hound's tongue	Cynoglossum grande
Hedgehog dogtail grass	Cynosurus echinoides
Medusahead	Elymus caput-medusae
Squirreltail grass	Elymus elymoides
Blue wildrye	Elymus glaucus
Naked buckwheat	Eriogonum nudum
California bedstraw	Galium californicum
Dove's foot geranium	Geranium molle
Hairy gumplant	Grindelia hirsutula
Toyon	Heteromeles arbutifolia
Large leather root	Hoita macrostachya
California horkelia	Horkelia californica
Klamath weed	Hypericum perforatum
Iris	Iris sp.
Rush	Juncus sp.
Prickly wild lettuce	Lactuca serriola
Whisker brush	Leptosiphon ciliatus
Narrowleaf cottonrose	Logfia gallica
Wooly fruited lomatium	Lomatium dasycarpum
Pink honeysuckle	Lonicera hispidula
Miniature lupine	Lupinus bicolor
Horehound	Marrubium vulgare

Daffodil	Narcissus sp.
Baby blue eyes	Nemophila menziesii var. menziesii
Goldback fern	Pentagramma triangularis
Knobcone pine	Pinus attenuata
Sugar pine	Pinus lambertiana
Ponderosa pine	Pinus ponderosa
Rusty popcorn flower	Plagiobothrys nothofulvus
California plantain	Plantago erecta
Henderson's shooting stars	Primula hendersonii
Douglas-fir	Pseudotsuga menziesii
Bracken	Pteridium aquilinum
California scrub oak	Quercus berberidifolia
Canyon live oak	Quercus chrysolepis
California black oak	Quercus kelloggii
Valley oak	Quercus lobata
Interior live oak	Quercus wislizeni
Oracle oak	Quercus x morehus
Western buttercup	Ranunculus occidentalis
Lemonade berry	Rhus trilobata
California rose	Rosa californica
Cut-leaf blackberry	Rubus laciniatus
Curly dock	Rumex crispus
Willow	Salix sp.
Blue elderberry	Sambucus nigra var. caerulea
Purple sanicle	Sanicula bipinnatifida
Bugle hedge nettle	Stachys ajugoides
Common snowberry	Symphoricarpos albus var. laevigatus
Tall sock destroyer	Torilis arvensis
Poison-oak	Toxicodendron diversilobum
Salsify	Tragopogon porrifolius
Pink clover	Trifolium hirtum
Clover	Trifolium sp.
California bay	Umbellularia californica
Stinging nettles	Urtica dioica var. holosericea
Common mullein	Verbascum thapsus
Giant chain fern	Woodwardia fimbriata
Centaury	Zeltnera sp.

APPENDIX 3: SITE PHOTOS





















April 15, 2021 Sent via Email

Mikel Alcantar, Chief Operations Officer Intangible Paradise LLC m_alcantar@outlook.com

Subject: Wetland Site Assessment at 8531 High Valley Road, Clearlake Oaks, Lake County,

California

Dear Mr. Alcantar:

At the request of Intangible Paradise LLC, Huffman-Broadway Group, Inc. (HBG) conducted an Aquatic Resource Delineation (ARD) on a 51-acre portion of the 158-acre parcel located at 8531 High Valley Road in Clearlake Oaks, Lake County California (APN 006-003-34).

The purpose of the ARD was to do determine the presence or absence of aquatic resources that may be subject to: (1) State Water Resources Control Board (SWRCB) regulations under the Porter-Cologne Water Quality Control Act; (2) California Department of Fish and Wildlife (CDFW) under Fish and Game Code 1602; (3) and U.S. Army Corps of Engineers (USACE) and U.S. Environmental Protection Agency (US EPA) regulation under Section 404 of the Clean Water Act (CWA).

1.0 SCOPE OF WORK & GENERAL SITE DESCRIPTION

The aquatic resource delineation was conducted in accordance with the State Water Resources Control Board's State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (WOS) adopted April 2, 2019; Department of Defense Code of Federal Regulations (CFR) definitions of Waters of the U.S.¹ (WOUS), the Corps of Engineers Wetland Delineation Manual² (Corps 1987 Manual), the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0³ (Arid West Manual) and supporting USACE guidance documents⁴.

The 51-acre Study Area encompasses the northwestern boundary of the 158-acre parcel. The topography is steep with slopes ranging from 10-50% and elevation of approximately 2,800 feet above mean sea level. The Study Area consists of a well-maintained dirt road and a PG&E

¹ Department of Defense, 1986

² US Army Corps of Engineers, 1987

³ US Army Corps of Engineers, 2008

⁴ US Army Corps of Engineers, 1992a, & 1992b

power line corridor that transects the property from southeast to northwest. Three small intermittent creeks drain north-west toward Clear Lake and one intermittent creek at the northwestern corner drains west toward Clear Lake. The Study Area supports two palustrine emergent wetlands near the western boundary and one palustrine emergent wetland and a riparian habitat in line with two of the intermittent creeks. A review of the Natural Resources Conservation Service (NRCS) soil survey maps for Lake County shows two soil types occurring in the Study Area. The majority of the Study Area consist of Millsholm-Squawrock-Pomo complex which is a well-drained soil found on 30 to 50 percent slopes. Along the eastern, southern, and northwestern boundary, soils are classified as Speaker-Marpa-Sanhedrin gravelly loams which are also well drained soils found on 30 to 50 percent slopes.

The latitude and longitude of the approximate center of the Study Area is 39.079660 N and 122.757532 W and encompasses U.S. Geological Survey (USGS) 7.5 min Mountain Clearlake Oaks (1996); and Lucerne (1996). Refer to Exhibit 1, Figure 1 for the USGS Topographic Map and Figure 2 for the Aquatic Resource Delineation Map. Refer to Exhibit 2 for the Wetland Determination Data Forms.

2.0 DELINEATION METHOD

The focus of HBG's investigation was to identify and map areas meeting the definition of wetlands and other WOUS and WOS. Data used to verify the extent and location of WOUS and WOS included: (1) high resolution aerial imagery; (2) USGS topographic survey data; (3) Biological Resources Assessment conducted by Natural Investigation Company, Inc. in 2020; (4) direct observations through ground truthing; and (5) collection of soil, vegetation, and hydrology field data. High resolution satellite imagery used in the analysis was sourced from Google Earth Pro. Point and polygon data was documented using a hand-held Trimble Geo XH Global Positioning System unit with sub-meter accuracy after geoprocessing and incorporated into an HBG project specific database using ESRI ArcGIS software. A detailed field study was conducted on April 9, 2021 to:

- 1. Determine if indicators of an Ordinary High Water Mark (OHWM) are present and document the location(s) of the OHWM along creeks;
- Determine the presence or absence of wetland vegetation, hydric soil, and hydrology indicators of wetland conditions and determine if field indicators of wetland conditions may be "significantly disturbed" or "naturally problematic"; and
- 3. Determine the extent and location of any areas that may be considered "Riparian Habitat" outside of the OHWM of the creeks.

3.0 TECHNICAL FINDINGS

The following sections discuss hydrophytic vegetation, hydric soil, and wetland hydrology conditions observed at the Study Area during the field survey and indicators used to map the and OHWM. Wetland Determination Data Forms for the Arid West Region documenting this information are in Exhibit 2. Sample Point locations and the extent and location of aquatic resources are shown on Exhibit 1, Figure 2.

Soil, hydrology, and vegetation conditions were not significantly disturbed, conditions were not problematic, and normal circumstances were present.

Hydric Soils:

Soils found with hydric field indicators were a depleted mineral soil with prominent brownish redox concentrations along the pore lining and ped face. Soil texture varied from sandy loam to sandy clay loam. Within Sample Point 6 (SP-6) the hydric soil indicator was a depleted matrix (F3) with a matrix color of 10YR4/1 with 30% 7.5YR4/6 redoximorphic concentrations along the pore lining and ped face.



SP-6. 10YR4/1 with 30% 7.5YR4/6 redox concentrations

Wetland Hydrology & OHWM:

The Primary hydrology indicators identified in the wetlands were Sediment Deposits (B2). The source of the water is likely a combination of subsurface water table moving to the surface during the rainy season and direct precipitation. The subsurface water table is not supported by snow melt as there is no snow melt in this area. The duration of water is likely intermittent due to the absence of water observed this spring.

The OHWMs found within the creeks were scour along the banks, and drift deposits in the form of pine needles wrapped around rocks and fallen tree branches within the creeks. The OHWM averaged 2-3 feet wide. The source of the surface water is likely direct precipitation and is intermittent in duration due to the absence of surface water observed during the spring site visit.

Wetland Vegetation:

The Palustrine Emergent Wetland habitat was dominated by nearly 100% of a Juncus species, possibly *Juncus patens*. Other wetland indicator plants commonly found throughout the Study Area included pennyroyal (*Mentha pulegium*) and carex and juncus species. Vegetation found within the Riparian Habitat included willows (*Salix sp.*) California bay (*Umbellularia californica*) and poison oak (*Toxicodendron diversilobum*).

4.0 AQUATIC RESOURCES AND JURISDICTIONAL FINDINGS

This section presents the findings of this delineation with respect to the identification and geographic extent of habitat areas found that meet technical criteria as wetlands and /or other waters (e.g., creeks), and if those aquatic resources may be subject to USACE jurisdiction under CWA 404 as defined by the Final Rule, SCWB WOS, or are subject to FGC 1602.

Aquatic Resources were identified within the Study Area that met the criteria of a wetland and /or other waters (e.g., creeks). This determination is based on an analysis of the technical findings in Section 3.0, which describe the collective presence of hydric soil, wetland hydrology, and hydrophytic vegetation indicators as required by the Corps' 1987 Manual, the Arid West Manual, and USACE guidance documents. Wetlands were classified using the Federal Geographic Data Committee classification system. In addition, several intermittent creeks were identified based on indicators of an OHWM and presence of a well-defined bed and bank. Refer to Exhibit 1, Figure 2 for the Aquatic Resource Delineation Map, and Table 1 below for a summary of aquatic resources and acreages.

Table 1. Aquatic Resources Within the Study Area							
FGDC Classification	Type of Surface Water Flow	Area (acres)					
Palustrine Emergent Wetlands	Intermittent	0.11					
Riverine / Intermittent Creeks ⁵	Intermittent	0.10					

The Palustrine Emergent Wetlands and Intermittent Creeks may be subject to regulations and USACE and US EPA under Section 404 of the CWA and SWRCB regulations. The Intermittent Creeks and abutting Riparian Habitat are subject to CDFW FGC 1602 and SWRCB regulations.

4

⁵ FGDC classifies this water as a "riverine" but CDFW may classify it as an intermittent creek.

If you have any questions regarding this Wetland Site Assessment, please contact me at 415-385-4106 or repercea@h-bgroup.com.

Sincerely,

Robert F. Digitally signed by Robert F. Perrera

Perrera
Date: 2021.04.15
12:51:49 -07'00'

Robert F. Perrera

Wetland Regulatory Scientist

Enclosures

Exhibit 1. Figures 1-2

Exhibit 2. Wetland Determination Data Forms

Сс

Mr. Meili Liu, Property Owner, meililiu369@gmail.com

REFERENCES

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Federal Geographic Data Committee. 2013. Classification of wetlands and deepwater habitats of the United States. FGDC-STD-004-2013. Second Edition. Wetlands Subcommittee, Federal Geographic Data Committee and U.S. Fish and Wildlife Service, Washington, DC.

G.O Graening, PhD & Tim Nosal, M.S. 2020. *Natural Investigation Company, Inc. Biological Resources Assessment For The Cannabis Cultivation Operation At 8531 High Valley Road, Clearlake Oaks, California*. March 28.

