# **APPENDIX F**

Biological Resources: Humboldt Wind Energy Project Aquatic Resources Survey Report, Humboldt County, California, Summer and Fall 2018



Humboldt Wind Energy Project Aquatic Resources Survey Report

October 30, 2018

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# **Acronyms and Abbreviations**

ac	acre
CCC	California Coastal Commission
CDFW	California Department of Fish and Wildlife
CZ	Coastal Zone
FAC	facultative
FACU	facultative upland
FACW	facultative wetland
ft	foot/feet
MCV	Manual of California Vegetation, 2 <sup>nd</sup> edition
mi	mile
OBL	obligate
ОНШМ	ordinary high water mark
RWQCB	North Coast Regional Water Quality Control Board
ТОВ	top-of-bank
UPL	upland
USACE	U.S. Army Corps of Engineers
USGS	U.S. Geological Survey

#### Note:

Often, agency suggestions and guidelines are provided in US units of measure (e.g., acres [ac] feet [ft], or miles [mi]), and in other instances, agency guidance is provided in metric (aka SI, or System International) units (e.g., meters [m] or kilometers [km]). To convert an otherwise readily recognized agency standard (e.g., 10 mi or 1 km) to the other system may result in confusion. Accordingly, we provide measures in either system, using the original agency suggestion unchanged, and provide conversion to the other standard only when it makes sense to do so.

# 1.0 INTRODUCTION

Humboldt Wind, LLC (Humboldt Wind) is planning to construct and operate the Humboldt Wind Energy Project (project) in south-central Humboldt County, California (Figure 1). The project would consist of up to 60 wind turbines and associated facilities including meteorological towers, electrical collection system, access roads, construction staging areas, a substation, an operations and maintenance facility, up to a 25-mile (mi) generation transmission line (gen-tie) and its point of interconnection at the existing Pacific Gas & Electric Bridgeville Substation. The project would have a nameplate generating capacity of up to 155 megawatts. Proposed turbine locations are situated on two prominent ridgelines, Bear River Ridge and Monument Ridge, 4.7 mi south and southwest of Scotia, in Humboldt County, California (Figure 1).

The project area encompasses areas of potential activity and includes a 1,000-foot-(ft-) wide corridor centered on proposed turbine locations; a 200-ft-wide corridor centered on project roads, the electrical collection line, and the gentie; and a 500-ft-wide buffer around proposed staging and temporary impact areas and project substations, encompassing 2,241 acres (ac) (Figure 2). The project area is divided into the following segments for description purposes:

- Bear River Ridge
- Western Monument Ridge
- Eastern Monument Ridge
- Monument Ridge Highway 101
- Highway 101 Shively Ridge
- Shively Ridge
- Bridgeville

Project components would be transported overland to the project site on Highway 101 before reaching the temporary staging area(s) located near the Jordan Creek offramp (Figure 1 and 2). Several locations along Highway 101 would require temporary improvements to accommodate transportation of project components to the project site. These transportation improvement areas are located along Highway 101 from Depot Road in the north, south to the 12<sup>th</sup> Street Overpass in the City of Fortuna. Transportation improvements will occur in five locations along this corridor. The five locations are referred to as:

- Depot Road
- Hookton Overpass
- Loleta Ramp
- Finch Creek Bridge and Bypass
- 12<sup>th</sup> Street Overpass Bypass

Stantec Consulting Services Inc. (Stantec) prepared a Draft Biological Resources Work Plan (Draft Work Plan) detailing biological resource surveys designed to support project planning (Stantec 2018a). In July and August 2018, we conducted aquatic resource surveys in the project area, and on October 11 and 12, 2018 surveyed in the transportation improvement areas. These surveys support project permitting for resources that may fall within the following jurisdictions:

• The U.S. Army Corps of Engineers (USACE), pursuant to Section 404 of the Clean Water Act

- The North Coast Regional Water Quality Control Board (RWQCB), pursuant to the Porter-Cologne Water Quality Control Act (California Water Code, Chapter 2, § 13050) or Section 401 of the Clean Water Act
- The California Department of Fish and Wildlife (CDFW), pursuant to section 1600 of the California Fish and Game Code
- The California Coastal Commission (CCC) pursuant to the 1976 California Coastal Act (CA Public Resources Code § 30121) and California Code of Regulations (14 CCR § 13577)

This Aquatic Resources Survey Report summarizes the methods and results of the survey of these resources, which are herein referred to as "jurisdictional waters."

# 2.0 ENVIRONMENTAL SETTING

Humboldt County is within the Klamath/North Coast bioregion and features a rocky coastline, montane forests, and small and sparsely populated settlements. The climate on the coast is cool and moist, driven by heavy rain and fog, and becomes progressively drier, warmer, and more variable inland while remaining relatively mild. In general, the county is mountainous and densely forested, with an expansive coastline that includes Humboldt Bay. Humboldt Bay, located about 16 mi north of the project, is the second largest estuary in California.

The project is on privately owned and managed lands in rural, unincorporated southcentral Humboldt County, 10 mi southeast of Ferndale, 20 mi south of Eureka, and 22 mi north of Garberville, California. Most of the project would be located on two prominent ridgelines that are located south and east of the town of Scotia. Monument Ridge is located south and west of Highway 101 and the Eel River, and Shively ridge is located north and east of Highway 101 and the Eel River.

The project area consists primarily of managed timberlands that are dominated by redwood (*Sequoia sempervirens*) forests and Douglas-fir (*Pseudotsuga menziesii*) forests, with annual grassland, hardwood, and chaparral inclusions. In addition to timber production, some areas of the project site are managed for cattle grazing. The topography is diverse and steep in places, and elevation ranges from nearly sea level in river bottoms to just over 3,000 ft.

# 2.1 TOPOGRAPHY AND HYDROLOGY

The project area is in the North Coastal Hydrologic Basin Region (North Coastal Region), which covers 12.46 million ac and extends from the Oregon border south to Tomales Bay. The North Coast Region is divided into nine hydrologic units, which are further divided into hydrologic areas and hydrologic subareas. The project area is located within three: the Eel River, Eureka Plain, and Cape Mendocino Hydrologic Units (Table 1). Each of the Hydrologic Units within the project area ultimately flow west to the Pacific Ocean, which is 0.25 to 33 mi from the proposed project, depending on location. The project area crosses numerous unnamed drainages and wetlands as well as several named drainages (Greenlow Creek, Eel River, Van Duzen River, and Stitz Creek). Topography within the project area varies widely and ranges from nearly sea level in river bottoms to just over 3,000 ft in elevation.

The western portion of the project area (Bear River Ridge, Western Monument Ridge, Highway 101-Monument Ridge, Eastern Monument Ridge) predominantly follows ridgelines (Figure 3). These ridgelines support several springs that form headwaters to intermittent and ephemeral drainages that empty into both the Eel River and Bear River. The eastern portion of the project area (Highway 101 – Shively Ridge, Shively Ridge, Bridgeville) traverses

varying topography including ridgelines, canyons, valley bottoms, and drainages. Flows in this section drain into intermittent and ephemeral drainages that empty into the Van Duzen River, which is a tributary to the Eel River. Hydrologic sources within the project area include precipitation, groundwater, and runoff from adjacent uplands.

Hydrologic Units	Hydrologic Areas	Hydrologic Subareas
110.00 Eureka Plain		
111.00 Eel River	111.10 Lower Eel River	11.11 Ferndale 11.12 Scotia 11.13 Larabee Creek
	111.20 Van Duzen River	11.22 Bridgeville
112.00 Cape Mendocino	112.20 Capetown	

#### Table 1: Hydrologic Units, Areas, and Subareas within the Project Area

Source: Water Quality Control Plan for the North Coast Region (RWQCB 2018).

# 2.2 VEGETATION COMMUNITIES

Vegetation communities were mapped within the project area during a separate field survey in the summer of 2018 (Table 2). Additional details and full results of the vegetation mapping survey can be found in the project Botanical Resources Report (Stantec 2018b). Nomenclature for the vegetation survey followed the alliances and associations used in the Manual of California Vegetation, 2<sup>nd</sup> edition (MCV) and updated in the online edition (Sawyer et al. 2009, CNPS 2018). Several of the communities mapped are not described in the MCV. In these instances, a new vegetation alliance and/or association was described and named, following MCV convention. Within the project area, the most abundant forests and woodlands were Douglas-fir forests and redwood forests, the most abundant shrubland was coyote brush (*Baccharis pilularis*) scrub, and the most abundant herbaceous communities were hairy oat grass (*\*Rytidosperma penicillatum*<sup>1</sup>) prairies and common velvet grass - sweet vernal grass (*Holcus lanatus - Anthoxanthum odoratum*) meadows.

The vegetation mapping survey applied MCV nomenclature solely based on vegetation composition. This aquatic resource survey applies MCV nomenclature to each delineated aquatic resource, and aquatic resources are not delineated solely based on vegetation. Additional vegetation communities contained within aquatic resources were mapped that were not identified during project area vegetation mapping. A complete listing of all communities mapped during both resource surveys is included in Table 2. Detailed descriptions applicable at the aquatic resource survey level (i.e., vegetation for each delineated feature) are provided in the results section (Section 4.0).

Table 2: Vegetation	Alliances withi	n the Project Area
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Scientific Name	Common Name	Wetland Community <sup>1</sup>	
	Herbaceous		
*Acmispon americanus	*Spanish lotus fields		
*Agrostis exarata	*spike bentgrass prairie		
*Aira praecox	*yellow hairgrass grasslands		
*Alopecurus saccatus	foxtail meadows	Х	
*Anthoxanthum odoratum	*sweet vernal grass meadows		
*Athyrium filix-femina var. cyclosorum	western lady fern seeps	Х	

<sup>&</sup>lt;sup>1</sup> Asterisk (\*) indicates alliances not included in the MCV.

Scientific Name	Common Name	Wetland Community <sup>1</sup>	
Brassica nigra	upland mustards		
Bromus (diandrus, hordeaceus) - Brachypodium distachyon	annual brome grasslands		
*Carex bolanderi	Bolander's sedge seeps	Х	
Carex praegracilis	sand dune sedge swaths	Х	
*Carex tumulicola	foothill sedge meadows		
Cortaderia jubata, selloana	pampas grass patches		
Cynosurus echinatus	annual dogtail grasslands		
*Cyperus eragrostis	tall cyperus seeps	Х	
Danthonia californica	California oat grass prairies		
Deschampsia cespitosa	tufted hair grass meadows		
Deschampsia elongata	hairgrass meadows	Х	
Elymus glaucus	blue wild rye montane meadows		
*Equisetum telmateia ssp. braunii	giant horsetail marshes	Х	
Festuca perennis	perennial rye grass fields	Х	
Holcus lanatus - Anthoxanthum odoratum	common velvet grass - sweet vernal grass meadows	х	
*Isolepis cernua	low bulrush marshes	Х	
*Juncus bolanderi	Bolander's rush marshes	Х	
Juncus effusus	soft rush marshes	Х	
Juncus occidentalis	slender juncus marshes	Х	
Juncus patens	western rush marshes	Х	
*Mentha pulegium	*pennyroyal marshes	Х	
*Nasturtium officinale	watercress seeps	Х	
Phalaris aquatica	Harding grass swards		
Poa pratensis	Kentucky blue grass turfs	Х	
*Rytidosperma penicillatum	*hairy oat grass prairies		
*Selaginella wallacei	Wallace's spikemoss mats		
	Shrubland		
*Arctostaphylos columbiana	*redwood manzanita stands		
Baccharis pilularis	coyote brush scrub		
Ceanothus thyrsiflorus	blue blossom chaparral		
Cytisus scoparius	broom patches		
*Eriogonum latifolium	*coast buckwheat patches		
Holodiscus discolor	ocean spray brush		
Rubus armeniacus	Himalayan blackberry brambles		
Rubus parviflorus	coastal brambles		
Rubus spectabilis	coastal brambles		

Scientific Name	Common Name	Wetland Community <sup>1</sup>
Rubus ursinus	coastal brambles	
Salix hookeriana	coastal dune willow thickets	Х
Salix lasiolepis	arroyo willow thickets	Х
Salix sitchensis	Sitka willow thickets	Х
Toxicodendron diversilobum	poison oak scrub	
Umbellularia californica	California bay forest	
Forest and	d Woodland Alliances	
Abies grandis	grand fir forest	
Acer macrophyllum	bigleaf maple forest	
Alnus rubra	red alder forest	Х
Arbutus menziesii	madrone forest	
Notholithocarpus densiflorus	tanoak forest	
Pinus radiata	Monterey pine plantation	
Populus fremontii	Fremont cottonwood forest	
Populus trichocarpa	black cottonwood forest	Х
Pseudotsuga menziesii	Douglas-fir forest	
Pseudotsuga menziesii - Notholithocarpus densiflorus	Douglas-fir - tanoak forest	
Quercus garryana var. garryana	Oregon white oak woodland	
Salix lasiandra	shining willow groves	
Sequoia sempervirens	redwood forest	

\* alliances not included in the MCV

<sup>1</sup> alliance with occurrences in delineated wetlands; not all occurrences are within wetlands

# 2.3 SOIL

Humboldt County spans two geologic provinces: Coast Ranges Province and Klamath Mountains Province. The Coast Ranges Province in the county's center and southwest is composed mainly of the Franciscan Complex, with schists, sand, and other alluvial deposits associated with the coast. The Klamath Mountains Province in the northeast features older sedimentary rock including sandstone, chert, slate, and schist. Thirty-three soil mapunits within the project area have been mapped by the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS 2018b) (Table 3, Figure 4). Twenty of the soil mapunits are rated as hydric or contain hydric components. Soil mapunits have not been mapped in portions of Bridgeville.