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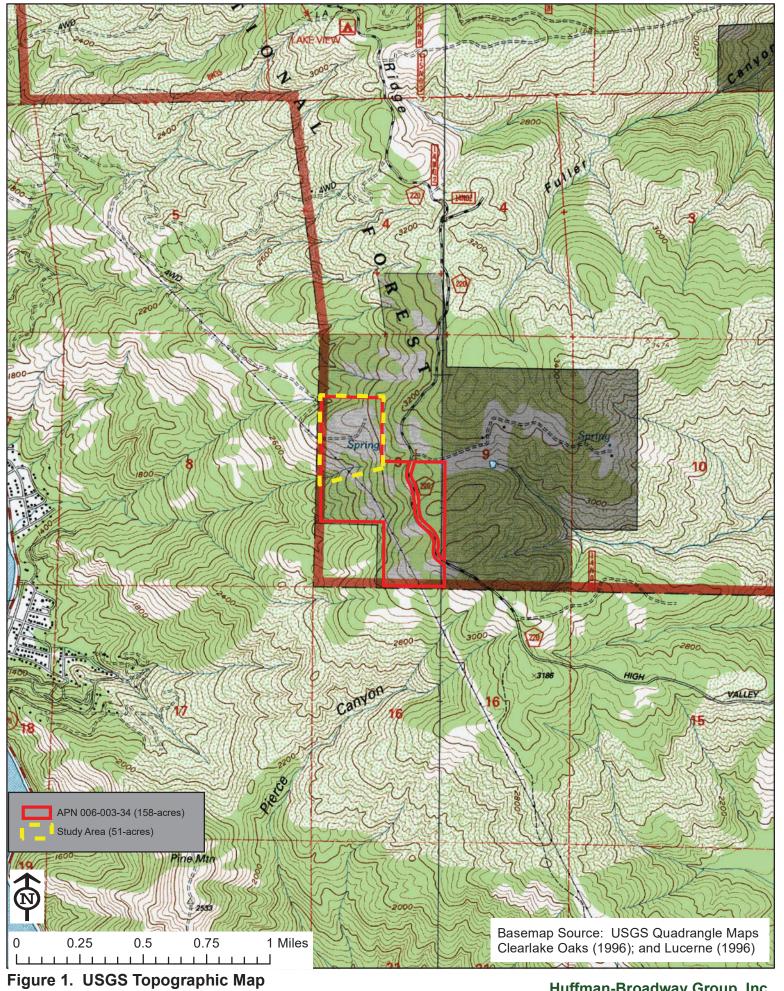
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Exhibit 1

Figures 1-2



8531 High Valley Road, APN 006-003-34 Clearlake Oaks, Lake County, California



Figure 2. Aquatic Resource Delineation 8531 High Valley Road, APN 006-003-34 Clearlake Oaks, Lake County, California

Exhibit 2.

Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 8531 High Valley Road Project		City/C	ount	y: <u>Clearlal</u>	ke Oak/ Lake County	Sampling Date:	4-9-2021
Applicant/Owner: Mikel Alcantar Intangible Paradise					State: <u>CA</u> \$		
Investigator(s): Robert F. Perrera							
Landform (hillslope, terrace, etc.): Hills/Mountains		Local	relie	f (concave	convex none). concave	Slon	o /0/.\. 5
Subregion (LRR): <u>C - Mediterranean California</u>	Lat: 39	07948	87	. (00110010,	Long: =122 756474	Olopi	. NA
Soil Map Unit Name: Millsholm-Squawrock-Pomo cor	Lat. <u>33</u>	0.50 r	orce	ant clanac	LONG. <u>"122.750474"</u>	Datum	1; <u>IVA</u>
Are climatic / budgelogic conditions on the cite tomical factly	inpiex, 50 t	0 30 F	JEIC	./	NVVI classifica	tion: <u>INA</u>	
Are climatic / hydrologic conditions on the site typical for th						•	
Are Vegetation, Soil, or Hydrology					"Normal Circumstances" pre		No
Are Vegetation, Soil, or Hydrology					eeded, explain any answers		
SUMMARY OF FINDINGS – Attach site map	showing	sam	plin	g point	locations, transects,	important fea	tures, etc.
	10 <u>v</u>	į	ls th	ne Sample			
Hydric Soil Present? Yes Netland Hydrology Present? Yes Netland Hydrology Present?	No V		with	nin a Wetla	nd? Yes	No <u></u> ✓	
Remarks:							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
VEGETATION – Use scientific names of plan	ıts.						
Tree Stratum (Plot size: 3x3)	Absolute			Indicator	Dominance Test worksh	neet:	
1. Pinus ponderosa	% Cover				Number of Dominant Spe	cies	
2				<u>FACU</u>	That Are OBL, FACW, or	FAC:1_	(A)
3.					Total Number of Dominar		
4					Species Across All Strata	: 4	(B)
	50				Percent of Dominant Spen	cies	(4 (0)
Sapling/Shrub Stratum (Plot size:)					That Are OBL, FACW, or	FAC:25_	(A/B)
1					Prevalence Index works		
2	-				Total % Cover of:		
3	-				OBL species		
4					FACW species		
5					FAC species		
Herb Stratum (Plot size: 3x3)		= 10ta	ai Co	ver	FACU species		
1. Elymus glaucus	30	Ye	S	FACU	UPL species Column Totals:		
2. Cynosurus echinoides	40	Yes		UPL	Column Totals.	(A)	(B)
3. Carex sp	20	Ye	S	FAC	Prevalence Index =	B/A =	
4. Juncus sp possibly patens				_FACW_	Hydrophytic Vegetation	Indicators:	
5					Dominance Test is >5		
6					Prevalence Index is ≤		
7					Morphological Adapta data in Remarks of	itions¹ (Provide su	pporting
8					Problematic Hydrophy		
Woody Vine Stratum (Plot size:)	100	= Tota	ıl Cov	/er		, 110 1 0 go (2010) (E	жрану
1.					¹ Indicators of hydric soil ar	nd wetland hydrok	oav must
2					be present, unless disturbe	ed or problematic.	
			l Cov	/er	Hydrophytic		
% Bare Ground in Herb Stratum % Cover					Vegetation	No. 7	
Remarks:	Of Blotic Off				Present? tes_	No _✓	_
		_					
3x3 sample due to the narrow width of the	swale lil	ce fea	atur	e.			

SOIL									Sampling Point: _	SP-1
	scription: (Describe to	o the dep	oth needed to docu	ment the	indicator	or confire	m the abser	nce of indic	ators.)	
Depth (inches)	Matrix			ox Featur						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹ _	_Loc ²	Texture	<u> </u>	Remarks	
0-4	10YR3/2	98	7.5YR4/6		C	PL	Sandy L			
4-13	7.5YR4/3	98	7.5YR4/6	2	<u>C</u>	_M	Sandy L		*****	
¹ Type: C=0	Concentration, D=Deple I Indicators: (Applicat	tion, RM=	=Reduced Matrix, CS LRRs, unless other	S=Covere	ed or Coate	d Sand G		Location: P	PL=Pore Lining, M= blematic Hydric So	:Matrix.
Black H Hydrog Stratifie 1 cm M	ol (A1) Epipedon (A2) Histic (A3) gen Sulfide (A4) ed Layers (A5) (LRR C) fuck (A9) (LRR D) ed Below Dark Surface (Sandy Redo Stripped Ma Loamy Muci Loamy Gley Depleted Ma	atrix (S6) cky Minera yed Matrix latrix (F3) < Surface	ral (F1) x (F2)) (F6)		1 ci 2 ci Red Red	m Muck (A9) m Muck (A10 duced Vertic d Parent Mat ner (Explain i) (LRR C) 0) (LRR B) c (F18) terial (TF2)	•
Thick D Sandy Sandy	Dark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4)	,Α11)	Depleted Da Redox Depr Vernal Pools	ressions (³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.			
Restrictive	Layer (if present):									
Туре:			***************************************							
Depth (ir	nches):						Hydric S	oil Present	? Yes	No √
Remarks:										
IYDROLC								20 20000000000		
•	drology Indicators:									
	icators (minimum of one	required	; check all that apply)			<u>Sec</u>	condary Indi	cators (2 or more re	equired)
	Water (A1)		Salt Crust (Water Mark	ks (B1) (Riverine)	
	ater Table (A2)		Biotic Crust					Sediment [Deposits (B2) (Rive	erine)
Saturati		440	Aquatic Inv					Drift Depos	sits (B3) (Riverine)	
	Marks (B1) (Nonriverine		Hydrogen S					Drainage P	Patterns (B10)	
	nt Deposits (B2) (Nonriv		Oxidized Ri				ts (C3)	Dry-Seasor	n Water Table (C2))
	posits (B3) (Nonriverine	a)	Presence of				-	Crayfish Bu	arrows (C8)	
	Soil Cracks (B6)		Recent Iron	ı Reducti	on in Tilled	Soils (C6))	Saturation \	Visible on Aerial Im	nagery (C9)
	ion Visible on Aerial Ima	gery (B7)		,	. ,		_	Shallow Aq	uitard (D3)	
vvater-S	Stained Leaves (B9)		Other (Expl	ain in Re	marks).			FAC-Neutra	al Test (D5)	

FAC-Neutral Test (D5)

Wetland Hydrology Present? Yes _____

This is a short swale feature approx. 30 feet long with no signs of surface flows.

Yes ____ No _ ✓ Depth (inches):

Yes ____ No __ ✓ Depth (inches): ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Yes ____ No _ ✓ Depth (inches): _

Field Observations: Surface Water Present?

Water Table Present?

(includes capillary fringe)

Saturation Present?

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 8531 High Valley Road Project		City/C	Count	y: <u>Clearl</u> al	ke Oak/ Lake County Sampling Date: 4-	9-2021
Applicant/Owner: Mikel Alcantar Intangible Paradise L	.LC / Meili	Liu			State: CA Sampling Point:	SP-2
Investigator(s): Robert F. Perrera		Section	on. T	ownship. R	Range: NA	J1 Z
Landform (hillslope, terrace, etc.): Hills/Mountains		Loca	l relie	ef (concave	Convex none). Concave Sions (6)	20
Subregion (LRR): <u>C - Mediterranean California</u>	Lat: 39	.0792	40 40) (00110d¥C	Slope (%)	o): <u>30</u> ^
Soil Map Unit Name: Millsholm-Squawrock-Pomo com	nolex 30 t	0.50	nerc	ent slones	Long. 1222.730792 Datum: N	A
Are climatic / hydrologic conditions on the site typical for thi	e time of ve	or2 V	/00	✓ N-	NVVI classification: NA	
Are Vegetation, Soil, or Hydrologys						
Are Vegetation, Soil, or Hydrology r					e "Normal Circumstances" present? Yes✓	No
					needed, explain any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map	showing	sam	ıplir	ng point	locations, transects, important featur	es, etc
Hydrophytic Vegetation Present? Yes✓ N	0					
Hydric Soil Present? Yes N	o <u> </u>			he Sample		
Wetland Hydrology Present? Yes N	o <u> </u>		Witi	nın a Wetla	and? Yes No✓	
Remarks:						
VEGETATION – Use scientific names of plan	ts.					
Tree Stratum (Plot size:)	Absolute	Dom	inan	Indicator	Dominance Test worksheet:	
	% Cover				Number of Dominant Species	
1					That Are OBL, FACW, or FAC: 1	_ (A)
3.					Total Number of Dominant	
4					Species Across All Strata: 1	_ (B)
					Percent of Dominant Species	
Sapling/Shrub Stratum (Plot size:)					That Are OBL, FACW, or FAC: 100	_ (A/B)
1					Prevalence Index worksheet:	
2					Total % Cover of: Multiply by:	
3	-				OBL species x 1 =	
4					FACW species x 2 =	
5					FAC species x 3 =	
Herb Stratum (Plot size: 3x3)		= 1 ota	al Co	ver	FACU species x 4 =	
1. Juncus sp. possibly patens	70	Ye	es	FACW	UPL species x 5 =	
2. <u>Centurea solstitialis</u>		No		UPL	Column Totals:(A)	(B)
3. Elymus caput-medusea	10	N	0	UPL	Prevalence Index = B/A =	-
4. <u>Unknown (had not flowered yet)</u>			0	FAC	Hydrophytic Vegetation Indicators:	
5		Pro			✓ Dominance Test is >50%	
6					Prevalence Index is ≤3.0 ¹	
7					Morphological Adaptations¹ (Provide suppo data in Remarks or on a separate sheet)	rting
8					Problematic Hydrophytic Vegetation¹ (Expla	
Woody Vine Stratum (Plot size:)	100	= Tota	al Co	ver		""
1					¹ Indicators of hydric soil and wetland hydrology	must
2.					be present, unless disturbed or problematic.	Tidot
			al Co	ver	Hydrophytic	
% Bare Ground in Herb Stratum % Cover					Vegetation	
Remarks:	OI BIOLIC CIT	ust			Present? Yes No	
3x3 sample due to the narrow width of the	swale fe	atur	e. ¯	The junc	cus was not in a healthy state appear	ed to
be water stressed.					_ ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	

Depth	scription: (Describ Matrix	e to the de				or confir	m the absence of i	ndicators.)
(inches)	Color (moist)	%	Color (moist)	lox Featur %	es Type ¹	Loc ²	- Texture	Remarks
0-12	7.5YR3/3	99	7.5YR4/6	1	C			Remarks
			7.511470			IVI	Sandy L	
				_				
						-		
			•				-	
ype: C=	Concentration, D=De	pletion, RM	=Reduced Matrix, C	S=Covere	ed or Coate	ed Sand G		n: PL=Pore Lining, M=Matrix.
	il Indicators: (Appli	cable to all	LRRs, unless other	erwise no	ted.)		Indicators for	Problematic Hydric Soils ³ :
_ Histos			Sandy Red					(A9) (LRR C)
	Epipedon (A2)		Stripped M				2 cm Muck	(A10) (LRR B)
	Histic (A3)		Loamy Mu				Reduced V	'ertic (F18)
	gen Sulfide (A4)	•	Loamy Gle				Red Parent	t Material (TF2)
	ed Layers (A5) (LRR	C)	Depleted N				Other (Exp	lain in Remarks)
	Muck (A9) (LRR D)		Redox Dar					
	ed Below Dark Surfac Dark Surface (A12)	ce (A11)	Depleted D				2	
	Mucky Mineral (S1)		Redox Dep		(F8)			drophytic vegetation and
	Gleyed Matrix (S4)		Vernal Poo	ois (F9)				ology must be present,
	Layer (if present):						unless disturt	bed or problematic.
	- Layor (ii present).							
	nches):							
Debill (II	nches).						Hydric Soil Pres	sent? Yes No
lemarks:								

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
 Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks) 	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Try-Season Water Table (C2) Crayfish Burrows (C8)
Field Observations:	
Surface Water Present? Yes No _ ✓ _ Depth (inches): Water Table Present? Yes No _ ✓ _ Depth (inches):	
Water Table Present? Yes No ✓ _ Depth (inches): Saturation Present? Yes No ✓ _ Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect	Wetland Hydrology Present? Yes No✓_
Remarks:	
This a short swale feature, likely a head cut or slumping from pro	evious wet years. No OHWM.

US Army Corps of Engineers

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: 8531 High Valley Road Project		City/C	County: <u>Clear</u>	lake Oak/ La	ke County	_ Sampling Date:	4-9-2021
Applicant/Owner: Mikel Alcantar Intangible Paradis	e LLC / Meili					_ Sampling Point: _	
Investigator(s): Robert F. Perrera							
Landform (hillslope, terrace, etc.): Hills/Mountains		Local	relief (concav	re, convex, no	ne): concave	Slor	ne (%): 20
Subregion (LRR): <u>C - Mediterranean California</u>	Lat: <u>39</u>	.0790	21	Long: -1	.22.756949	Datur	n: NA
Soil Map Unit Name: Millsholm-Squawrock-Pomo o	complex, 30 t	:o 50 r	percent slop	es	NWI classifi	cation: NA	
Are climatic / hydrologic conditions on the site typical for	this time of ve	ear? Y	es √ N	o (If r	o evolain in F	Pemarks \	
Are Vegetation, Soil, or Hydrology	significantly	disturt				present? Yes <u>√</u>	, No
Are Vegetation, Soil, or Hydrology						ers in Remarks.)	140
SUMMARY OF FINDINGS – Attach site ma							atures. etc
	No <u>√</u>						,
Hydric Soil Present? Yes			Is the Samp			,	
Wetland Hydrology Present? Yes			within a Wet	tland?	Yes	No <u>√</u> _	
Remarks:							
I							
VEGETATION – Use scientific names of pl	ants.				······		
Tree Otrata (DL)			inant Indicato		ice Test work	sheet:	
Tree Stratum (Plot size:)			cies? Status	- I Mullibel C	of Dominant S	pecies	
1				_ That Are	OBL, FACW,	or FAC:1	(A)
3.					nber of Domin		
4.					Across All Stra		(B)
				Percent o	of Dominant Sp	pecies or FAC:33	(A /D)
Sapling/Shrub Stratum (Plot size:)							(AVD)
1					ce Index wor		
2					% Cover of:		
4						x 1 = x 2 =	
5						x3 =	
				E .		x 4 =	
Herb Stratum (Plot size: 3x3)				UPL spec		x 5 =	
Juncus sp. possibly patens Centurea solstitialis			s FACW			(A)	
Centurea soistitialis Elymus caput-medusea		No		- Prev	valence Index	= B/A =	
4. Sedge sp			D UPL D FAC			n Indicators:	
5				-	nance Test is		
6				-	lence Index is		
7				Morph	nological Adap	otations¹ (Provide su	upporting
8	···					or on a separate sl	3
Woody Vine Stratum (Plot size:)	100	= Tota	l Cover	Proble	ematic Hydrop	hytic Vegetation ¹ (E	explain)
1				1Indicators	of hydric soil	and wetland hydrol	oay muet
2				be present	t, unless distu	rbed or problematic	
			l Cover	Hydrophy	rtic		
% Bare Ground in Herb Stratum % Cov				Vegetatio	n	No. /	
Remarks:	- OI DIOUG OIL	١٥١		Present?	Yes	No _ ✓	
3x3 sample due to the narrow width of the water stressed.	ne swale fe	atur	e. The jun	cus was n	ot in a hea	Ithy state app	eared to
be water stressed.							

Depth (inches)	ription: (Describe	to the de	oth needed to docu	mont the	indicator	au a a u fi	Alexandra Ci	Sampling Po	oint: SP-3
	Matrix	to the de		ox Feature		or contin	n the absence of ir	uicators.)	
111011007	Color (moist)	%	Color (moist)	% reature	Type ¹	Loc ²	Texture	Remark	70
0-12	7.5YR3/3	99	7.5YR4/6	1				Remain	72
	7.511(0/5		7.5TN4/0		_ <u>_C</u>	_M	Sandy L		
			-						
-		_							
				_					
					-				
		-			-				
1		-							
'Type: C=Cor	ncentration, D=Dep	letion, RM	=Reduced Matrix, C	S=Covere	d or Coate	d Sand Gi	rains. ² Location	n: PL=Pore Lining	, M=Matrix.
		able to all	LRRs, unless othe		ed.)		Indicators for F	Problematic Hydr	ic Soils³:
Histosol (A	•		Sandy Red				1 cm Muck		
Histic Epipedon (A2)Black Histic (A3)Stripped Matrix (S6)Loamy Mucky Mineral (F1)						2 cm Muck			
Loamy Mucky Mineral (F1) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)						Reduced Ve			
Stratified Layers (A5) (LRR C) Depleted Matrix (F2) Depleted Matrix (F3)						Material (TF2) ain in Remarks)			
	k (A9) (LRR D)	,	Redox Dark		(F6)		Other (Expire	alli ili Kelliaiks)	
Depleted B	Below Dark Surface	e (A11)	Depleted Da						
	k Surface (A12)		Redox Depr		F8)		3Indicators of hy	drophytic vegetati	on and
	icky Mineral (S1)		Vernal Pool	s (F9)				logy must be pres	
	eyed Matrix (S4)						unless disturb	ed or problematic	
	ayer (if present):								
Туре:			-						
Depth (inch	nes):		***				Hydric Soil Pres	ent? Yes	No <u>√</u>
Remarks:									
IYDROLOG	V								
IDITOLOG									
187-41									
Wetland Hydro		no roquiroc	l chack all that annly	/\			Secondary	Indicators (2 or me	ore required)
Primary Indicat	tors (minimum of o	ie required	i, check all that apply						
Primary Indicat Surface W	/ater (A1)	ne required	Salt Crust					Marks (B1) (River	ine)
Primary Indicat Surface Wi	/ater (A1) er Table (A2)	ne required	Salt Crust	(B11) t (B12)	***************************************		Water I	Marks (B1) (River ent Deposits (B2) (,
Primary Indicat Surface W High Water Saturation	/ater (A1) er Table (A2) (A3)		Salt Crust	(B11) t (B12)	s (B13)		Water N Sedime	, , ,	(Riverine)
Primary Indicat Surface Wate High Wate Saturation Water Marl	/ater (A1) er Table (A2) (A3) rks (B1) (Nonriveri	ne)	Salt Crust Biotic Crus Aquatic Inv Hydrogen S	(B11) t (B12) rertebrates Sulfide Od	lor (C1)		Water M Sedime Drift De Drainag	ent Deposits (B2)	(Riverine)
Primary Indicat Surface Wi High Watel Saturation Water Marl Sediment [/ater (A1) er Table (A2) (A3) rks (B1) (Nonriveri Deposits (B2) (Non	ne) ıriverine)	Salt Crust Biotic Crus Aquatic Inv	(B11) t (B12) rertebrates Sulfide Od	lor (C1)	iving Root	Water M Sedime Drift De Drainag	ent Deposits (B2) (eposits (B3) (Rive	(Riverine) rine)
Primary Indicat Surface With High Water Saturation Water Mark Sediment I Drift Depos	/ater (A1) er Table (A2) (A3) rks (B1) (Nonriveri Deposits (B2) (Nonsits (B3) (Nonriver	ne) ıriverine)	Salt Crust Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence of	(B11) t (B12) rertebrates Sulfide Od hizospher of Reduce	lor (C1) es along L d Iron (C4)		Water Note of the Control of t	ent Deposits (B2) (eposits (B3) (Rive r ge Patterns (B10)	(Riverine) rine)
Primary Indicat Surface W. High Water Saturation Water Marl Sediment I Drift Depos Surface So	/ater (A1) er Table (A2) (A3) eks (B1) (Nonriveri Deposits (B2) (Nonsits (B3) (Nonsits (B3) (Nonriveri Dil Cracks (B6)	ne) ıriverine) ine)	Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence c	(B11) t (B12) rertebrates Sulfide Od hizospher of Reduces	lor (C1) res along L d Iron (C4) on in Tilled		Water N Sedime Drift De Drainag ts (C3) Dry-Sea Crayfisl	ent Deposits (B2) (eposits (B3) (Rive r ge Patterns (B10) ason Water Table	(Riverine) rine) (C2)
Primary Indicat Surface With High Water Saturation Water Mart Sediment I Drift Depos Surface So Inundation	later (A1) er Table (A2) (A3) eks (B1) (Nonriveriant Deposits (B2) (Nonsits (B3) (Nonriveriant) Deposits (B6) Visible on Aerial In	ne) ıriverine) ine)	Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Thin Muck	(B11) t (B12) rertebrates Sulfide Od hizospher of Reduces n Reductio	lor (C1) res along L d Iron (C4) on in Tilled C7)		Water f Sedime Drift De Drainag ts (C3) Dry-Sea Crayfisl) Saturat	ent Deposits (B2) (eposits (B3) (Rive r ge Patterns (B10) ason Water Table in Burrows (C8)	(Riverine) rine) (C2)
Primary Indicat Surface Water Saturation Water Marter Sediment I Drift Depose Surface So Inundation Water-Stain	/ater (A1) er Table (A2) (A3) eks (B1) (Nonriveriant Deposits (B2) (Nonsits (B3) (Nonriveriant Dil Cracks (B6) Visible on Aerial Inined Leaves (B9)	ne) ıriverine) ine)	Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence c	(B11) t (B12) rertebrates Sulfide Od hizospher of Reduces n Reductio	lor (C1) res along L d Iron (C4) on in Tilled C7)		Water it Sedime Drift De Drainag ts (C3) Dry-Sea Crayfisi) Saturat Shallow	ent Deposits (B2) (eposits (B3) (Riverage Patterns (B10) ason Water Table in Burrows (C8) ion Visible on Aeri	(Riverine) rine) (C2)
Primary Indicat Surface With High Water Saturation Water Mark Sediment In Drift Depose Surface Solution Water-Stain Field Observat	/ater (A1) er Table (A2) (A3) eks (B1) (Nonriveriant Deposits (B2) (Nonsits (B3) (Nonriveriant Coll Cracks (B6) Visible on Aerial Intined Leaves (B9) tions:	ne) iriverine) ine) magery (B7	Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Thin Muck Other (Exp	(B11) t (B12) rertebrates Sulfide Od hizospher of Reduces n Reductio Surface ((lain in Rer	lor (C1) res along L d Iron (C4) on in Tilled C7) marks)	Soils (C6)	Water it Sedime Drift De Drainag ts (C3) Dry-Sea Crayfisi) Saturat Shallow	ent Deposits (B2) (posits (B3) (River) ge Patterns (B10) ason Water Table in Burrows (C8) ion Visible on Aeri v Aquitard (D3)	(Riverine) rine) (C2)
Primary Indicat Surface With High Water Saturation Water Mart Sediment E Drift Depos Surface So Inundation Water-Stain Field Observat	/ater (A1) er Table (A2) (A3) rks (B1) (Nonriverial Deposits (B2) (Nonriverial Cracks (B6) Visible on Aerial Infined Leaves (B9) tions: Present? Yes	ne) iriverine) ine) magery (B7	Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Thin Muck Other (Exp	(B11) t (B12) rertebrates Sulfide Od hizospher of Reduces n Reductio Surface ((lain in Rer	lor (C1) res along L d Iron (C4) on in Tilled C7) marks)	Soils (C6)	Water it Sedime Drift De Drainag ts (C3) Dry-Sea Crayfisi) Saturat Shallow	ent Deposits (B2) (posits (B3) (River) ge Patterns (B10) ason Water Table in Burrows (C8) ion Visible on Aeri v Aquitard (D3)	(Riverine) rine) (C2)
Primary Indicat Surface With High Water Saturation Water Mark Sediment In Drift Depose Surface Solution Water-Stain Field Observat	Vater (A1) er Table (A2) (A3) rks (B1) (Nonriverial Deposits (B2) (Nonriverial Cracks (B6) Visible on Aerial Infined Leaves (B9) tions: Present? Yesent? Yesent?	ne) Iriverine) ine) magery (B7	Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Thin Muck Other (Exp	(B11) t (B12) rertebrates Sulfide Od hizospher of Reducei n Reductic Surface ((lain in Rer hes):	lor (C1) res along L d Iron (C4) on in Tilled C7) marks)	Soils (C6)	Water it Sedime Drift De Drainag ts (C3) Dry-Sea Crayfisi) Saturat Shallow	ent Deposits (B2) (posits (B3) (River) ge Patterns (B10) ason Water Table in Burrows (C8) ion Visible on Aeri v Aquitard (D3)	(Riverine) rine) (C2)