### Table 3: Soil Mapunits Within the Project Area

Mapunit Symbol	Mapunit Name	Hydric Rating Status
Water and Fluvents, 0 to 2 percent slopes	100	Υ
Weott, 0 to 2 percent slopes	110	Υ

Mapunit Symbol	Mapunit Name	Hydric Rating Status	
Arlynda, 0 to 2 percent slopes	119	Y	
Jollygiant, 0 to 2 percent slopes	127	Y	
Typic Fluvaquents, 0 to 2 percent slopes	131	Y	
Udifluvents, 0 to 2 percent slopes	132	Y	
Parkland-Garberville complex, 2 to 9 percent slopes	151	Y	
Eelriver and Cottoneva soils, 0 to 2 percent slopes	179	Y	
Grizzlycreek-Chaddcreek complex, 2 to 9 percent slopes	181	N	
Russ, 0 to 2 percent slopes	195	Y	
Ferndale, 0 to 2 percent slopes	220	Y	
Canalschool, 0 to 2 percent slopes	221	Y	
Hookton-Tablebluff complex, 2 to 9 percent slopes	230	N	
Hookton-Tablebluff-Cannonball complex, 9 to 15 percent slopes	231	N	
Tablebluff-Cannonball-Lepoil complex, 15 to 30 percent slopes	232	N	
Cannonball-Candymountain-Lepoil Complex, 30 to 50 percent slopes	233	N	
Ferncat-Sleepyhollow-Oilcreek complex, 30 to 50 percent slopes	344	Y	
Sleepyhollow-Oilcreek complex, 50 to 75 percent slopes	345	Y	
Ferncat-Sleepyhollow complex, 9 to 30 percent slopes	368	N	
Scoutcamp-Redcrest complex, 15 to 30 percent slopes	382	N	
Scoutcamp-Rootcreek-Redcrest complex, 5 to 30 percent slopes	383	N	
Scoutcamp-Rootcreek-Redcrest complex, 30 to 50 percent slopes	384	Ν	
Scoutcamp-Redcrest complex, 50 to 75 percent slopes	385	Ν	
Scoutcamp-Rootcreek-Redcrest complex, 50 to 75 percent slopes	386	Ν	
Salmoncreek-Rootcreek complex, 2 to 15 percent slopes	387	Υ	
Salmoncreek-Rootcreek complex, 15 to 30 percent slopes	388	Υ	
Salmoncreek-Rootcreek complex, 30 to 50 percent slopes	389	Υ	
Burgsblock-Coolyork-Tannin complex, 15 to 30 percent slopes	451	Ν	
Burgsblock-Coolyork-Tannin complex, 30 to 50 percent slopes	452	Ν	
Tannin-Burgsblock-Rockyglen complex, 30 to 50 percent slopes	461	Ν	
Northbear-Caperidge-Taylorpeak complex, 30 to 50 percent slopes	505	Ν	
Redwoodhouse-Yagercreek-Mailridge complex, 15 to 30 percent slopes	512	Ν	
Redwoodhouse-Yagercreek-Mailridge complex, 30 to 50 percent slopes	513	Ν	
Redwoodhouse-Yagercreek-Mailridge complex, 50 to 75 percent slopes	514	N	
Redwoodhouse-Mailridge-Mountbaldy complex, 15 to 30 percent slopes	520	Ν	
Crazycoyote-Sproulish-Caperidge complex, 15 to 50 percent slopes	567	N	
Sproulish-Canoecreek-Redwohly complex, 30 to 50 percent slopes, warm	574	N	
Canoecreek-Sproulish-Redwohly complex, 50 to 75 percent slopes, warm	575	Ν	
Wirefence-Windynip-Devilshole complex, 5 to 30 percent slopes	646	Ν	

Mapunit Symbol	Mapunit Name	Hydric Rating Status
Windynip-Wirefence-Devilshole complex, 30 to 50 percent slopes	649	Ν
Yorknorth-Witherell complex, 00315 to 30 percent slopes	655	Ν
Yorknorth-Witherell complex, 30 to 50 percent slopes	662	N
Dryfield-Yorknorth-Witherell complex, 5 to 30 percent slopes	667	N
Hydraquents-Wassents mucky silt loam, strongly saline, 0-3 percent slopes, very frequently flooded	1009	Y
Urban land-Friendlycity association, 0 to 2 percent	1010	N
Urban land-Anthraltic Xerorthents association, 0 to 2 percent slopes	1014	N
Peaked-Oceanhouse-Forhaux complex, 5 to 30 percent slopes	4406	Y
Dolason-Forhaux-Peaked complex, 5 to 30 percent slopes	4408	Y
Forhaux-Peaked-Dolason complex, 30 to 50 percent slopes	4409	Y
Hoagland-Chalkmountain-Pasturerock complex, 30 to 50 percent slopes	4417	N
Highyork-Elkcamp-Airstrip complex, 30 to 50 percent slopes	4422	N

Source: Natural Resources Conservation Service. 2018b. USDA Web Soil Survey. Available: <u>http://websoilsurvey.nrcs.usda.gov</u>. Accessed August 2018.

# 3.0 METHODS

# 3.1 DESKTOP REVIEW

Prior to conducting fieldwork, the following resources were reviewed:

- U.S. Fish and Wildlife Service National Wetland Inventory (USFWS 2018)
- Google Earth color aerial imagery dating back to 1985
- U.S. Geological Survey (USGS) 7.5-minute topographic maps (USGS 1969a, 1969b, 1969c, 1970)
- USGS National Hydrography Dataset (USGS 2017)

These resources were used to identify potential aquatic features based on changes in vegetation, topographic changes, or visible drainage patterns. Prior to field surveys, potential features were digitized into a working field map which was then used as a reference during field surveys.

# 3.2 AQUATIC RESOURCES FIELD ASSESSMENT

The following Stantec Biologists conducted the aquatic resources field assessment between July 9 and August 10, and on October 3 and 4, 2018:

- Sheryl Creer
- John Holson
- Kayla Henry
- Allison Loveless
- Leticia Morris

- Andrew Sorci
- Sara Taylor
- Sarah Tona
- Gabe Youngblood

The last appreciable rainfall prior to the July and August field assessment as recorded by the National Oceanic and Atmospheric Administration's Scotia weather station occurred on June 9, 2018 (NRCS 2018a). Prior to the October transportation route field assessment, the last appreciable rainfall as recorded by the NOAA Eureka weather station occurred on October 2, 2018. Plant species observed during field surveys were recorded (Appendix A) using botanical nomenclature following The Jepson Manual: Vascular Plants of California, Second Edition (Baldwin et al. 2012). Nomenclatural changes made after the publication date of The Jepson Manual follow the Jepson eFlora (Jepson Flora Project 2018).

### 3.2.1 Wetlands Mapping

Potential wetlands under the jurisdiction of USACE and RWQCB, and riparian wetlands under the jurisdiction of CDFW were mapped within the project area. Wetland delineation followed the routine determination method given in the Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987) and the revised procedures in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0) (USACE 2010). This methodology entails examination of specific sample points in both wetlands and uplands (i.e. paired points) to determine the boundaries of wetland features. Sample points are examined for hydrophytic vegetation, hydric soils, and wetland hydrology. By the federal definition, all three parameters must be present for an area to be considered a wetland. Riparian canopy (riparian wetland) potentially under the jurisdiction of CDFW was mapped when a shrub or forest community associated with a drainage passed the USACE criterion for hydrophytic vegetation. Potential wetlands under the jurisdiction of the CCC that are located within the Coastal Zone (CZ) were also mapped. The CCC defines wetlands within the CZ following the USACE method for delineation, but only requires one of the three factors for a feature to qualify as a wetland (CCC 2011). Therefore, features mapped as CCC wetlands may not meet the definition of a USACE wetland.

Sixty-five sample points were established within the study area, and a USACE wetland determination data form was completed for each.(Appendix A). Sample pits were excavated at each point, and soils were evaluated for hydric indicators (NRCS 2017). Vegetation was also sampled and recorded, as well as and indicators of wetland hydrology in a 1-meter-radius plot surrounding the sample point. In situations where adjacent wetland features supported similar vegetation composition and indicators of hydrology, one set of sample points was excavated for one wetland feature and then applied to adjacent features. Several sample points in suspected wetlands did not pass the USACE three-parameter test and are considered upland and are therefore not in a set of paired points.

Wetland boundaries were determined by following a combination of the limits of hydrophytic vegetation, limits of observed wetland hydrology, topographic breaks, and aerial ortho-photo interpretation. Sample pits and wetland boundaries were mapped using a sub-meter-accurate Bad Elf<sup>™</sup> Global Positioning Service Unit (Bad Elf) paired with Collector for ArcGIS<sup>™</sup> (Collector). All spatial data was collected in the WGS84 datum. Representative photographs were also taken of sample points and features (Appendix C). All potential wetland areas were evaluated to identify their connection to on-site and off-site hydrologic resources; all potentially jurisdictional wetland areas were mapped if they met all three USACE-required parameters. Boundaries of CDFW-jurisdictional riparian canopy were also mapped using aerial imagery or, in circumstances where riparian canopy was not discernible from aerial imagery, with the Bad Elf.

All wetland features were assigned an MCV vegetation community based on overall vegetation within each delineated feature (i.e., using vegetation beyond the sample plot). Several vegetation communities within the delineated wetlands are not described in the MCV. In these situations, a new vegetation alliance was described and named, following MCV convention.

## 3.2.2 Drainage Mapping

Drainages potentially under the jurisdiction of USACE and RWQCB were delineated and mapped following A Guide to Ordinary High Water Mark (OHWM) Delineation for Non-Perennial Streams in the Western Mountains, Valleys, and Coast Region of the United States (USACE 2014). Assessment of the hydrological regime (i.e. ephemeral, intermittent, perennial) followed guidance also included in the USACE 2014 guide. Top-of-bank (TOB) measurements were noted for each drainage to delineate drainage areas potentially under the jurisdiction of CDFW under Section 1600 of the California Fish and Game Code. Culverts were also mapped to assist with determining overall connectivity and water flow. In locations that were accessible, linear features and culverts were mapped using a Bad Elf paired with Collector. A custom data dictionary in Collector was used to ensure consistent data collection in the field, and all spatial data was collected in the WGS84 datum. The following attributes were collected or measured for each mapped drainage: average OHWM width and depth, average TOB width and depth, hydrologic regime, OHWM indicators, substrate below OHWM, and depth of water (if present). Representative photographs of features were also taken (Appendix C). In some instances, culverts or drainages were obscured by thick brush, covered in poison oak and/or stinging nettle, or inaccessible due to steep terrain. In these cases, full-color aerial imagery and/or topographic maps were used to assist mapping the jurisdictional features. Isolated roadside ditches excavated wholly in uplands and draining from upland to upland were not mapped. Specifically, if a roadside ditch was not connected (or adjacent) to a wetland or other drainage, it was not mapped. All other potentially jurisdictional drainages with primary or secondary indicators of OHWM were mapped and assumed to have either connectivity in some capacity (subsurface, adjacent, etc.) or a significant nexus with traditionally navigable waters as defined by the Clean Water Rule.

# 4.0 RESULTS

A total of 14.6390 ac of wetlands potentially under the jurisdiction of RWQCB and USACE were mapped. Of these 14.6390 ac, 7.2293 ac are riparian wetland potentially under the jurisdiction of CDFW, and 0.493 ac are potentially under the jurisdiction of the CCC (Figure 5, Table 4, Appendix D). A total of 0.1384 ac of open water potentially under the jurisdiction of the RWQCB, USACE, and CDFW. In addition, 2.8550 ac of drainages potentially under the jurisdiction of RWQCB and USACE and 6.8607 ac potentially under the jurisdiction of CDFW were also mapped. Finally, 14,4499.5031 linear ft of drainages were mapped that are potentially under the jurisdiction of RWQCB and USACE, as well as 15,902.3031 linear ft potentially under the jurisdiction of CDFW.

Feature Type	USACE and RWQCB		CDFW		CCC
	Acres <sup>1</sup>	Linear Feet	Acres <sup>2</sup>	Linear Feet	
Wetlands	14.6390	N/A	7.2293	N/A	0.4963
Open Water	0.1384	N/A		N/A	

Table 4: Summary of Potentially Jurisdictional Aquatic Features within the Project Area

Ephemeral Drainages	0.2398	5,642.1105	0.3978	5,642.1105	
Intermittent Drainages	0.4071	4,608.6133	0.5886	4,608.6133	
Perennial Drainages	2.2081	4,248.7792	5.8742	5,651.5792	
Subtotal – Drainages	2.8550	14,499.5031	6.8607	15,902.3031	
Total Jurisdictional Area	17.4940	14,499.5031	14.0900	15,902.3031	0.4963

<sup>1</sup> Acreage was calculated using the area within the OHWM and includes culverts.