This a short swale feature, likely head cut or slumping from previous wet years.

Remarks:

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: 8531 High Valley Road Project		City/Coun	ty: Clearlal	ke Oak/ Lake County Sampling Date:	4-9-2021
Applicant/Owner: Mikel Alcantar Intangible Paradise L	LC / Meili	Liu		State: CA Sampling Point:	SD./I
Investigator(s): Robert F. Perrera		Section, T	ownship R	ange: NA	31-4
Landform (hillslope, terrace, etc.): Hills/Mountains		Local reli	ef (concave	Convey none); concave	(0/). 10
Subregion (LRR): <u>C - Mediterranean California</u>	Lat: 39.	.079021	o. (00110a10,	Long: -122 756949	(%): <u>IU</u>
Soil Map Unit Name: Millsholm-Squawrock-Pomo con	nplex. 30 t	o 50 nerc	ent slones	Long. 122.730343 Datum:	IVA
Are climatic / hydrologic conditions on the site typical for thi	s time of vo	ar2 Voc	✓ No	NVVI classification; NA	
Are Vegetation, Soil, or Hydrology	significantly	disturbed?			
Are Vegetation, Soil, or Hydrology r				"Normal Circumstances" present? Yes	_ No
SUMMARY OF FINDINGS – Attach site map				eeded, explain any answers in Remarks.)	uros oto
			- 5 point		
Hydrophytic Vegetation Present? Yes N Hydric Soil Present? Yes N	0	ls t	he Sample	d Area	
Wetland Hydrology Present? Yes ✓ N	O	wit	hin a Wetla	nd? Yes No ✓	
Remarks:	<u> </u>				
This is the headwater of what may have been in the part during program.					
This is the headwater of what may have been in the past during average or above a approx. 100 liner feet from this point.	iverage rainfall o	r is currently fo	orming over time	an intermittent creek. The channel extends with signs of drift depo	sits/OHWM for
VECETATION Has a single					
VEGETATION – Use scientific names of plan					
Tree Stratum (Plot size: 5x5)	Absolute <u>% Cover</u>		t Indicator	Dominance Test worksheet:	
1. Salix sp	70	Yes	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 2	(A)
2					(//
3				Total Number of Dominant Species Across All Strata: 6	(B)
4.				Percent of Dominant Species	· (-)
Sapling/Shrub Stratum (Plot size: 5x5)		= Total Co	over	That Are OBL, FACW, or FAC:30	(A/B)
1. <u>Umbellularia californica</u>	5	Voc	EAC	Prevalence Index worksheet:	
2				Total % Cover of: Multiply by	
3				OBL species x 1 =	
4				FACW species x 2 =	
5				FAC species x 3 =	
Herb Stratum (Plot size: 5x5)		= Total Co	over	FACU species x 4 =	
1. Pteridium aquilinum	30	Vac	_FACU	UPL species x 5 =	
2. Cynosurus echinoides	20	Yes	UPL	Column Totals: (A)	(B)
3. Elymus caput-medusea	20	Yes	UPL	Prevalence Index = B/A =	
4. Mentha pulegium	10	No	OBL	Hydrophytic Vegetation Indicators:	
5. Geranium sp	10	No	FAC	Dominance Test is >50%	
6				Prevalence Index is ≤3.0¹	
7				Morphological Adaptations ¹ (Provide support data in Remarks or on a separate sheet)	oorting
8				Problematic Hydrophytic Vegetation¹ (Exp	
Woody Vine Stratum (Plot size: 5x5)	100	= Total Co	ver	· · · · · · · · · · · · · · · · · ·	nam)
1. Toxicodendron diversilobum	20	Yes	FACU	¹ Indicators of hydric soil and wetland hydrolog	y must
2				be present, unless disturbed or problematic.	
	:	= Total Co	ver	Hydrophytic	
% Bare Ground in Herb Stratum 10	of Biotic Cru	ust		Vegetation Present? Yes No _✓	
Remarks:					•

Profile Des	scription: (Describe	to the de	pth needed to doc	ument the	indicator	or confin	m the absence	Sampling Point: SP-4
Depth	Matrix			dox Feature		or commi	ii the absence	of mulcators.)
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	_Loc ²	Texture	Remarks
0-11	10YR3/2	_99	10YR3/6	1	_C	_M_	Sandy L	
11-13	NA	<u>NA</u>	NA	NA	_NA	NA	peebles	Hit a gravel/peeble layer
¹ Type: C=0 Hydric Soi l Histoso	Concentration, D=Dep	eletion, RM able to all	LRRs, unless oth	erwise note	d or Coate	ed Sand G	Indicators	cation: PL=Pore Lining, M=Matrix. for Problematic Hydric Soils³:
Histic E Black F Hydrog Stratifie 1 cm M	pipedon (A2)		Loamy Gle Depleted I Redox Da	Matrix (S6) Icky Mineral Eyed Matrix Matrix (F3) rk Surface ((F2) F6)		2 cm N Reduc Red Pa	Muck (A9) (LRR C) Muck (A10) (LRR B) ed Vertic (F18) arent Material (TF2) (Explain in Remarks)
Thick D Sandy I Sandy (Restrictive	Park Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Layer (if present):		Redox De Vernal Poo	Dark Surfact pressions (F bis (F9)		Maria I.	wetland I	of hydrophytic vegetation and hydrology must be present, isturbed or problematic.
	oches):						Hydric Soil	Present? Yes No✓
YDROLO								
	drology Indicators:		la ala anta al 11 de a					
Surface	cators (minimum of or Water (A1) ater Table (A2)	ne required	Salt Crust Biotic Cru	t (B11) st (B12)			W Se	dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine)
Water N	on (AS) larks (B1) (Nonriverii nt Deposits (B2) (Non posits (B3) (Nonriver i	riverine)	Hydrogen	Rhizosphere	or (C1) es along L		Dr ts (C3) Dr	ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8)
Drift De Surface Inundati	Soil Cracks (B6) on Visible on Aerial In tained Leaves (B9)	nagery (B7		Surface (C plain in Ren	(7)	Solis (Co)	Sh	nturation Visible on Aerial Imagery (C9) nallow Aquitard (D3) NC-Neutral Test (D5)

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

This is the headwater of what may have been in the past, or is currently forming over time, an intermittent creek. The channel extends with signs of drift deposits/OHWM for approx. 100 liner feet downstream from this point. Approximately 10 feet wide at the sample point but then steepens and narrows to 3 feet wide.