<sup>2</sup> CDFW-jurisdictional acreage was calculated as follows: drainages used the area within TOB including culverts; wetlands were defined as areas associated with drainages that are forested or vegetated with shrubs that also meet the USACE criterion for hydrophytic vegetation. In some cases, these riparian wetlands extend beyond TOB.

## 4.1 WETLANDS

A total of 96 wetlands and 1 open water (stock pond) were mapped that are potentially under the jurisdiction of USACE, RWQCB, CCC, and/or CDFW within the project area (Appendix D). Mapped wetlands were categorized into one of three Cowardin classifications: palustrine emergent, palustrine forested, and palustrine scrub-shrub habitats (Cowardin et al. 1979).

## 4.1.1.1 Vegetation

Mapped wetlands were further classified wetlands into one of 23 vegetation alliances (Table 5, Appendix D). The most abundant vegetation type by wetland feature is pennyroyal (*Mentha pulegium*) marshes, which comprise 29 wetlands and 2.2092 ac. The second most abundant type is soft rush (*Juncus effusus*) marshes, which comprise 21 wetlands and 2.7868 ac. The wetland indicator status for the dominant species in each vegetation/wetland type is provided below (Lichvar et al. 2016).

Table 5: Summary of Wetlands by	Vegetation Community
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Scientific Name	Common Name	Cowardin Code <sup>1</sup>	Acres				
Palustrine Emergent							
*Alopecurus saccatus	*foxtail meadows	PEM	0.0677				
*Athyrium filix-femina var. cyclosorum	*western lady fern seep	PEM	0.0309				
*Carex bolanderi	*Bolander's sedge seep	PEM	0.0481				
*Carex praegracilis	*field sedge meadows	PEM	0.0160				
*Cyperus eragrostis	*tall cyperus seep	PEM	0.1319				
Deschampsia elongata	hairgrass meadows	PEM	0.0038				
*Equisetum telmateia ssp. braunii	*giant horsetail marshes	PEM	0.4927				
Festuca perennis	perennial rye grass fields	PEM	0.0346				
Holcus lanatus	common velvet grass meadows	PEM	0.4284				
*Isolepis cernua	low bulrush marshes	PEM	0.0521				
*Juncus bolanderi	*Bolander's rush marshes	PEM	0.1912				

Scientific Name	Common Name	Cowardin Code <sup>1</sup>	Acres
*Juncus bufonius	*toad rush marshes	PEM	0.0809
Juncus effusus	soft rush marshes	PEM	2.7868
*Juncus occidentalis	*slender juncus marshes	PEM	0.5196
Juncus patens	western rush marshes	PEM	0.2216
*Mentha pulegium	*pennyroyal marshes	PEM	2.2092
*Nasturtium officinale	watercress seeps	PEM	0.0066
Poa pratensis	Kentucky blue grass turf	PEM	0.0920
Subtotal			7.2321
	Palustrine Scrub-Shrub		
Salix hookeriana	coastal dune willow thickets	PSS	0.0085
Salix lasiolepis	arroyo willow thickets	PSS	0.3143
Salix sitchensis	Sitka willow thickets	PSS	1.4389
Subtotal			1.4474
	Palustrine Forested		
Alnus rubra	red alder forest	PFO	3.9565
Populus trichocarpa black cottonwood forest		PFO	1.5110
Subtotal			5.4675
	Other		1
Open Water	Water		0.1384
Total			14.7774

\* alliances not included in the MCV

<sup>1</sup> PEM = palustrine emergent, PSS = palustrine scrub-shrub, PFO = palustrine forested. Codes based on Cowardin, L. M., V. Carter, F. C. Golet, and E. T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service Report No. FWS/OBS/-79/31.Washington, D.C.

### Palustrine Emergent Wetlands

#### \*Foxtail meadows

Two wetlands were classified as foxtail (*Alopecurus saccatus*) meadows: one on Bear River Ridge and one in Bridgeville. Both are dominated by foxtail, a facultative wetland species (FACW), with a lower abundance of other forbs and grasses such as pennyroyal, an obligate wetland species (OBL) and Diego bent grass (*Agrostis pallens*), an upland species (UPL).

#### \*Western lady fern seep

One wetland in Bridgeville was classified as a western lady fern (*Athyrium filix-femina var. cyclosorum*) seep. This wetland is dominated by western lady fern, a facultative species (FAC), with a presence of common horsetail (*Equisetum arvense*) (FAC).

#### \*Field sedge meadow

One wetland in Bridgeville was classified as a field sedge (*Carex praegracilis*) meadow. This wetland is dominated by field sedge (FACW) and supports a lesser amount of common velvet grass (FAC) and pennyroyal (OBL).

#### \*Bolander's sedge seep

One wetland on Western Monument Ridges was classified as a Bolander's sedge (*Carex bolanderi*) seep. This wetland is dominated by Bolander's sedge (FAC) with a presence of musk monkeyflower (*Mimulus moschatus*) (OBL).

#### \*Tall cyperus seeps

Four wetlands were classified as tall cyperus (*Cyperus eragrostis*) seeps: one on Shively Ridge and three in Bridgeville. All are dominated by tall cyperus (FACW), with a lower abundance of other forbs and grasses such as pennyroyal (OBL), buttercup (*Ranunculus muricatus*) (FACW), and common horsetail (FAC).

#### Hairgrass meadow

One wetland in Bridgeville was classified as a hairgrass (*Deschampsia elongata*) meadow. This wetland is dominated by hairgrass (FACW), with a lower abundance of pennyroyal (OBL).

#### \*Giant horsetail marshes

One wetland on Eastern Monument Ridge was classified as a giant horsetail (*Equisetum telmateia* ssp. *braunii*) marsh. This wetland is co-dominated by giant horsetail (FACW) and California mugwort (*Artemisia douglasiana*) (FACW).

#### Perennial rye grass fields

Two wetlands were classified as perennial rye grass (*Festuca perennis*) fields: one on Bear River Ridge and one on Western Monument Ridge. Both are dominated by perennial rye grass (FAC), with a lower abundance of common velvet grass (FAC).

#### Common velvet grass meadows

Three wetlands were classified as common velvet grass meadows: two on Bear River Ridge and one in Bridgeville. Both are dominated by common velvet grass (FAC), with varying and lower abundances of fiddleleaf dock (*Rumex pulcher*) (FAC), Baltic rush (*Juncus balticus* ssp. *ater*) (FACW), and perennial rye grass (FAC).

#### \*Low bulrush marshes

One wetland on Bear River Ridges was classified as a low bulrush marsh. This wetland is co-dominated by hyssop loosestrife (*Lythrum hyssopifolia*) (OBL).

#### \*Bolander's rush marshes

Two wetlands on Bear River Ridge were classified t as Bolander's rush (*uncus bolanderi*) marshes. Both are dominated by Bolander's rush (OBL), with varying and lower abundances of common velvet grass (FAC) and Diego bent grass (UPL).

#### Soft rush marshes

Twenty-one wetlands were classified as soft rush marshes: 13 on Bear River Ridge, 4 on Western Monument Ridge, 2 on Eastern Monument Ridge, 1 on Shively Ridge, and 1 in Bridgeville. The marshes are dominated by soft rush (FACW), and the majority are co-dominated by common velvet grass (FAC). Several of the marshes support pennyroyal (OBL) as a co-dominant.

#### Slender juncus marshes

Four wetlands were classified as slender juncus (*Juncus occidentalis*) marshes: three on Bear River Ridge and one on Highway 101 – Shively. All four are dominated by slender juncus (FACW), with a lower abundance of Diego bent grass (UPL) present as well.

#### Western rush marshes

Five wetlands were classified as western rush (*Juncus patens*) marshes: one on Bear River Ridge, two on Highway 101 – Monument Ridge, and two in Bridgeville. All five are dominated by western rush (FACW), with varying and lower abundances of pennyroyal (OBL) and barley (*Hordeum marinum* ssp. *gussoneanum*) (FAC).

#### \*Pennyroyal marshes

Twenty-nine wetlands were classified as pennyroyal marshes; 1 along the transportation route at Hookton Overpass, 8 on Bear River Ridge, 3 on Western Monument Ridge, 1 on Highway 101 – Monument Ridge, 1 on Shively Ridge, and 15 in Bridgeville. The marshes are dominated by pennyroyal (OBL), and the majority are co-dominated by common velvet grass (FAC) or perennial rye grass (FAC). Several of the marshes support foxtail (FACW) as a co-dominant.

#### Watercress seep

One wetland on Western Monument Ridge was classified as a watercress (*Nasturtium officinale*) seep. This wetland is co-dominated by common velvet grass (FAC).

#### Kentucky blue grass turf

Two wetlands on Bear River Ridge were classified as Kentucky blue grass (*Poa pratensis*) turf. Both are dominated by Kentucky blue grass (FAC) and co-dominated by pennyroyal (OBL).

#### Palustrine Scrub-Shrub Wetlands

#### Coastal dune willow thickets

One wetland on Shively Ridge was classified as a coastal dune willow (*Salix hookeriana*) thicket. The shrub layer is co-dominated by coastal dune willow (FACW) and California blackberry (*Rubus ursinus*), a facultative upland species (FACU). The herbaceous layer is dominated by common horsetail (FAC), with a small amount of pennyroyal (OBL) and mountain bog bulrush (*Scirpus microcarpus*) (OBL).

#### Arroyo willow thickets

Two wetlands were classified along the transportation route as arroyo willow (*Salix lasiolepis*) thickets. This shrub community is dominated by arroyo willow (FACW). Stands at Hookton Overpass support a diversity of shrub species including Nootka rose (*Rosa nutkana*) (FAC) and California hazel (*Corylus cornuta* subsp. *californica*) (FACU). Stands at Finch Creek Bridge Bypass are overwhelmingly dominated by arroyo willow with a trace amount of thimbleberry and Himalayan blackberry (FAC).

#### Sitka willow thickets

Four wetlands were classified as Sitka willow (*Salix sitchensis*) thickets: three on Eastern Monument Ridge and one on Highway 101 – Shively. All four are characterized by a prominent shrub layer dominated by Sitka willow (FACW). The three thickets on Eastern Monument Ridge support a sparse tree layer dominated by red alder (*Alnus rubra*) (FAC) and a small amount of coyote brush (UPL) in the shrub layer. The herbaceous layer is sparse and is dominated by stinging nettle (*Urtica dioica*) (FAC). A moderately dense woody vine layer is present throughout and is dominated by poison oak (*Toxicodendron diversilobum*) (FAC). The thicket on the Highway 101 – Shively section of the project area is associated with Stitz Creek and supports a sparse tree layer also dominated by red alder (FAC). The herbaceous layer is sparse and is dominated by red alder (FAC).

### Palustrine Forested Wetlands

### Red alder forest

Five wetlands were classified as red alder forest: one on Eastern Monument Ridge associated with Greenlow Creek, two on Highway 101 – Shively associated with the Eel River, and two in Bridgeville associated with Little Larabee Creek. All five forested wetlands are characterized by a prominent tree layer dominated by red alder (FAC), with little to no shrub or herbaceous layer. Other vegetation present includes bigleaf maple (*Acer macrophyllum*) (FACU), blue elderberry (*Sambucus nigra* ssp. *caerulea*) (FAC), and Nootka rose (*Rosa nutkana*) (FAC).

#### Black cottonwood forest

Two wetlands in Bridgeville associated with the Van Duzen River were classified as black cottonwood *Populus trichocarpa*) forest. Black cottonwoods dominate the tree layer, with a small amount of red alder present. The shrub layer is co-dominated by narrowleaf willow (*Salix exigua*) (FACW) and polished willow (*S. laevigata*) (FACW). The shrub layer is dominated by Himalayan blackberry (*Rubus armeniacus*) (FAC).

## Open Water

One feature on Bear River Ridge was classified as open water. At the time of the field surveys, this feature was unvegetated, holding water, and functioning as a stock pond for cattle. It is surrounded by a wetland feature (pennyroyal marsh) that was mapped separately.

## 4.1.1.2 Soils

Sixty-five sample points within the study area were established where soils were excavated and evaluated for the presence of hydric soil indicators. Sample points associated with wetland features share the feature's number (e.g. Wetland 193 has associated sample points 193 upland and 193 wetland). Fifty-six points make up 28 paired sets of upland and wetland points associated with mapped wetland features; 9 points are single upland points (suspected wetlands) that did not meet the USACE wetland criteria. Wetland soil samples were predominantly classified as clay loam or loam and upland soils samples as clay loam or sandy loam. The predominant hydric soil indicator was redox dark surface (F6). Soil matrix colors in both wetland and upland areas were predominantly 10 YR 3/2 or 10 Y/R 3/1. Redox concentrations within the soil matrix of hydric soils were predominantly 7.5 YR 5/8 or 10 YR 5/8. Redox concentrations were frequently observed in upland soil samples but at a significantly lower percentage than in hydric soils.

## 4.1.1.3 Hydrology

Most wetland features within the project area supported oxidized rhizospheres along living roots (C3) as the primary indicator of wetland hydrology. Frequently observed secondary indicators include drainage patterns (B10) and geomorphic position (D2).

# 4.2 DRAINAGES

A total of 83 drainages and drainage segments potentially under the jurisdiction of the USACE, RWQCB, and CDFW were mapped within the project area (Appendix C Table C-1). Based on topography, all drainages mapped are assumed to eventually drain into one of three perennial drainages: Eel River, Bear River, or Van Duzen River. The Van Duzen River drains into the Eel River, and the Eel River and Bear River both drain directly to the Pacific Ocean. Both the Eel River and Van Duzen River are considered traditionally navigable waters by USACE. In total, 38 ephemeral, 29 intermittent, and 16 perennial drainages/drainage segments were examined within the project area. The highest concentration of drainages is in the Bridgeville (35) and Monument Ridge (22) sections of the project area.

## 4.2.1 Ephemeral Drainages

A total of 38 ephemeral drainages and drainage segments were mapped throughout the project area; most are concentrated in Bridgeville. Ephemeral drainages mapped include 8 ditches that connect drainages to each other and 10 culverted segments of drainages. Most originate upslope and outside the project area.

## 4.2.2 Intermittent Drainages

A total of 29 intermittent drainages and drainage segments were mapped throughout the project area; most are concentrated in Bridgeville. Intermittent drainages mapped include three culverted segments. Several of the

drainages empty directly into Hoagland Creek or Fish Creek, which are both tributaries to the Van Duzen River, and two of the drainages drain directly to the Van Duzen River. Four drainages drain directly to Greenlow Creek, Shively Creek, or Monument Creek, all of which are tributaries to the Eel River. Most of the drainages originate outside the project area and are likely fed by ephemeral drainages located upslope.

## 4.2.3 Perennial Drainages

A total of 16 perennial drainages and drainage segments were mapped throughout the project area: 9 across Eastern and Western Monument Ridge, 5 across Bridgeville, 1 on Highway 101 – Monument, and 1 on Highway 101 – Shively. Seven of the perennial drainages the project crosses are segments of named drainages: Eel River, Fish Creek, Greenlow Creek, Hoagland Creek, Little Larabee Creek, Stitz Creek, and Van Duzen River. Fish Creek, Hoagland Creek, and Little Larabee Creek drain to the Van Duzen River; and Stitz Creek and Greenlow Creek both drain to the Eel River. Eel River, Greenlow Creek, Little Larabee Creek, Stitz Creek, and the Van Duzen River all support riparian wetland vegetation (Section 0). Two of unnamed perennial drainages (mapped in three segments) drain to Brushy Creek, a tributary to the Bear River; two (mapped in 4 segments) drain to Jordan Creek, a tributary to the Eel River; and one drains directly to Hoagland Creek, a tributary to the Van Duzen River. All perennial drainages within the project area were carrying water at the time of the field surveys. Several of the perennial drainages originate within the project area and are spring-fed. Most of the drainages originate outside the project area and are likely fed by ephemeral and intermittent drainages located upslope.

# 4.3 NON-JURISIDICTIONAL FEATURES

Nine sample test points were established in locations that appeared to be potential wetlands. However, upon examination and completion of the 3-factor USACE analysis, these locations were determined to be in uplands and, therefore, not in jurisdictional wetland areas (Figure 5).

## 4.3.1 Upland Ditches

Access roads crisscross the project area, many of which have unvegetated man-made ditches associated with them. Ditches exhibiting indicators of OHWM but determined to be wholly excavated in and conveying runoff to and from uplands are not considered jurisdictional features and were, therefore, not included in mapping.

## 4.3.2 Erosional Features

Several other areas appearing from aerials to be potentially jurisdictional features were determined in the field to be erosional features with no indicator of OHWM, no bed or bank, and/or no wetland indicators. These features are not considered jurisdictional and were therefore not mapped.

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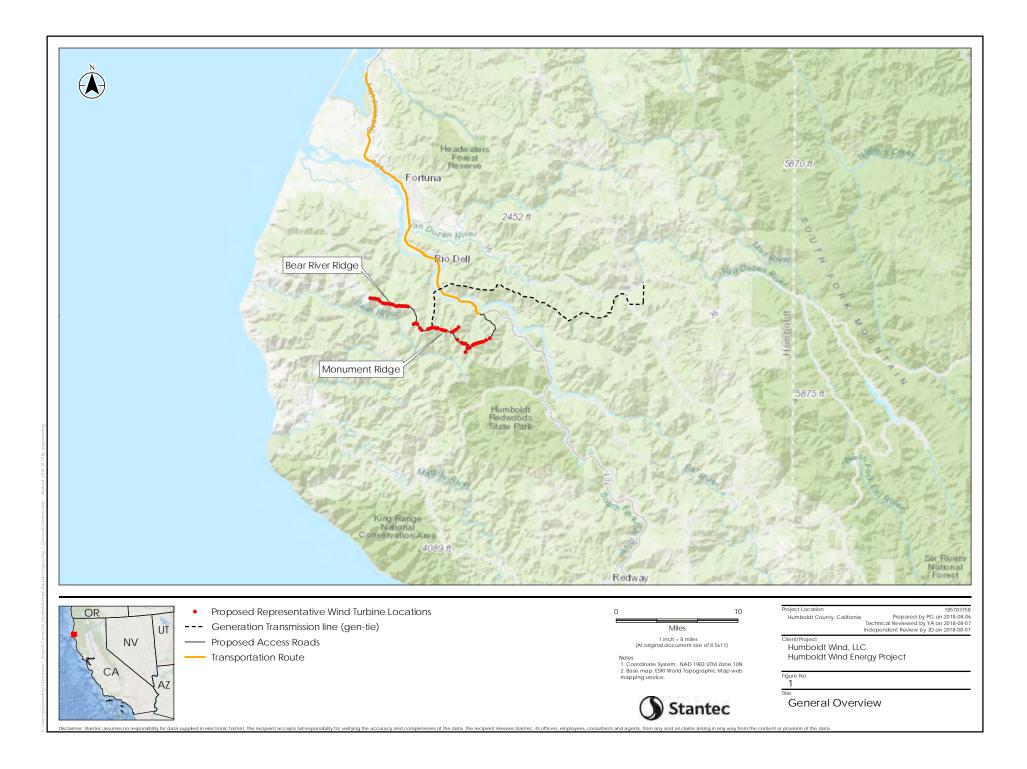
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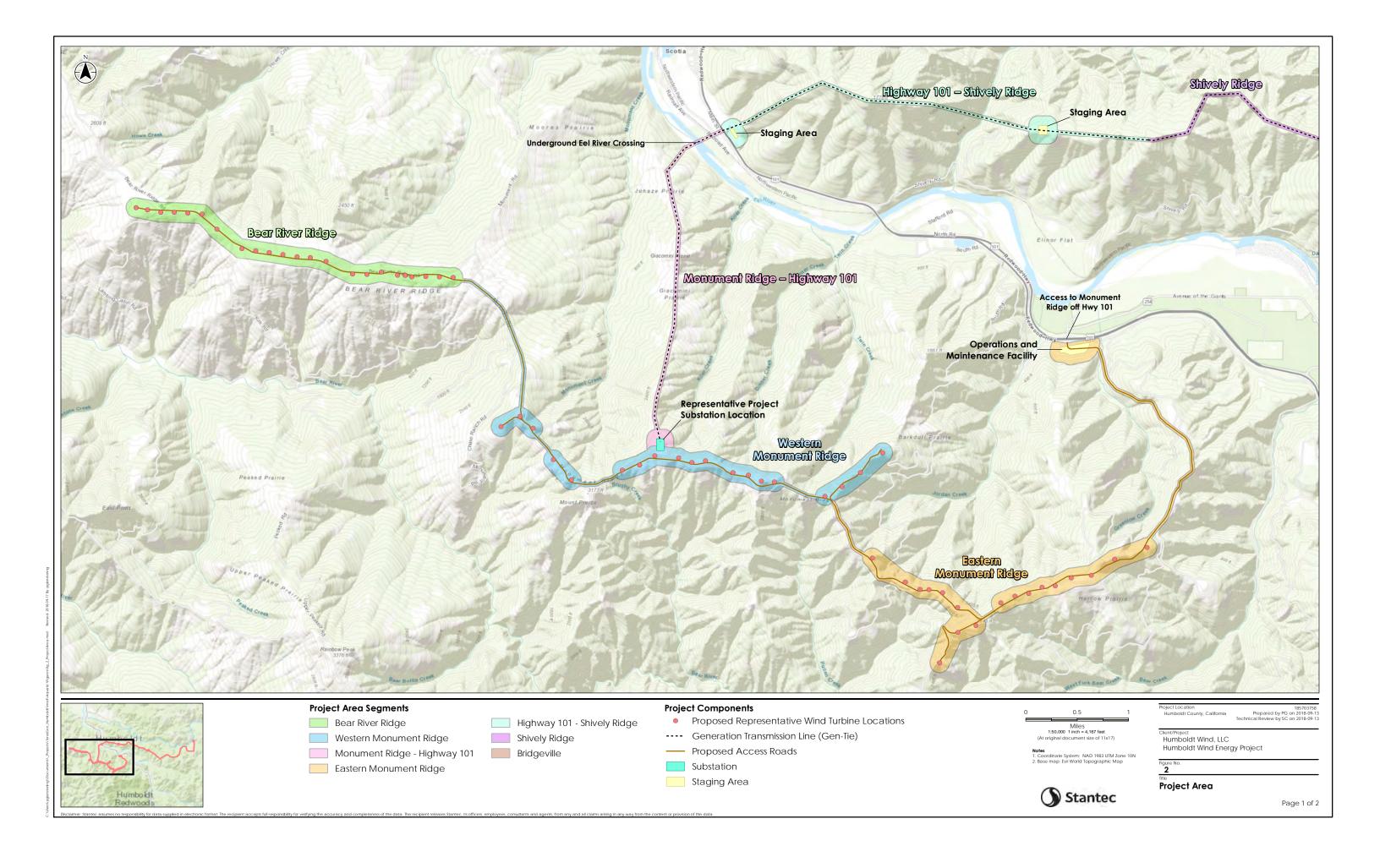
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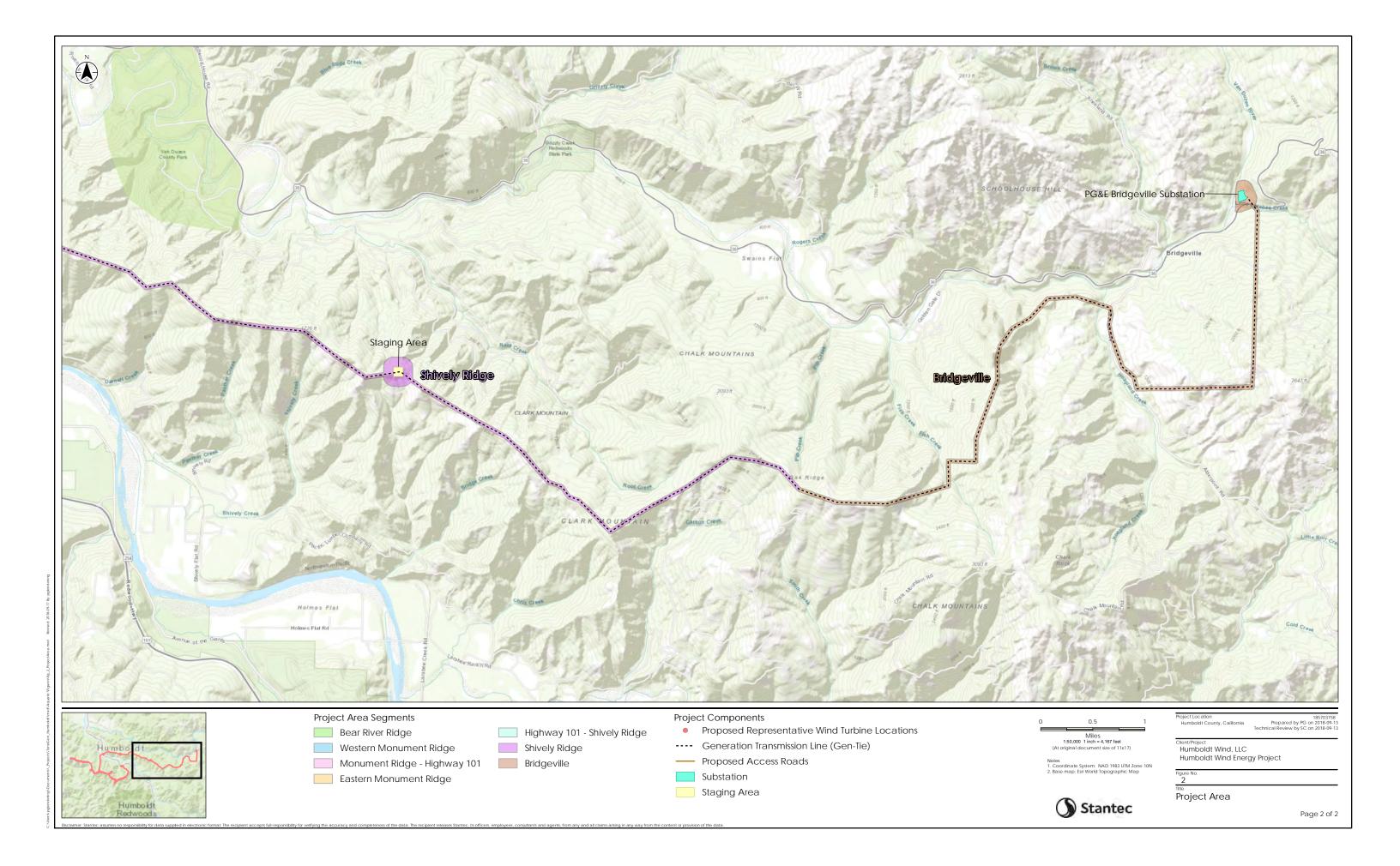
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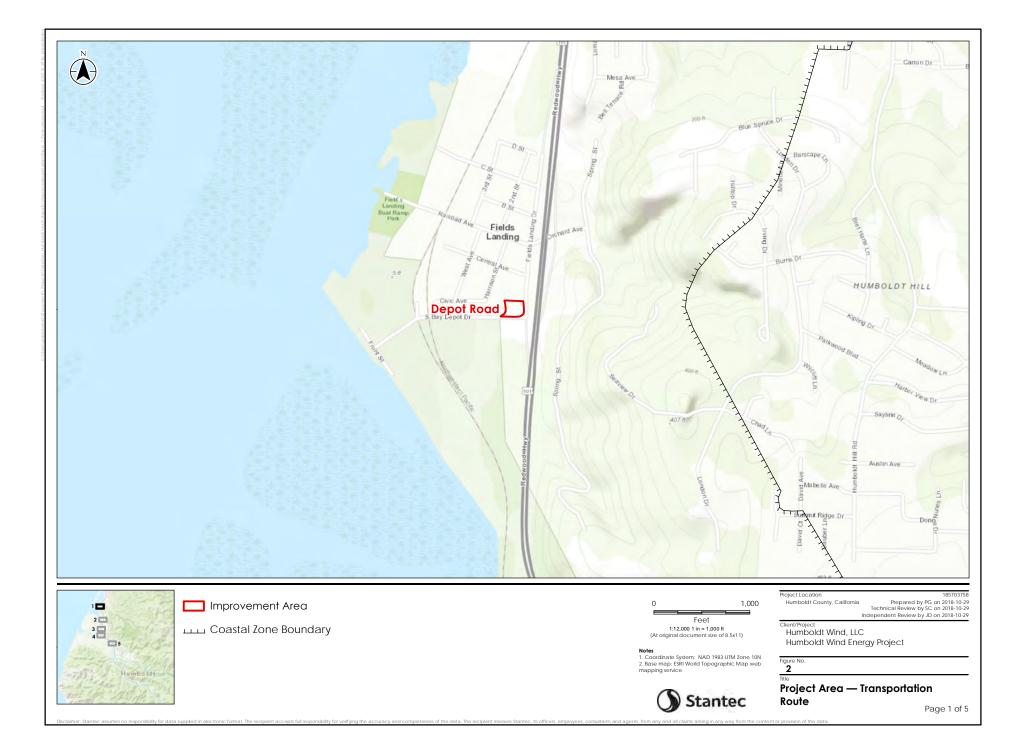
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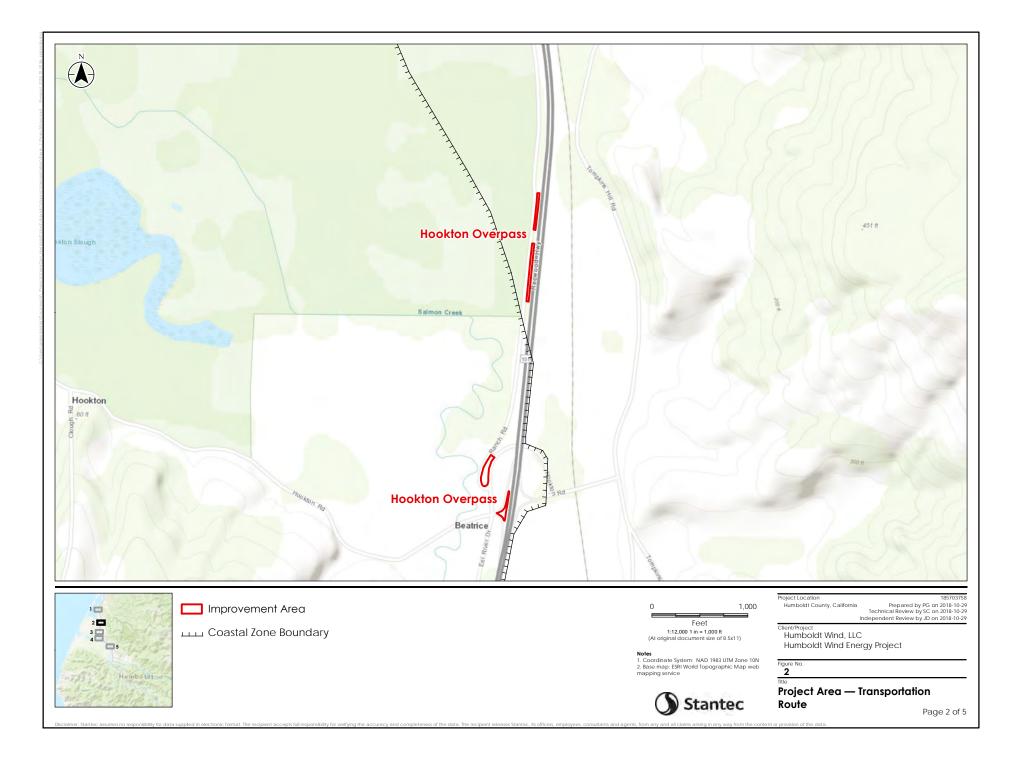
# **FIGURES**