WETLAND DETERMINATION DATA FORM – Arid West Region

Applicant/Owner: Milkel Alcantar Intangible Paradise LLC / Meili Liu State: CA Sampling Point: SP-Investigator(s): Robert F. Perrera Section, Township, Range: NA Section, Township, Range: NA Section, Township, Range: NA Landform (hillslope, terrace, etc.) Hills/Mountains Lat: 39,078376 Long: -12758787 Datum: NA Soli Map Unit Name: Millisholm-Squawrock-Pomo complex, 30 to 50 percent slopes NWI classification: NA Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No (If no, explain in Remarks.) Are Vegetation Soli or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No (If no, explain in Remarks.) Are Vegetation Soli or Hydrology anaturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, Hydrophytic Vegetation Present? Yes No ✓ Is the Sampled Area within a Wetland? Yes No ✓ Vegetand Hydrology Present? Yes No ✓ Vegetand Hy	Project/Site: 8531 High Valley Road Pro	oject	_ City/Cour	nty: <u>Clearlal</u>	ke Oak/ Lake Cou	unty San	npling Date: _	4-9-202
Investigator(s): Robert F, Perrera Section, Township, Range; NA Londiform (fillalope, terrace, etc.): Hills/Mountains Local relief (concave, convex, none): convex Stope (%): Subregion (LRR): C - Mediterranean California Lat: 39,078376 Long: 122,758787 Datum: NA Soli Map Unit Name: Millsholm-Squawrock-Pomo complex, 30 to 50 percent slopes NWI classification: NA Are climatic / hydrologic conditions on the site typical for this time of year? Yes	Applicant/Owner: Mikel Alcantar Intang	ible Paradise LLC / Mei						
Landorn (fillslope, terrace, etc.): Hills/Mountains	Investigator(s): Robert F. Perrera							
Subregion (LRR): C-Mediterranean California	Landform (hillslope, terrace, etc.): Hills/M	lountains	_ Local rel	ief (concave,	convex. none): co	nvex	Slor	ne (%)· I
Soli May Unit Name: Milisholm-Squawrock-Pomo complex, 30 to 50 percent slopes Are climatic / hydrologic conditions on the site typical for this time of year? Yes \(\frac{1}{2} \) No (If no, explain in Remarks.) Are Vegetation Soli or Hydrology significantly disturbed? Are Namel Circumstances present? Yes \(\frac{1}{2} \) No Are Vegetation (If no, explain any answers in Remarks.) SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, Hydrophytic Vegetation Present? Yes No \(\frac{1}{2} \) No \(\frac{1}{2} \) Is the Sampled Area within a Wetland? Yes No \(\frac{1}{2} \) No \(\frac{1}{2} \) No \(\frac{1}{2} \) Wetland Hydrology Present? Yes No \(\frac{1}{2} \) No \(\frac{1}{2} \) Sections? Status Status (Plot size: Sapiling/Shrub Stratum (Plot size: Sapil	Subregion (LRR): C - Mediterranean Ca	alifornia Lat: 3	9.078376	,	Long: -122.75	8787	Datur	n: ΝΔ
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (if no, explain in Remarks.) Are Vegetation Soil or Hydrology significantly disturbed?	Soil Map Unit Name: Millsholm-Squawre	ock-Pomo complex, 30	to 50 per	cent slopes	N\A/I	classification	Datui	11, 14/1
Are Vegetation	Are climatic / hydrologic conditions on the s	site typical for this time of	vear? Yes	✓ No	/If no ovn	ain in Damar	lea)	
Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, Hydrophytic Vegetation Present? Yes No V Is the Sampled Area within a Wetland? Yes No V Wetland Hydrology Present? Yes No V Wetland Hydrology Present? Yes No V Is the Sampled Area within a Wetland? Yes No V Wetland Hydrology Present? Yes No V Is the Sampled Area within a Wetland? Yes No V Wetland Hydrology Present? Yes No V Is the Sampled Area within a Wetland? Yes No V Is the Sample Area within a Wetland? Yes No V Is the Sample Area within a Wetland? Yes No V Is the Sample Area within a Wetland? Yes No V Is the Sample Area within a Wetland? Yes No V Is the Sample Area within a Wetland? Yes No V Is the Sample Area within a Wetland? Yes No V Is the Sample Are								<i>(</i>
SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, Hydrophytic Vegetation Present?								No
Hydrophytic Vegetation Present? Yes				,				otuwoo o
Sapiling/Shrub Stratum (Plot size:)		_		mg point	ocations, trai	30013, 1111	portant lea	
Wetland Hydrology Present? Yes No ✓ Remarks: VEGETATION – Use scientific names of plants. Tree Stratum (Plot size:) Absolute Dominant Indicator Species? Status Number of Dominant Species That Are OBL, FACW, or FAC:	30 300		- Is	the Sample	d Area			
VEGETATION - Use scientific names of plants.			~ wi	thin a Wetla	nd? Ye	s	No <u>√</u>	
Absolute		100 100						
Absolute % Cover Species Status Cominant Indicator Species Status Species Across All Strata Acro OBL, FACW, or FAC Orall Mumber of Dominant Species Across All Strata Acro OBL, FACW, or FAC Orall Mumber of Dominant Species Across All Strata Acro OBL, FACW, or FAC Orall Mumber of Dominant Species Across All Strata Acro OBL, FACW, or FAC Orall Mumber of Dominant Species Across All Strata Acro OBL, FACW, or FAC Orall Mumber of Dominant Species Across All Strata Acro OBL, FACW, or FAC Orall Mumber of Dominant Species Across All Strata Acro OBL, FACW, or FAC Orall Mumber of Dominant Species Across All Strata Acro OBL, FACW, or FAC Orall Mumber of Dominant Species Across All Strata Acro OBL, FACW, or FAC Orall Mumber of Dominant Species Across All Strata Acro OBL, FACW, or FAC Orall Mumber of Dominant Species Across All Strata Acro OBL, FACW, or FAC Orall Mumber of Dominant Species Across All Strata Acro OBL, FACW, or FAC Orall Mumber of Dominant Species Acro OBL, FACW, or FAC Orall Mumber of Dominant Species Acro OBL, FACW, or FAC Orall Mumber of Dominant Species Acro OBL, FACW, or FAC Orall Mumber of Dominant Species Acro OBL, FACW, or FAC Orall Mumber of Dominant Species Acro OBL, FACW, or FAC Orall Mumber of Dominant Species Acro OBL, FACW, or FAC Orall Mumber of Dominant Species Acro OBL, FACW, or FAC Orall Mumber of Dominant Species Acro OBL, FACW, or FAC Orall Mumber of Dominant Species Acro OBL, FACW, or FAC Orall Mumber of Dom								
Absolute % Cover Species Status Cominant Indicator Species Status Court Species Status Species Status Species Status Species Status Species Status Species Status Species Across All Strata Across A								
Number of Dominant Species Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A Total Number of Dominant Species Arross All Strata: 2 (B Sapling/Shrub Stratum (Plot size:)	VEGETATION – Use scientific na		- D!-	-1-1	T			
That Are OBL, FACW, or FAC: 0	Tree Stratum (Plot size:							
2.							s : 0	(A)
3.	2							(//
### Total Cover Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A							2	(B)
Sapling/Shrub Stratum (Plot size:								(D)
Prevalence Index worksheet: 2	Sanling/Shruh Stratum / Dlot size		_ = Total C	over	That Are OBL, F	nant Species ACW, or FA0	D: 0	(A/E
2.								
3	2.		_			_		h
4					I .			
5								
Herb Stratum (Plot size:								
1. Elymus caput-medusea 2. Centurea solstitialis 2. Cynosurus echinatus 3. Cynosurus echinatus 4. Bromus hordeaceus 5. Erodium sp 5. No FAC 6. Juncsu sp 10 No FAC 7								
Servine Statum Column Totals: (A) (I))						
3. Cynosurus echinatus 10 No UPL Prevalence Index = B/A = 4. Bromus hordeaceus 10 No FACU FERDIUM SP 5 No FAC 6. Juncsu sp 10 No FAC 7.			Yes					
4. Bromus hordeaceus 10 No FACU Hydrophytic Vegetation Indicators: 5. Erodium sp 5 No FAC Dominance Test is >50% 6. Juncsu sp 10 No FAC Prevalence Index is ≤3.0¹ 7								
5. Erodium sp 6. Juncsu sp 10 No FAC 7								
6. Juncsu sp 10 No FAC Prevalence Index is ≤3.0¹ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 85 = Total Cover Woody Vine Stratum (Plot size:) 1								
7	O Jungou en							
8				<u>FAC</u>				
Woody Vine Stratum (Plot size:) 1 = Total Cover 2 = Total Cover					data in R	ai Adaptation emarks or on	a separate si	upporting heet)
Woody Vine Stratum (Plot size:) 1	0.		- Total C	nvor				
2 be present, unless disturbed or problematic. Hydrophytic Vegetation	Woody Vine Stratum (Plot size:)	_ == 10tal Ct	ovei				
2 = Total Cover Hydrophytic Vegetation	1				¹ Indicators of hyd	lric soil and v	etland hydrol	logy must
= Total Cover Hydrophytic Vegetation					be present, unles	s disturbed o	r problematic	ř.
				over				
	% Bare Ground in Herb Stratum 15	% Cover of Biotic C	Crust			Yos	No -/	i
Remarks:			71 401		1 TOSCIIL:	163	NO	