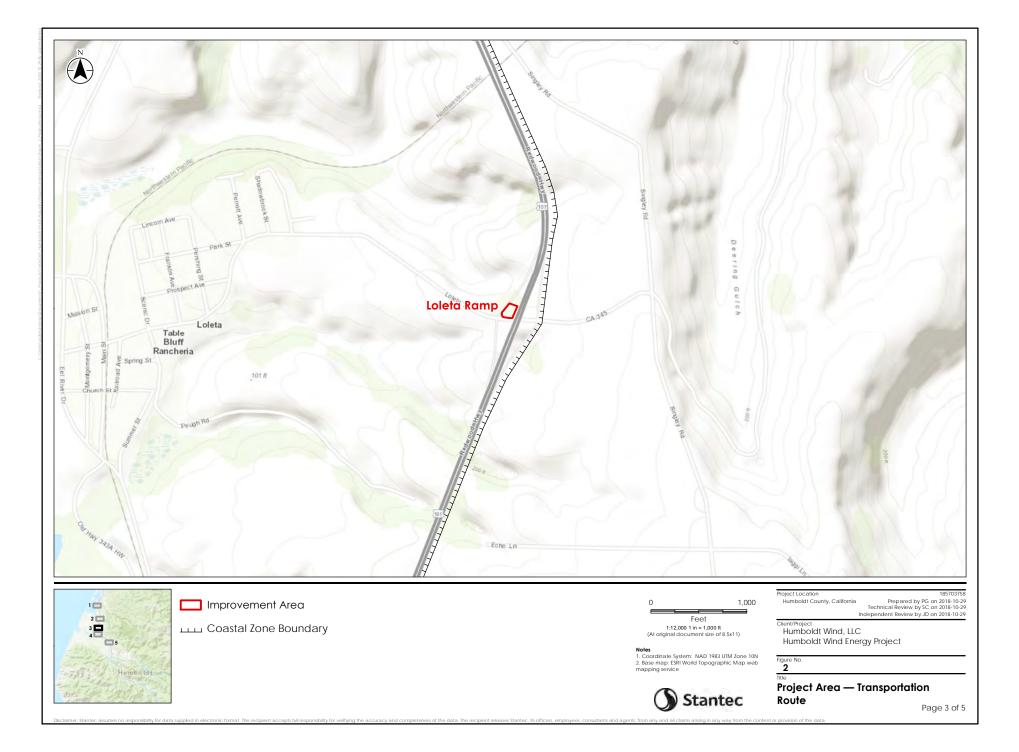


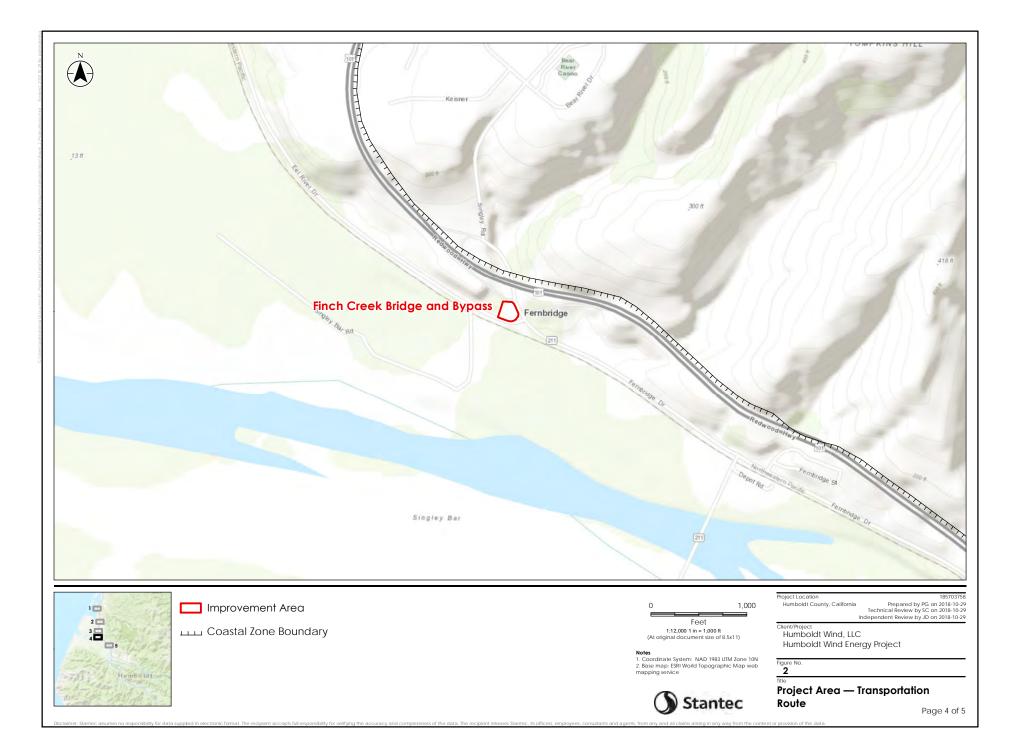




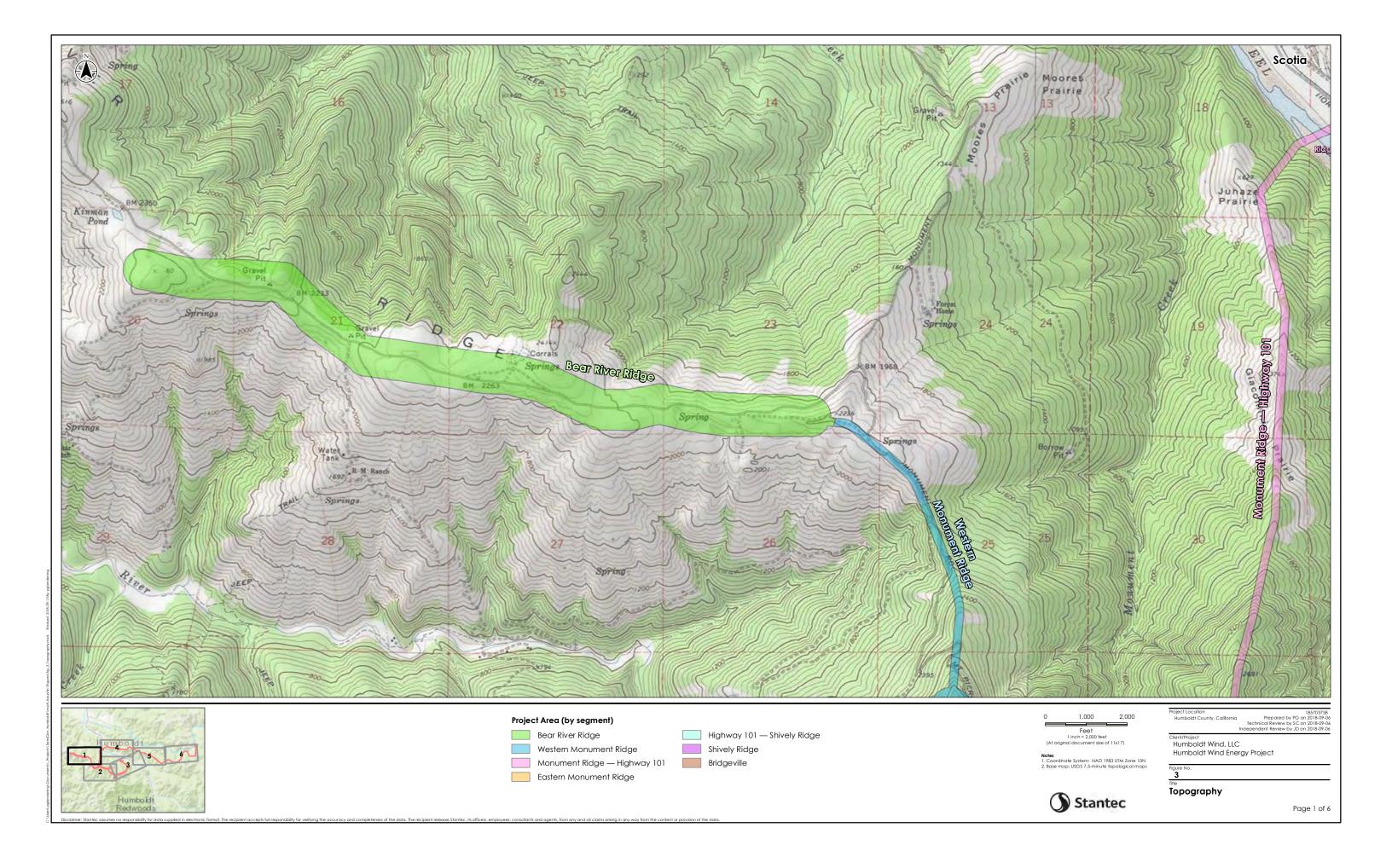


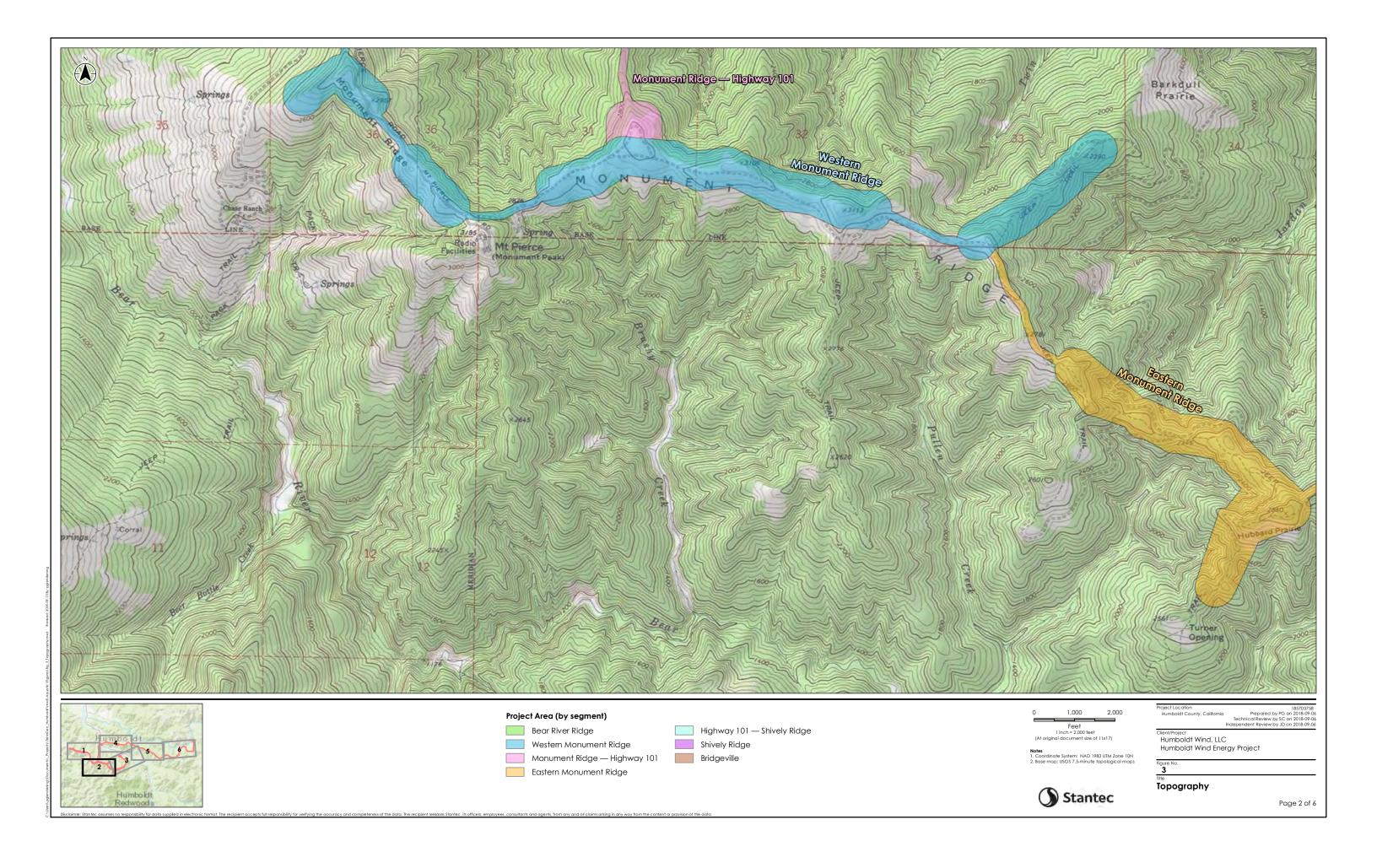


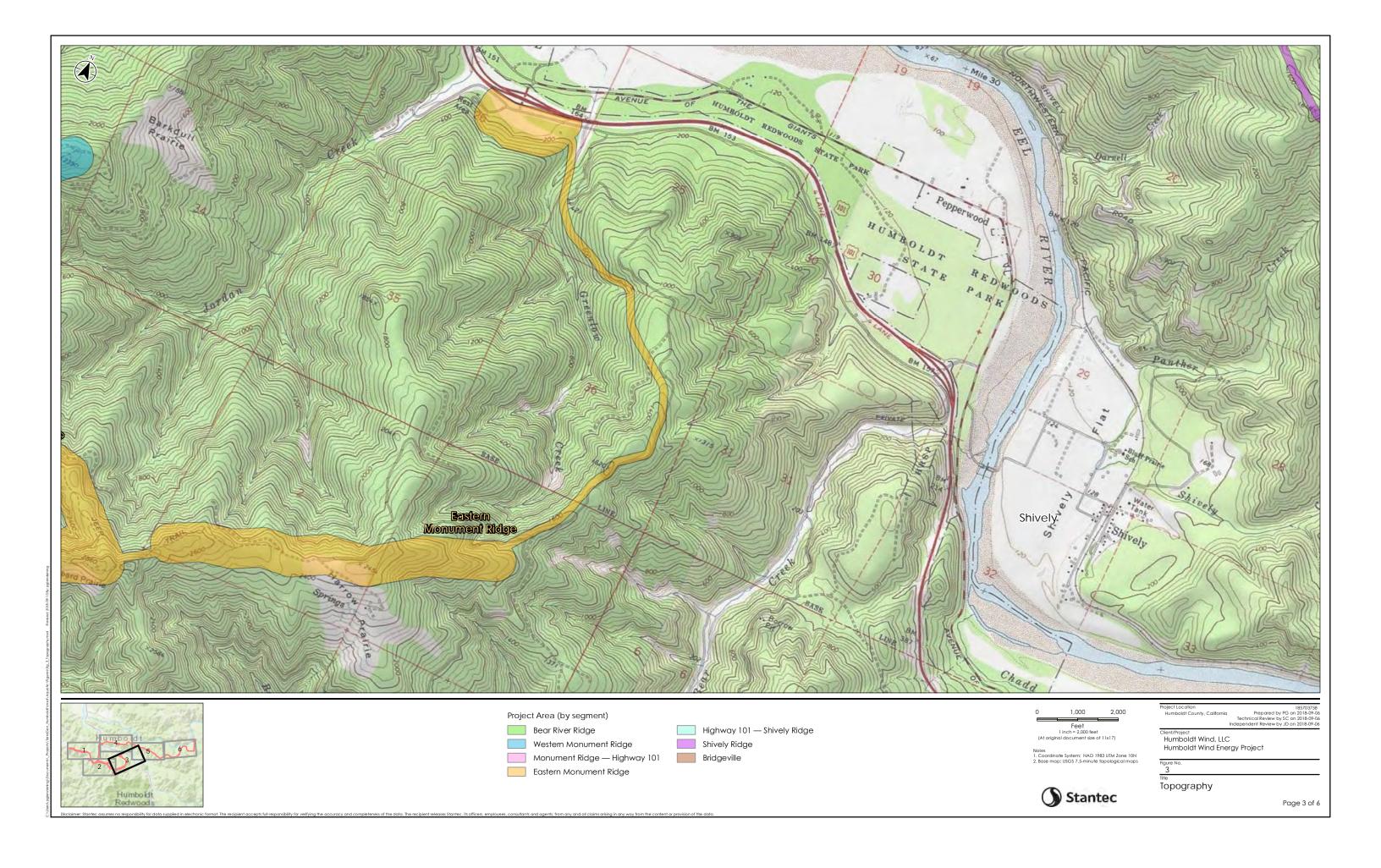