Profile Description: (Describe to the depression Depth Matrix		x Features			o
(inches) Color (moist) %	Color (moist)	% Type ¹	Loc ²	Texture	Remarks
<u>0-12</u> <u>10YR4/3</u> <u>100</u>				andy L	
					300
				····	
		V 100 - 100 W			
¹ Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, CS	S=Covered or Coate	d Sand Grains	² l occ	ation: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all L	RRs, unless other	wise noted.)			or Problematic Hydric Soils ³ :
Histosol (A1)	Sandy Red	1.00			uck (A9) (LRR C)
Histic Epipedon (A2)	Stripped Ma	. ,			uck (A10) (LRR B)
Black Histic (A3)		ky Mineral (F1)			d Vertic (F18)
Hydrogen Sulfide (A4)		red Matrix (F2)		Red Pa	rent Material (TF2)
Stratified Layers (A5) (LRR C)	Depleted M		-	Other (E	Explain in Remarks)
1 cm Muck (A9) (LRR D) Depleted Below Dark Surface (A11)		Surface (F6)			
Thick Dark Surface (A12)		ark Surface (F7) essions (F8)	3		
Sandy Mucky Mineral (S1)	Vernal Pool				f hydrophytic vegetation and ydrology must be present,
Sandy Gleyed Matrix (S4)		5 (1 0)			turbed or problematic.
Restrictive Layer (if present):				arnood did	tarbed of problematic.
Type:			- 1		
. , po					
			Н	vdric Soil P	resent? Ves No /
Depth (inches):			Н	ydric Soil F	resent? Yes No <u>√</u>
Depth (inches):Remarks:			н	ydric Soil F	resent? Yes No <u>√</u>
Depth (inches):Remarks:			н	ydric Soil F	resent? Yes No <u>√</u>
Depth (inches):			н		
Depth (inches):	check all that apply		н	Second	ary Indicators (2 or more required)
Depth (inches): Remarks: YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one required; Surface Water (A1)	check all that apply	B11)	н	Second	ary Indicators (2 or more required) ter Marks (B1) (Riverine)
Depth (inches): Remarks: YDROLOGY Vetland Hydrology Indicators: 'rimary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2)	check all that apply Salt Crust (Biotic Crus	B11) (B12)	н	Second Wa	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine)
Depth (inches):	check all that apply Salt Crust (Biotic Crusi Aquatic Inv	B11) t (B12) ertebrates (B13)	н	<u>Second</u> Wa Sec Drif	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine)
Depth (inches):	check all that apply Salt Crust (Biotic Crust Aquatic Inv	B11) (B12) ertebrates (B13) Sulfide Odor (C1)		Second Wa Sec Drif	ary Indicators (2 or more required) ter Marks (B1) (Riverine) timent Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10)
Depth (inches):	check all that apply Salt Crust (Biotic Crust Aquatic Inv Hydrogen S	B11) (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres along L		<u>Second</u> Wa Sec Drif Dra 3) Dry	ary Indicators (2 or more required) ter Marks (B1) (Riverine) timent Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2)
Depth (inches):	check all that apply Salt Crust (Biotic Crust) Aquatic Inv Hydrogen S Oxidized R	B11) t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres along L f Reduced Iron (C4)	iving Roots (C	Second Wa Sec Drif Dra 3) Cra	ary Indicators (2 or more required) ter Marks (B1) (Riverine) timent Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8)
Depth (inches):	check all that apply Salt Crust (Biotic Crust (Aquatic Inv Hydrogen S Oxidized Ri Presence o	B11) t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres along L f Reduced Iron (C4) Reduction in Tilled	iving Roots (C	Second Wa Sec Drif Dra 3) Cra Sat	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9)
Depth (inches):	check all that apply Salt Crust (Biotic Crust (Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iron	B11) I (B12) I (B13) I (B13) I (B16) I (B13) I (B16) I (B13) I (B13) I (B13) I (B13) I (B14) I	iving Roots (C	Second Wa Sec Drif Dra 3) Dry Cra Sat Sha	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9)
Depth (inches):	check all that apply Salt Crust (Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iron	B11) t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres along L f Reduced Iron (C4) Reduction in Tilled	iving Roots (C	Second Wa Sec Drif Dra 3) Dry Cra Sat Sha	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9)
Depth (inches):	check all that apply Salt Crust (Biotic Crust (Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iron Thin Muck S	B11) t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres along L f Reduced Iron (C4) Reduction in Tilled Surface (C7) ain in Remarks)	iving Roots (C Soils (C6)	Second Wa Sec Drif Dra 3) Dry Cra Sat Sha	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9)
Depth (inches):	check all that apply Salt Crust (Biotic Crust (Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iron Thin Muck S Other (Expl	B11) t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres along L f Reduced Iron (C4) Reduction in Tilled Surface (C7) ain in Remarks)	iving Roots (C Soils (C6)	Second Wa Sec Drif Dra 3) Dry Cra Sat Sha	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9)
Depth (inches):	check all that apply Salt Crust (Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iron Thin Muck S Other (Expl	B11) t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres along L f Reduced Iron (C4) Reduction in Tilled Surface (C7) ain in Remarks) hes):	iving Roots (C Soils (C6)	Second Wa Sec Drif Dra 3) Dry Sat Sha	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) illow Aquitard (D3) C-Neutral Test (D5)
Depth (inches):	check all that apply Salt Crust (Biotic Crust (Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iron Thin Muck S Other (Expl	B11) t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres along L f Reduced Iron (C4) Reduction in Tilled Surface (C7) ain in Remarks) nes):	iving Roots (C Soils (C6)	Second Wa Sec Drif Dra 3) Cra Sat Sha FAC	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9)
Depth (inches):	check all that apply Salt Crust (Biotic Crust (Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iron Thin Muck S Other (Expl	B11) t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres along L f Reduced Iron (C4) Reduction in Tilled Surface (C7) ain in Remarks) nes):	iving Roots (C Soils (C6)	Second Wa Sec Drif Dra 3) Cra Sat Sha FAC	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 illow Aquitard (D3) C-Neutral Test (D5)
Depth (inches):	check all that apply Salt Crust (Biotic Crust (Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iron Thin Muck S Other (Expl	B11) t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres along L f Reduced Iron (C4) Reduction in Tilled Surface (C7) ain in Remarks) nes):	iving Roots (C Soils (C6)	Second Wa Sec Drif Dra 3) Cra Sat Sha FAC	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) illow Aquitard (D3) C-Neutral Test (D5)
Depth (inches):	check all that apply Salt Crust (Biotic Crust (Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iron Thin Muck S Other (Expl	B11) t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres along L f Reduced Iron (C4) Reduction in Tilled Surface (C7) ain in Remarks) nes):	iving Roots (C Soils (C6)	Second Wa Sec Drif Dra 3) Cra Sat Sha FAC	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) illow Aquitard (D3) C-Neutral Test (D5)
Depth (inches):	check all that apply Salt Crust (Biotic Crust (Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iron Thin Muck S Other (Expl	B11) t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres along L f Reduced Iron (C4) Reduction in Tilled Surface (C7) ain in Remarks) nes):	iving Roots (C Soils (C6)	Second Wa Sec Drif Dra 3) Cra Sat Sha FAC	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 illow Aquitard (D3) C-Neutral Test (D5)
Depth (inches):	check all that apply Salt Crust (Biotic Crust (Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iron Thin Muck S Other (Expl	B11) t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres along L f Reduced Iron (C4) Reduction in Tilled Surface (C7) ain in Remarks) nes):	iving Roots (C Soils (C6)	Second Wa Sec Drif Dra 3) Cra Sat Sha FAC	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 illow Aquitard (D3) C-Neutral Test (D5)

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: 8531 High Valley Road Project	City/County: Clearla	ke Oak/ Lake County Sampling Date: 4-9-2021
Applicant/Owner: Mikel Alcantar Intangible Paradise L	LC / Meili Liu	State: CA Sampling Point: SP-6
Investigator(s): Robert F. Perrera	Section, Township, R	lange: NA
Landform (hillslope, terrace, etc.): Hills/Mountains	Local relief (concave	convex none): none/concave Slope (%): 50
Subregion (LRR): <u>C - Mediterranean California</u>	Lat: 39.078388	Long: -122.758858 Datum: NA
Soil Map Unit Name: Millsholm-Squawrock-Pomo com	plex, 30 to 50 percent slope	S NAM classification: NA
Are climatic / hydrologic conditions on the site typical for this	s time of year? Yes V	(If no explain in Remarks)
Are Vegetation, Soil, or Hydrologys		"Normal Circumstances" present? Yes _ ✓ No
Are Vegetation, Soil, or Hydrology n		
SUMMARY OF FINDINGS – Attach site map		needed, explain any answers in Remarks.) locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: Yes ✓ No	Is the Sample	d Area and? Yes ✓ No
Coyote brush lined the boundary of this wet	tland seep	
VEGETATION – Use scientific names of plant	1_	
VEGETATION – Ose scientific names of plant	Absolute Dominant Indicator	
1	% Cover Species? Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:1 (A)
3		Total Number of Dominant Species Across All Strata:1 (B)
Sapling/Shrub Stratum (Plot size:)	= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
1		Prevalence Index worksheet:
2		Total % Cover of: Multiply by:
3.		OBL species x 1 =
4		FACW species x 2 =
5		FAC species x 3 =
Herb Stratum (Plot size: 5x5)	= Total Cover	FACU species x 4 =
		UPL species x 5 =
2		Column Totals: (A) (B)
3		Prevalence Index = B/A =
4		Hydrophytic Vegetation Indicators:
5		✓ Dominance Test is >50%
6		Prevalence Index is ≤3.0 ¹
7		Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
	100 = Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum (Plot size:) 1		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2		
% Bare Ground in Herb Stratum % Cover of	= Total Cover	Hydrophytic Vegetation Present? Yes✓ No
Remarks:		

Depth		to the dep	oth needed to docu	ıment the i	indicator	or confirm	n the absenc	e of indicators.)
(inches)	Matrix Color (moist)	%	Color (moist)	ox Feature %	S Type ¹	Loc ²	Texture	Demond
0-0.5	10YR4/1	100			Type			Remarks
0.5-8	10YR4/1	70	7.5YR4/6				Sandy	color reflects parent material
	101117/1		7.31K4/6	30	<u>C</u>	PL/IM	Sandy L	prominent redox
Type: C=C	oncentration, D=Dep	letion, RM:	=Reduced Matrix, C	S=Covered	or Coate	d Sand Gr	rains ² Lo	cation: PL=Pore Lining, M=Matrix.
łydric Soil	Indicators: (Applic	able to all	LRRs, unless othe	rwise note	ed.)	d Odila Ol		s for Problematic Hydric Soils ³ :
Histosol			Sandy Red		•			Muck (A9) (LRR C)
	pipedon (A2)		Stripped Ma					Muck (A10) (LRR B)
Black H	istic (A3) en Sulfide (A4)		Loamy Muc				Reduc	ced Vertic (F18)
	d Layers (A5) (LRR (~)	Loamy Gley		(F2)			Parent Material (TF2)
	uck (A9) (LRR D)	3)	✓ Depleted M — Redox Dark		E6)		Other	(Explain in Remarks)
	d Below Dark Surface	e (A11)	Depleted Da					
_ Thick Da	ark Surface (A12)		Redox Depi				3Indicators	of hydrophytic vegetation and
	lucky Mineral (S1)		Vernal Pool	s (F9)				hydrology must be present,
	Bleyed Matrix (S4)							listurbed or problematic.
estrictive	Layer (if present):							
T							1	
Depth (inc	ches):						Hydric Soil	Present? Yes✓ No
Depth (independent of the control of	GY						Hydric Soil	Present? Yes ✓ No
Depth (included in the control of th	GY drology Indicators:							
Depth (included in the control of th	GY drology Indicators: ators (minimum of or		; check all that apply				Secon	ndary Indicators (2 or more required)
Depth (independent of the control of	GY drology Indicators: eators (minimum of or		; check all that apply Salt Crust ((B11)			<u>Secor</u> W	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine)
Depth (independent of the control of	GY drology Indicators: eators (minimum of or Water (A1) ter Table (A2)		; check all that apply Salt Crust (Biotic Crus	(B11) t (B12)	(D42)		<u>Secor</u> W S	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine)
Depth (independent of the control of	GY drology Indicators: sators (minimum of or Water (A1) ter Table (A2) on (A3)	ne required	; check all that apply Salt Crust (Biotic Crus Aquatic Inv	(B11) t (B12) rertebrates			<u>Secor</u> W Si D	ndary Indicators (2 or more required) /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine)
Depth (independent of the control of	GY drology Indicators: eators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriveria	ne required	; check all that apply Salt Crust (Biotic Crus Aquatic Inv Hydrogen S	(B11) t (B12) rertebrates Sulfide Odd	or (C1)	iving Root	Secon W Si D	ndary Indicators (2 or more required) /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10)
Depth (incomensus: "DROLO" Tetland Hydrimary Indicomensus Surface North High War Saturation Water Mar Sedimen	GY drology Indicators: sators (minimum of or Water (A1) ter Table (A2) on (A3)	ne required ne) nriverine)	; check all that apply Salt Crust (Biotic Crus Aquatic Inv Hydrogen S Oxidized R	(B11) t (B12) rertebrates Sulfide Odo hizosphere	or (C1) es along L		Secor W Si D D s (C3) D	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2)
Depth (incomercia) /DROLOGICATION /etland Hydromary Indicomercia Surface Water Market Marke	GY drology Indicators: sators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriveria t Deposits (B2) (Non	ne required ne) nriverine)	; check all that apply Salt Crust (Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence o	(B11) t (B12) rertebrates Sulfide Odo hizosphere of Reduced	or (C1) es along L Iron (C4)		Secor W Si Di Di s (C3) Di Ci	ndary Indicators (2 or more required) /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8)
Depth (incomercia) /DROLOGI /etland Hydrimary Indicomercia Surface Note that the second water Marchite Second control of the point of the point of the surface Surfa	GY drology Indicators: cators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriveria the Deposits (B2) (Nonriveria osits (B3) (Nonriveria	ne required ne) iriverine)	; check all that apply Salt Crust (Biotic Crus (Aquatic Inv Hydrogen S Oxidized R Presence o	(B11) t (B12) rertebrates Sulfide Odd hizosphere of Reduced n Reduction	or (C1) s along L Iron (C4) n in Tilled		Secon W Si D D Si Si C(3) Ci Si Si Si	ndary Indicators (2 or more required) /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9
Depth (independent of the control of	GY drology Indicators: cators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriveria t Deposits (B2) (Non osits (B3) (Nonriveria Soil Cracks (B6)	ne required ne) iriverine)	; check all that apply Salt Crust (Biotic Crus (Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror	(B11) t (B12) rertebrates Sulfide Odo hizosphere of Reduced n Reductior Surface (C'	or (C1) es along L Iron (C4) n in Tilled 7)		Secor W So D D So So C(C3) C So	ndary Indicators (2 or more required) /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8)
Depth (indemarks: "DROLOGIC TENTION OF THE PROPERTY OF THE PR	GY drology Indicators: eators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriveria t Deposits (B2) (Non osits (B3) (Nonriveria Soil Cracks (B6) on Visible on Aerial In ained Leaves (B9)	ne required ne) uriverine) ine) nagery (B7)	; check all that apply Salt Crust (Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror) Thin Muck S Other (Expl	(B11) t (B12) rertebrates Sulfide Odo hizosphere of Reduced n Reductior Surface (C) lain in Rem	or (C1) es along L Iron (C4) n in Tilled 7) arks)	Soils (C6)	Secor W So D D So So C(C3) C So	ndary Indicators (2 or more required) /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9 nallow Aquitard (D3)
Depth (included in the content of th	GY drology Indicators: eators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriveri t Deposits (B2) (Non osits (B3) (Nonriveri Soil Cracks (B6) on Visible on Aerial In ained Leaves (B9) rations: er Present? Ye	ne required ne) nriverine) ine) nagery (B7)	; check all that apply Salt Crust (Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Thin Muck S Other (Expl	(B11) t (B12) rertebrates Sulfide Odd hizosphere of Reduced n Reduction Surface (C' lain in Rem	or (C1) es along L Iron (C4) n in Tilled 7) narks)	Soils (C6)	Secor W So D D So So C(C3) C So	ndary Indicators (2 or more required) /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9 nallow Aquitard (D3)
Depth (independent of the control of	GY drology Indicators: eators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriveria t Deposits (B2) (Non osits (B3) (Nonriveria Soil Cracks (B6) on Visible on Aerial In ained Leaves (B9) rations: er Present? Yee	ne required ne) nriverine) nagery (B7)	; check all that apply Salt Crust (Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Thin Muck S Other (Expl	(B11) t (B12) rertebrates Gulfide Odo hizosphere of Reduced n Reduction Surface (C lain in Rem hes):	or (C1) es along L Iron (C4) n in Tilled 7) narks)	Soils (C6)	Secor W So D D So So C(C3) C So	ndary Indicators (2 or more required) /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9 nallow Aquitard (D3)
Depth (independent of the control of	GY drology Indicators: cators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriveri t Deposits (B2) (Non osits (B3) (Nonriveri Soil Cracks (B6) on Visible on Aerial In ained Leaves (B9) rations: er Present? Present? Ye esent? Ye esent? Ye esent? Ye esent?	ne required ne) iriverine) inagery (B7)	; check all that apply Salt Crust (Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Thin Muck S Other (Expl	(B11) t (B12) rertebrates Sulfide Odd hizosphere of Reduced n Reduction Surface (C' lain in Rem hes): hes):	or (C1) es along L fron (C4) in in Tilled 7) earks)	Soils (C6)	Secor 	ndary Indicators (2 or more required) /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9 nallow Aquitard (D3)
Depth (independent of the control of	GY drology Indicators: eators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriveria t Deposits (B2) (Non osits (B3) (Nonriveria Soil Cracks (B6) on Visible on Aerial In ained Leaves (B9) rations: er Present? Ye esent? Ye esent? Ye	ne required ne) iriverine) inagery (B7)	; check all that apply Salt Crust (Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Thin Muck S Other (Expl	(B11) t (B12) rertebrates Sulfide Odd hizosphere of Reduced n Reduction Surface (C' lain in Rem hes): hes):	or (C1) es along L Iron (C4) n in Tilled 7) earks)	Soils (C6)	Secor 	ndary Indicators (2 or more required) /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9 nallow Aquitard (D3) AC-Neutral Test (D5)
Depth (includes capital control of the control of t	GY drology Indicators: cators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriveri t Deposits (B2) (Non osits (B3) (Nonriveri Soil Cracks (B6) on Visible on Aerial In ained Leaves (B9) rations: er Present? Present? Ye esent? Ye esent? Ye esent? Ye esent?	ne required ne) iriverine) inagery (B7)	; check all that apply Salt Crust (Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Thin Muck S Other (Expl	(B11) t (B12) rertebrates Sulfide Odd hizosphere of Reduced n Reduction Surface (C' lain in Rem hes): hes):	or (C1) es along L Iron (C4) n in Tilled 7) earks)	Soils (C6)	Secor 	ndary Indicators (2 or more required) /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9 nallow Aquitard (D3) AC-Neutral Test (D5)