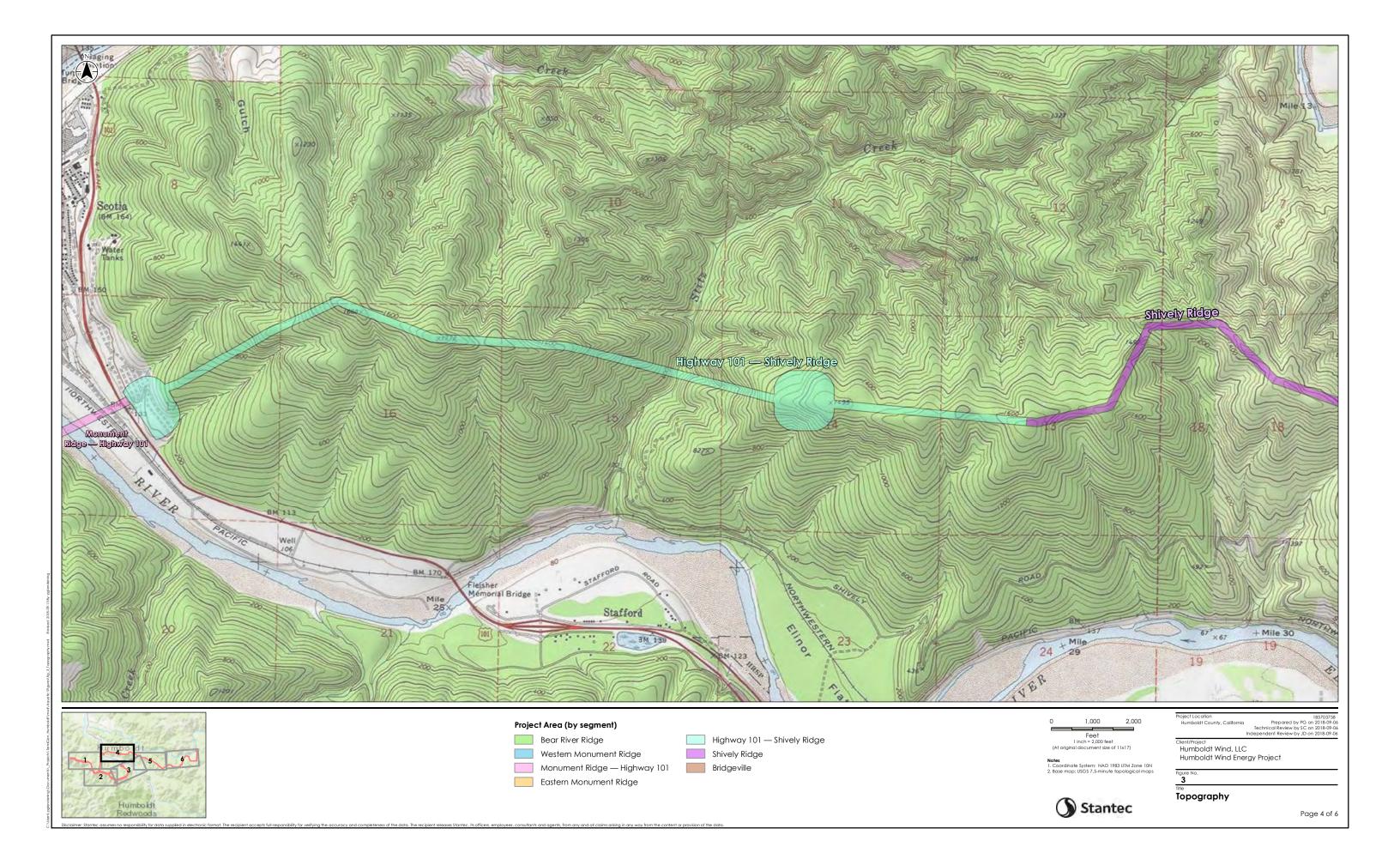


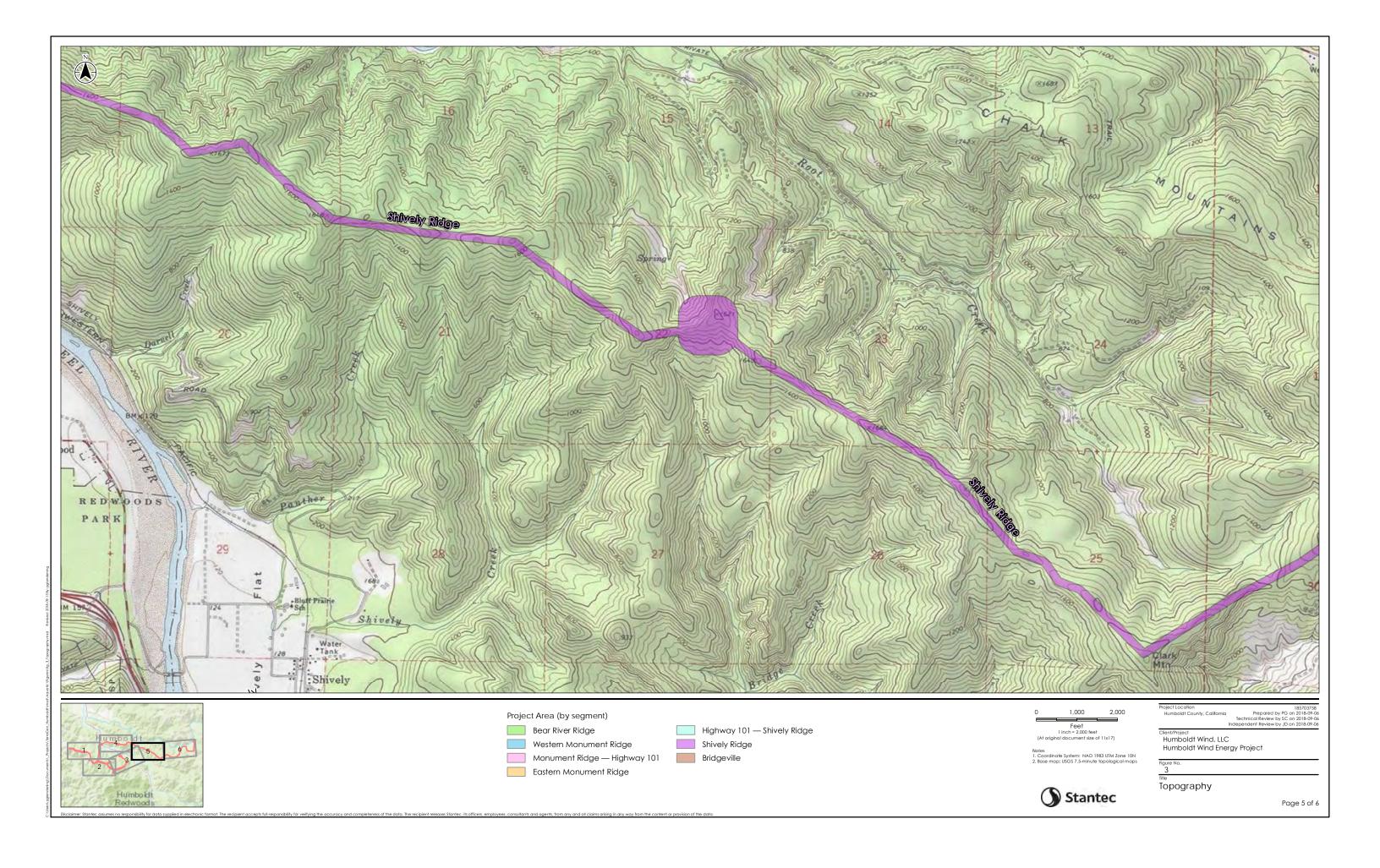


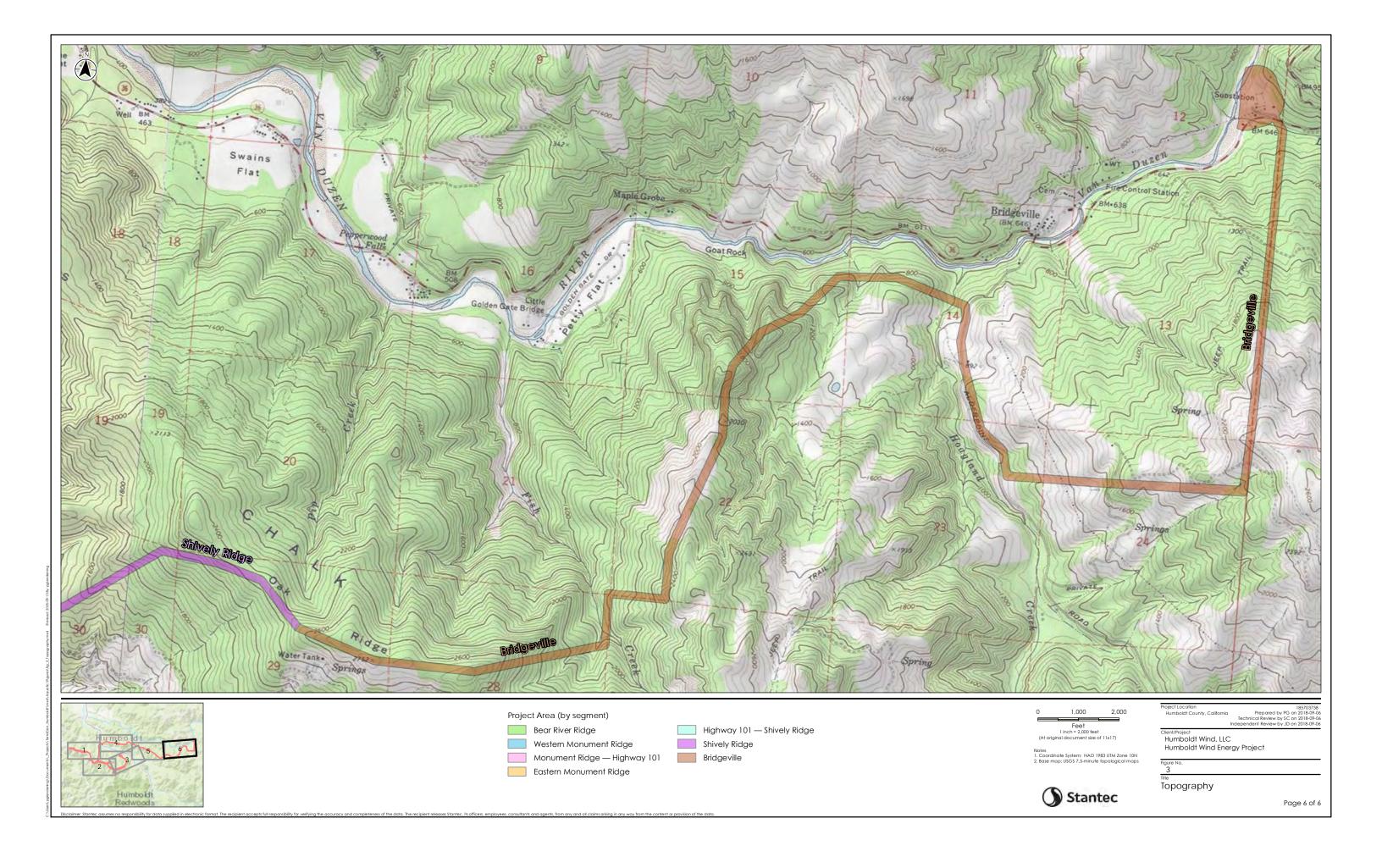


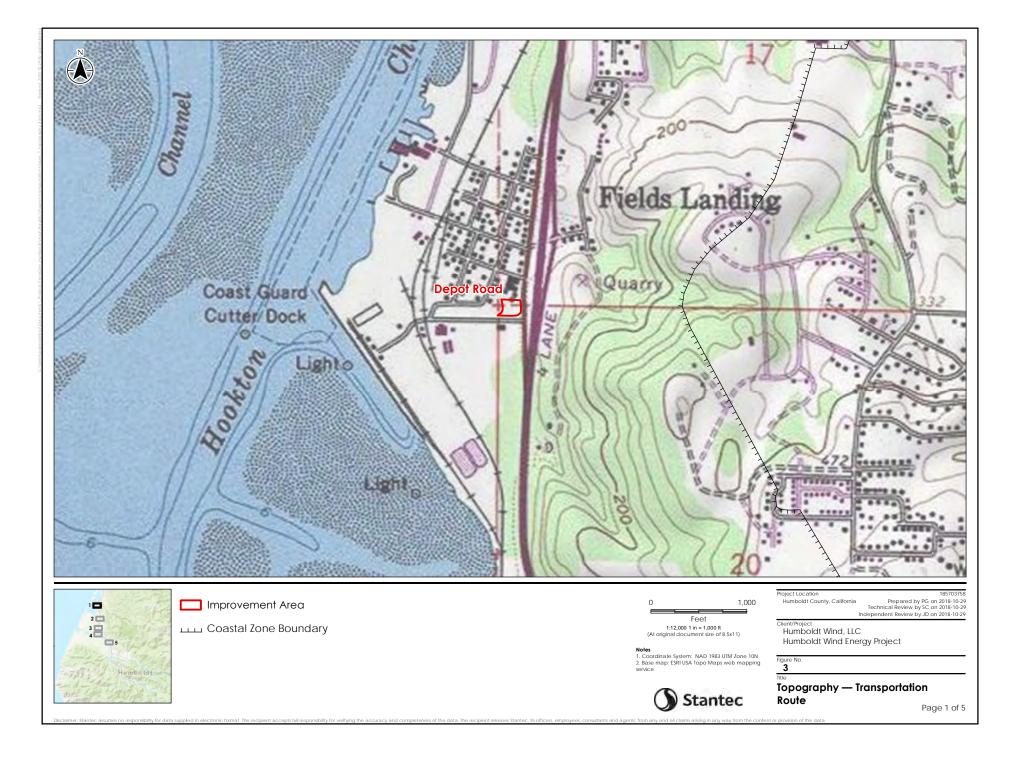