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 8531 High Valley Road	Project		City/Cou	nty: <u>Clearlal</u>	ke Oak/ Lake Co	unty :	Sampling Date:	4-9-2021
Applicant/Owner: Mikel Alcantar Inta	ngible Paradis	se LLC / Meili	i Liu		State:	CA S	Sampling Point:	SP-7
					ange: <u>NA</u>			
Landform (hillslope, terrace, etc.): Hills	/Mountains		Local re	lief (concave	convex none). c	onvey	Clone	(0/) 10
Subregion (LRR): <u>C - Mediterranean</u>	California	Lat: 39	.081094	(00.100.70,	Long: -122.75	7/152	Stope	. NA
Soil Map Unit Name: Millsholm-Squa	wrock-Pomo	complex 30 t	to 50 ne	cent clanes	LOTIG	17432	Datum	: IVA
Are climatic / hydrologic conditions on th	e cito tunical fo	r this time of	0 V	./	NVVI	classificat	ion: <u>INA</u>	
Are Vegetation Soil or i	e site typical ioi	i uns ume or ye	earr yes					
Are Vegetation, Soil, or H					"Normal Circumst			No
Are Vegetation, Soil, or I					eeded, explain an			
SUMMARY OF FINDINGS - At	tach site ma	ap showing	ı sampl	ing point	locations, trai	nsects, i	important feat	tures, etc
Hydrophytic Vegetation Present?								
Hydric Soil Present?	Yes	No ✓	1	the Sample				
Wetland Hydrology Present?	Yes		w	ithin a Wetla	nd? Ye	9s	_ No <u></u> ✓	
Remarks:								
VEGETATION – Use scientific	names of pl	ants.						
		Absolute	Domina	nt Indicator	Dominance Te	st worksh	eet.	
Tree Stratum (Plot size:			Species	? Status	Number of Dom			
1					That Are OBL, F	FACW, or	FAC:0_	(A)
2.					Total Number of	f Dominan	t	
3					Species Across			(B)
4.					Percent of Dom	inant Snec	rige	
Sapling/Shrub Stratum (Plot size:	,		_= Total C	Cover	That Are OBL, F	ACW, or I	FAC:0	(A/B)
1					Prevalence Ind	ov workel	nonf:	
2.				***************************************	Total % Cov			··
3.			***************************************	-			x1=	
4.			-		1		x2=	
5							x3=	
							x 4 =	
Herb Stratum (Plot size: 5x5							x 5 =	
1. Elymus caput-medusea		40	Yes	UPL	Column Totals:		(A)	(B)
			Yes	<u>UPL</u>				
							B/A =	
4				-	Hydrophytic Ve	_		
5				-	Dominance			
6					Prevalence			
7					Morphologic data in R	aı Adaptat emarks or	tions¹ (Provide sup on a separate she	porting eet)
8	***************************************	100					tic Vegetation¹ (Ex	
Woody Vine Stratum (Plot size:)	100	= Total C	over			,	. ,
1					¹ Indicators of hyd	dric soil an	d wetland hydrolo	gy must
2					be present, unles	ss disturbe	d or problematic.	
				over	Hydrophytic			
% Bare Ground in Herb Stratum	% Cov	er of Biotic Cru	uet		Vegetation Present?	Voo	No. /	
Remarks:					1 10001111	res_	No <u>✓</u>	

SOIL								Sampling Point: SP-7
Profile Descrip	otion: (Describe	to the depth ne	eded to docum	nent the ir	ndicator c	or confirm	the absence	of indicators)
Depth _	Matrix			x Features				31a.oa.o.(31)
(inches)	Color (moist)	%C	olor (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-12 1	.0YR4/4	100					Sandv CL	Sandy Clay Loam w/ Pebbles
								and gravel
								and graver
								W
¹Type: C=Copo	entration D=Deal	otion DM-Dad					. 2	
Hydric Soil Ind	centration, D=Deplicators: (Applica	ble to all I RR	unless other	=Covered	or Coated	Sand Gra		cation: PL=Pore Lining, M=Matrix.
Histosol (A		ible to all LIVIV			u.)			for Problematic Hydric Soils ³ :
Histic Epipe		_	Sandy Redo Stripped Material	. ,				Auck (A9) (LRR C)
Black Histic			Loamy Muck		(F1)			fluck (A10) (LRR B) ed Vertic (F18)
Hydrogen S	Sulfide (A4)	_	Loamy Gleye	•	. ,			arent Material (TF2)
Stratified La	ayers (A5) (LRR C)	Depleted Ma					(Explain in Remarks)
	(A9) (LRR D)	_	_ Redox Dark	Surface (F	6)			,
	elow Dark Surface	(A11)	Depleted Da				-	
Inick Dark	Surface (A12)	_	_ Redox Depre		3)			of hydrophytic vegetation and
	ed Matrix (S4)	,—	_ Vernal Pools	(F9)				hydrology must be present,
Restrictive Lay							uniess di	sturbed or problematic.
Type:	()							
	s):						Hydric Soil	Dreseard Ver
Remarks:							Hyuric Soil	Present? Yes No _✓
HYDROLOGY	,							
5 N O 1-10 D WOODON CORES NOT 100								
Wetland Hydrol			-III (I I)					
	rs (minimum of on						100	dary Indicators (2 or more required)
Surface Wat	, ,	-	Salt Crust (E	,			W	ater Marks (B1) (Riverine)
Saturation (/		-	Biotic Crust		(m. r.a.)			ediment Deposits (B2) (Riverine)
	নত) s (B1) (Nonriverin		Aquatic Inve					ift Deposits (B3) (Riverine)
	eposits (B2) (Non r	· -	Hydrogen S			to a Deat		ainage Patterns (B10)
	s (B3) (Nonriveri	, –	Oxidized Rife Presence of			ving Roots		y-Season Water Table (C2)
Surface Soil		_	Recent Iron		, ,	Collo (CC)		ayfish Burrows (C8)
	isible on Aerial Im	ageny (B7)	Recent from Thin Muck S			solis (Cb)		turation Visible on Aerial Imagery (C9)
	ed Leaves (B9)	agory (Br) _	Other (Expla		,			allow Aquitard (D3)
Field Observation			Other (Exple	AIII III I I COITIE	arks)			C-Neutral Test (D5)
Surface Water Pr		No v	Depth (inch	Del.				
Water Table Pres			Depth (inch					
Saturation Prese			Depth (inch			1	od Usadnotomi	Dunnanto Van
(includes capillar	y fringe)							Present? Yes No
Describe Record	ed Data (stream g	auge, monitorin	g well, aerial ph	otos, previ	ous inspe	ctions), if	available:	
Remarks:								

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 8531 High Valley Road Project		City/C	ounty: <u>Clearla</u>	ke Oak/ Lake County	Sampling Date:	4-9-2021
Applicant/Owner: Mikel Alcantar Intangible Paradis	e LLC / Meili			State: CA		
Investigator(s): Robert F. Perrera		Sectio	n, Township, R	ange: NA	_ , , , , , , , , , , , , , , , , , , ,	
Landform (hillslope, terrace, etc.): Hills/Mountains		Local	relief (concave	, convex, none); convex	Slone	e (%)· 10
Subregion (LRR): <u>C - Mediterranean California</u>	Lat: 39.	.08012	22	Long: -122,758743	Datum	ο (70). <u>10</u> ο ΝΔ
Soil Map Unit Name: Millsholm-Squawrock-Pomo c	omplex, 30 t	o 50 p	ercent slopes	5 NWI classif	fication: NA	1. 1471
Are climatic / hydrologic conditions on the site typical for	this time of ve	ar? Ye	es ✓ No	(If no explain in	Pomarke)	
Are Vegetation, Soil, or Hydrology	significantly	disturb		"Normal Circumstances"		No
Are Vegetation, Soil, or Hydrology				needed, explain any answ		NO
SUMMARY OF FINDINGS – Attach site ma						tures etc
Hydrophytic Vegetation Present? Yes					-, postant roa	
Hydric Soil Present? Yes			Is the Sample			
Wetland Hydrology Present? Yes			within a Wetla	nd? Yes	No	
Remarks:						
VEGETATION – Use scientific names of pla	ants					
	Absolute	Domii	nant Indicator	Dominance Test work	kehoot:	
Tree Stratum (Plot size:)	% Cover	<u>Speci</u>	ies? Status	Number of Dominant S		
1				That Are OBL, FACW,	or FAC:0_	(A)
2				Total Number of Domir	nant	
3				Species Across All Stra	ata: <u>3</u>	(B)
4				Percent of Dominant S	pecies	
Sapling/Shrub Stratum (Plot size:)				That Are OBL, FACW,	or FAC: 0	(A/B)
1				Prevalence Index wor	rksheet:	
2					Multiply b	
3				OBL species		
5.				FACW species		
5				FACIL species		
Herb Stratum (Plot size: 5x5)		- 10ta	i Covei	FACU species		
	40	Yes	S UPL	Column Totals:		
2. <u>Centurea solstitialis</u>		Yes				
3. Bromus hordeaceus					(= B/A =	
4				Hydrophytic Vegetation Dominance Test is		
5				Prevalence Index is		
7					is ⊒3.0 iptations¹ (Provide su	pporting
8.				data in Remarks	s or on a separate sh	eet)
	100		Cover	Problematic Hydro	phytic Vegetation¹ (E	xplain)
Woody Vine Stratum (Plot size:)				1,		
1				¹ Indicators of hydric soil be present, unless distu	l and wetland hydrolo urbed or problematic	ogy must
2					The second secon	
W.B				Hydrophytic Vegetation		
% Bare Ground in Herb Stratum % Cov	er of Biotic Cru	ust		Present? Yes	s No_ <u>√</u>	_
Remarks:		-				

Profile Des	cription: (Describe	to the den	th needed to docs	ment the indicator		4b b	Sampling	g Point:	3P-8
Depth	Matrix	r to the dep		ox Features	or comm	n the absence	of indicators.)		
(inches)	Color (moist)	%	Color (moist)	%Type ¹	_Loc ²	Texture	Rei	marks	
0-12	10YR4/4	100	•			Sandy CL	Sandy Clay Loa		les
							and gravel		
		,							
				-					
1-Tumps 0-0								200	
Hydric Soil	Indicators: (Applic	oletion, RM=	Reduced Matrix, C	S=Covered or Coated	d Sand G		cation: PL=Pore Li	ning, M=Mat	rix.
Histoso		able to all t		*			for Problematic H	lydric Soils	' :
	pipedon (A2)		Sandy Red Stripped M				Muck (A9) (LRR C)		
Black H				cky Mineral (F1)			fluck (A10) (LRR B ed Vertic (F18))	
Hydroge	en Sulfide (A4)		Loamy Gle				arent Material (TF2)	
	d Layers (A5) (LRR	C)	Depleted M	latrix (F3)			Explain in Remark		
	uck (A9) (LRR D)		Redox Dark					,	
	d Below Dark Surfac ark Surface (A12)	e (A11)		ark Surface (F7)					
	Mucky Mineral (S1)		Redox Dep				of hydrophytic vege		
	Bleyed Matrix (S4)		Vernal Poo	IS (F9)			hydrology must be sturbed or problem		
	Layer (if present):					uniess di	isturbed of problem	iatic.	
	Edyor (ii proserit).								
Туре:						Hydric Soil		No	J
Туре:						Hydric Soil		No	✓
Type: Depth (in						Hydric Soil		No	✓
Type: Depth (in						Hydric Soil		No	✓
Type: Depth (in						Hydric Soil		No	✓
Type: Depth (in Remarks:	ches):					Hydric Soil		No	✓
Type:	ches):					Hydric Soil		No	✓
Type:	GY drology Indicators:			Δ			Present? Yes_		
Type: Depth (in Remarks: YDROLO Vetland Hyde	GY drology Indicators:		check all that apply			Secon	Present? Yes _	or more requi	
Type: Depth (in Remarks: YDROLO Wetland Hyd Primary Indic Surface	GY drology Indicators: eators (minimum of o		check all that apply	(B11)		<u>Secon</u>	Present? Yes	or more requi iverine)	red)
Type: Depth (in Remarks: YDROLO Wetland Hyd Primary India Surface High Wa	GY drology Indicators: eators (minimum of o Water (A1) ter Table (A2)		check all that apply Salt Crust Biotic Crus	(B11) t (B12)		Secon W Se	Present? Yes	or more requi iverine) 32) (Riverine	red)
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Type: Depth (in: Remarks: YDROLO Wetland Hyd Frimary Indic Surface High Wa Saturatic Water M Sedimer	GY drology Indicators: eators (minimum of o Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriveri at Deposits (B2) (Nor	ne required; ne) nriverine)	check all that apply Salt Crust Biotic Crus Aquatic Inv Hydrogen	(B11) it (B12) vertebrates (B13) Sulfide Odor (C1) ihizospheres along Li	ving Root	Secon	Present? Yes	or more requi iverine) 32) (Riverine) 10) able (C2)	red)
Type: Depth (in: Remarks: YDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep	GY drology Indicators: eators (minimum of o Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriveri at Deposits (B2) (Nor osits (B3) (Nonriver	ne required; ne) nriverine)	check all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen 3 Oxidized R	(B11) vertebrates (B13) Sulfide Odor (C1) vhizospheres along Li of Reduced Iron (C4)		Secon W Se Dr Dr Ss (C3) Cr	dary Indicators (2 of ater Marks (B1) (Riediment Deposits (B3) (Riedimage Patterns (By-Season Water Taayfish Burrows (C8	or more requi iverine) 32) (Riverine) 10) able (C2)	red)
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Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 8531 High Valley Road Project	City/County: Clearla	ake Oak/ Lake County Sampling Date:4-9-2021
Applicant/Owner: Mikel Alcantar Intangible Parad		State: <u>CA</u> Sampling Point: <u>SP-9</u>
Investigator(s): Robert F. Perrera		Range: NA
Landform (hillslope, terrace, etc.): Hills/Mountains	Local relief (concave	e, convex, none): <u>convex</u> Slope (%): <u>5</u>
Subregion (LRR): <u>C - Mediterranean California</u>	Lat: 39.0080765	Long: -122.756719 Datum: NA
Soil Map Unit Name: Millsholm-Squawrock-Pomo	complex, 30 to 50 percent slope	NWI classification: NA
Are climatic / hydrologic conditions on the site typical	for this time of year? Yes ✓ No	(If no explain in Remarks)
Are Vegetation, Soil, or Hydrology		e "Normal Circumstances" present? Yes _ ✓ No
Are Vegetation, Soil, or Hydrology		needed, explain any answers in Remarks.)
		locations, transects, important features, etc
	No	
Hydric Soil Present? Yes	No V	
Wetland Hydrology Present? Yes	No✓ within a Weti	and? Yes No
Remarks:		
VEGETATION – Use scientific names of	plants.	
	Absolute Dominant Indicator	
Tree Stratum (Plot size:)	<u> % Cover Species? Status</u>	- Number of Dominant Species
1		That Are OBL, FACW, or FAC:1 (A)
3.		Total Number of Dominant Species Across All Strata:1(B)
4		
Sapling/Shrub Stratum (Plot size:)	= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:100 (A/B)
1		Prevalence Index worksheet:
2		Total % Cover of: Multiply by:
3		OBL species x 1 =
4		FACW species x 2 =
5		FAC species x 3 =
Herb Stratum (Plot size: 5x5)	= Total Cover	FACU species x 4 =
1. Juncus sp possible patens	100 Yes FACW	UPL species x 5 =
2.		Column Totals: (A) (B)
3		Prevalence Index = B/A =
4		Hydrophytic Vegetation Indicators:
5		✓ Dominance Test is >50%
6		Prevalence Index is ≤3.0 ¹
7		Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
8		Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:)	100 = Total Cover	
1		¹ Indicators of hydric soil and wetland hydrology must
2		be present, unless disturbed or problematic.
	= Total Cover	Hydrophytic
% Bare Ground in Herb Stratum % C	over of Biotic Crust	Vegetation Present? Yes No
Remarks:		
Juncus patch appears to be water stress	sed	
parameter stress		

OIL						Sampling Point:	SP-9
rotile Des	cription: (Describe	to the depth	needed to document the indicator or	r confirm the	absence of indic	ators.)	
Depth	Matrix		Redox Features			·	
(inches)	Color (moist)	%	Color (moist) % Type ¹	Loc ² T	exture	Remarks	···
0-12	10YR4/4			Sar	ndy L		
						·	
ydric Scil	oncentration, D=Del	oletion, RM=Re	duced Matrix, CS=Covered or Coated	Sand Grains.	² Location: P	L=Pore Lining, M=	Matrix.
		able to all LR	Rs, unless otherwise noted.)	In	dicators for Prob	lematic Hydric S	oils³:
Histosol	` '		Sandy Redox (S5)		_ 1 cm Muck (A9)		
_ Histic Ep _ Black Hi	pipedon (A2)		Stripped Matrix (S6)	_	_ 2 cm Muck (A10)) (LRR B)	
	n Sulfide (A4)		Loamy Mucky Mineral (F1)	_	_ Reduced Vertic		
	Layers (A5) (LRR	C)	Loamy Gleyed Matrix (F2)		_ Red Parent Mat	erial (TF2)	
1 cm Mu	ck (A9) (LRR D)	3)	Depleted Matrix (F3) Redox Dark Surface (F6)	_	Other (Explain in	n Remarks)	
	Below Dark Surfac	e (A11)	Depleted Dark Surface (F7)				
	rk Surface (A12)	- (,	Redox Depressions (F8)	3 _{lr}	ndicators of hydrop	bytic vegetation a	m al
	lucky Mineral (S1)		Vernal Pools (F9)	11	wetland hydrology	must be present	na
_ Sandy G	leyed Matrix (S4)				unless disturbed of	r nrohlematic	
						o problematio.	
estrictive L	ayer (if present):						
estrictive L Type:	ayer (if present):		-				
Туре:							No 🗸
Туре:			-		dric Soil Present?		No <u>√</u>
Type: Depth (inc			-				No <u>√</u>
Type: Depth (incentification) DROLOG	hes):						No <u>√</u>
Type: Depth (incommarks: DROLOG etland Hyd	hes):						No <u>√</u>
Type: Depth (incommarks: DROLOGETIAND Hydicalized Light Ligh	ches): GY rology Indicators: ators (minimum of o				dric Soil Present?		
Type: Depth (incomerks: DROLOGETIAND Hydical Surface N	GY rology Indicators: ators (minimum of o				dric Soil Present?	Yes	
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