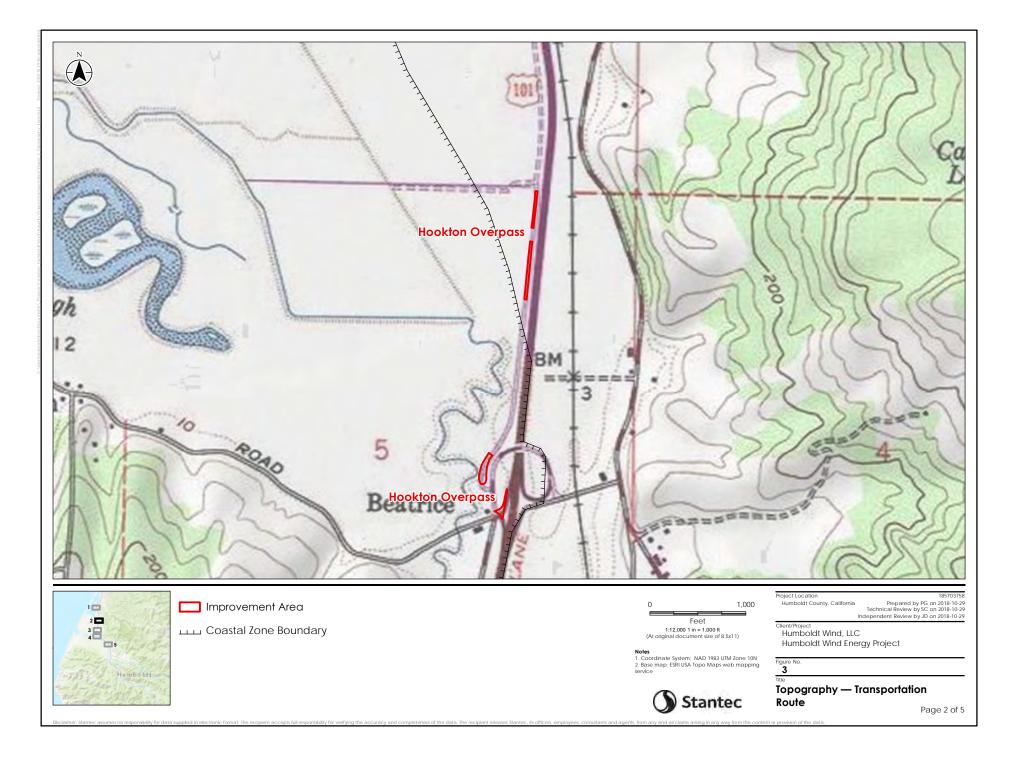


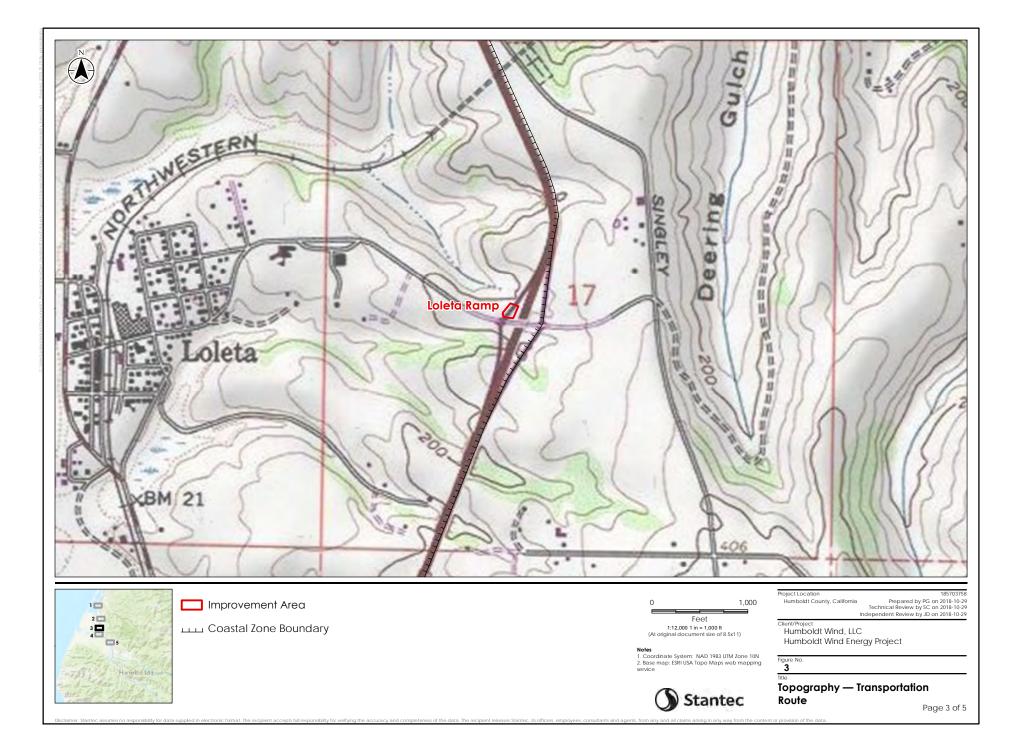


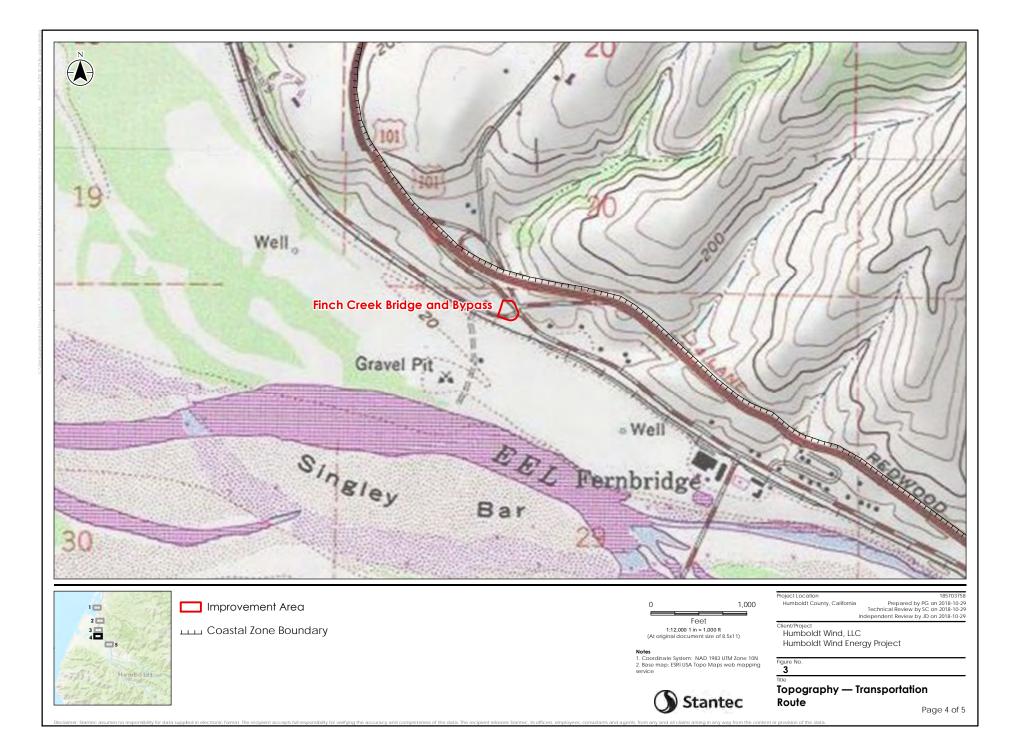


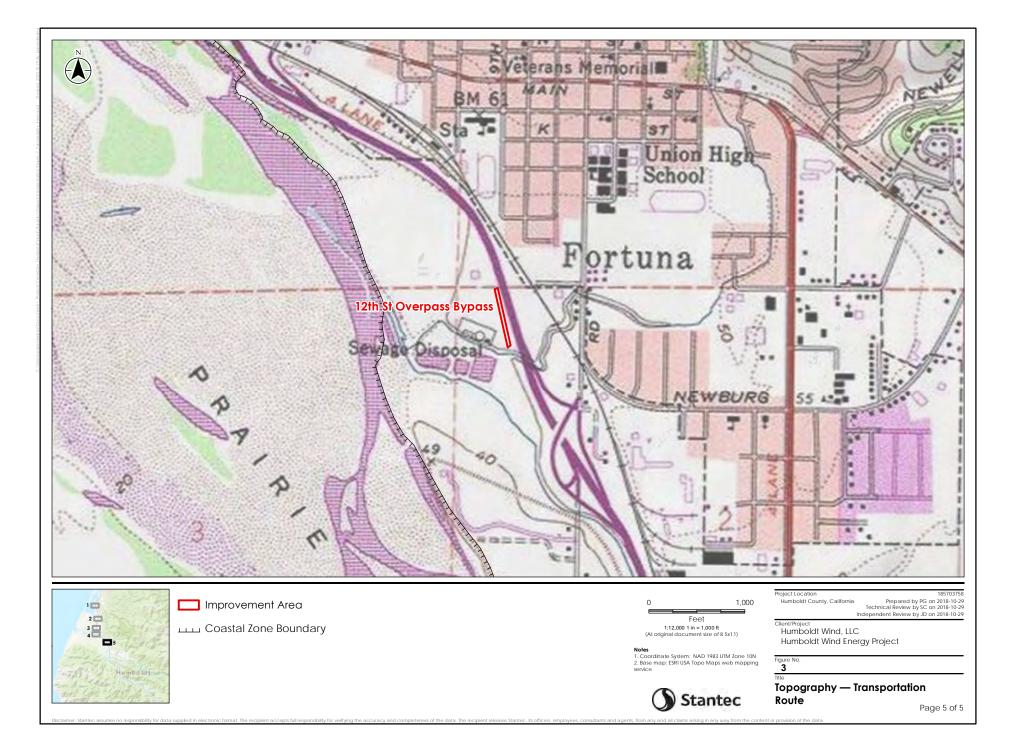


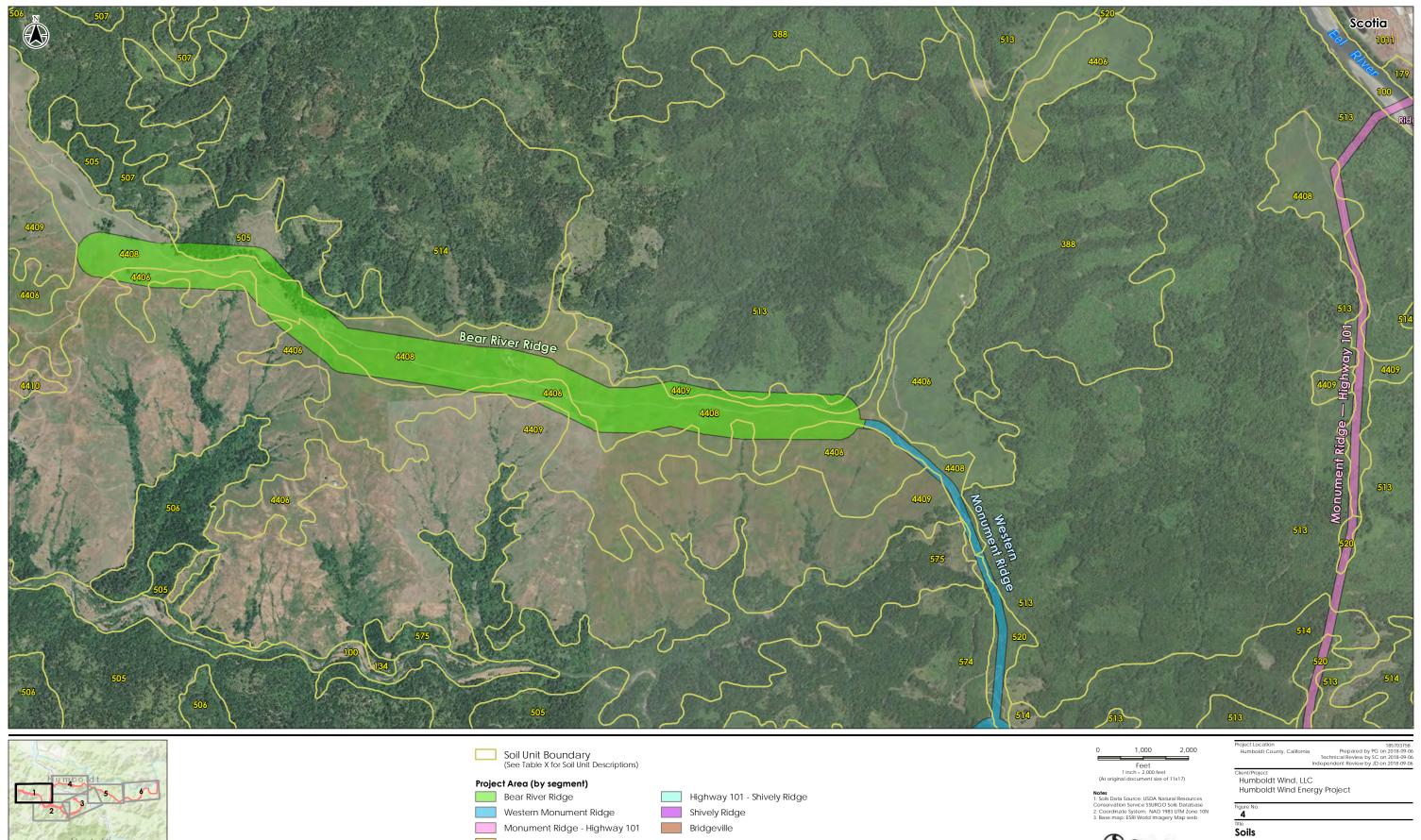


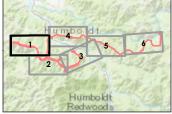




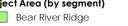








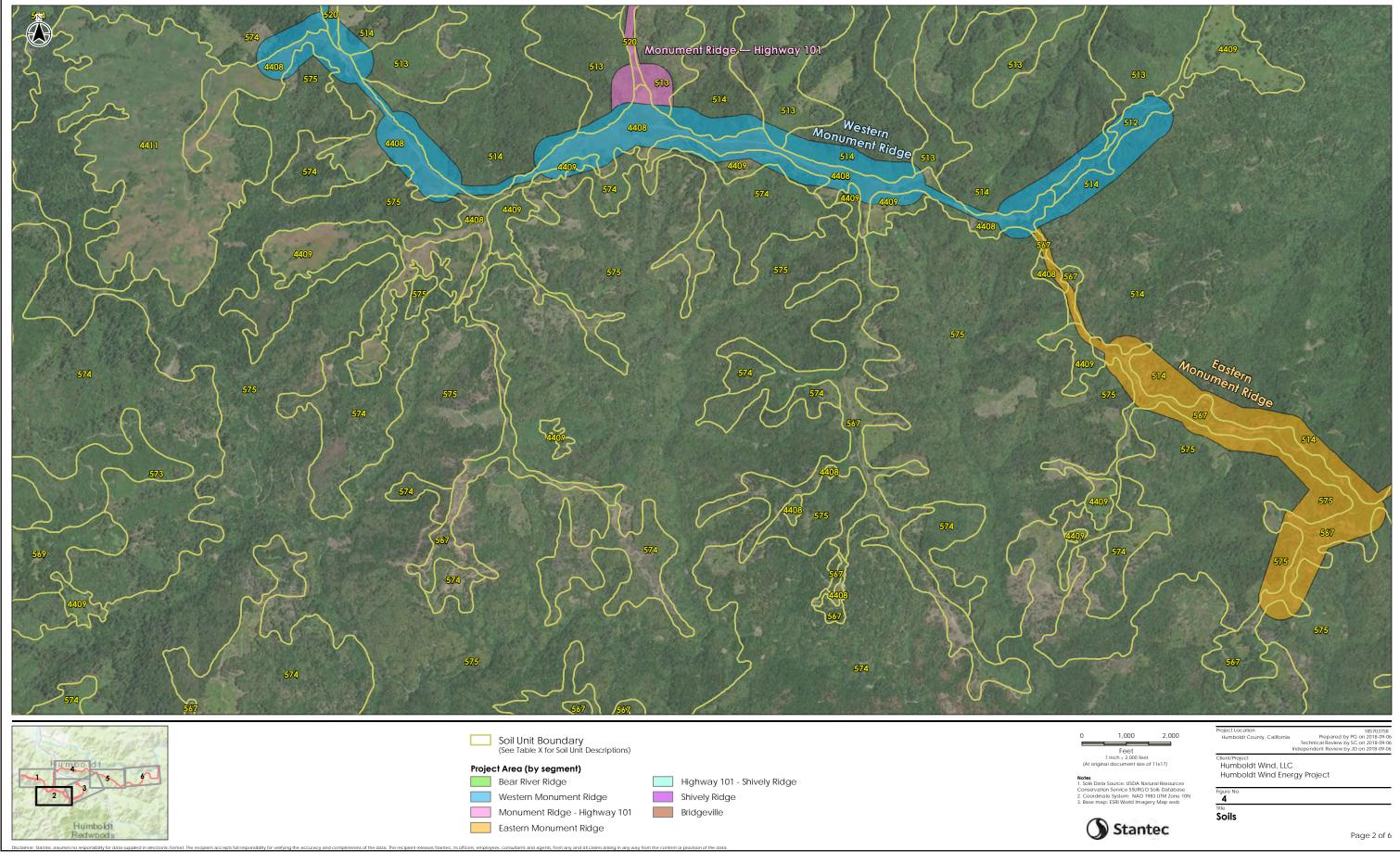


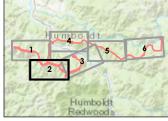


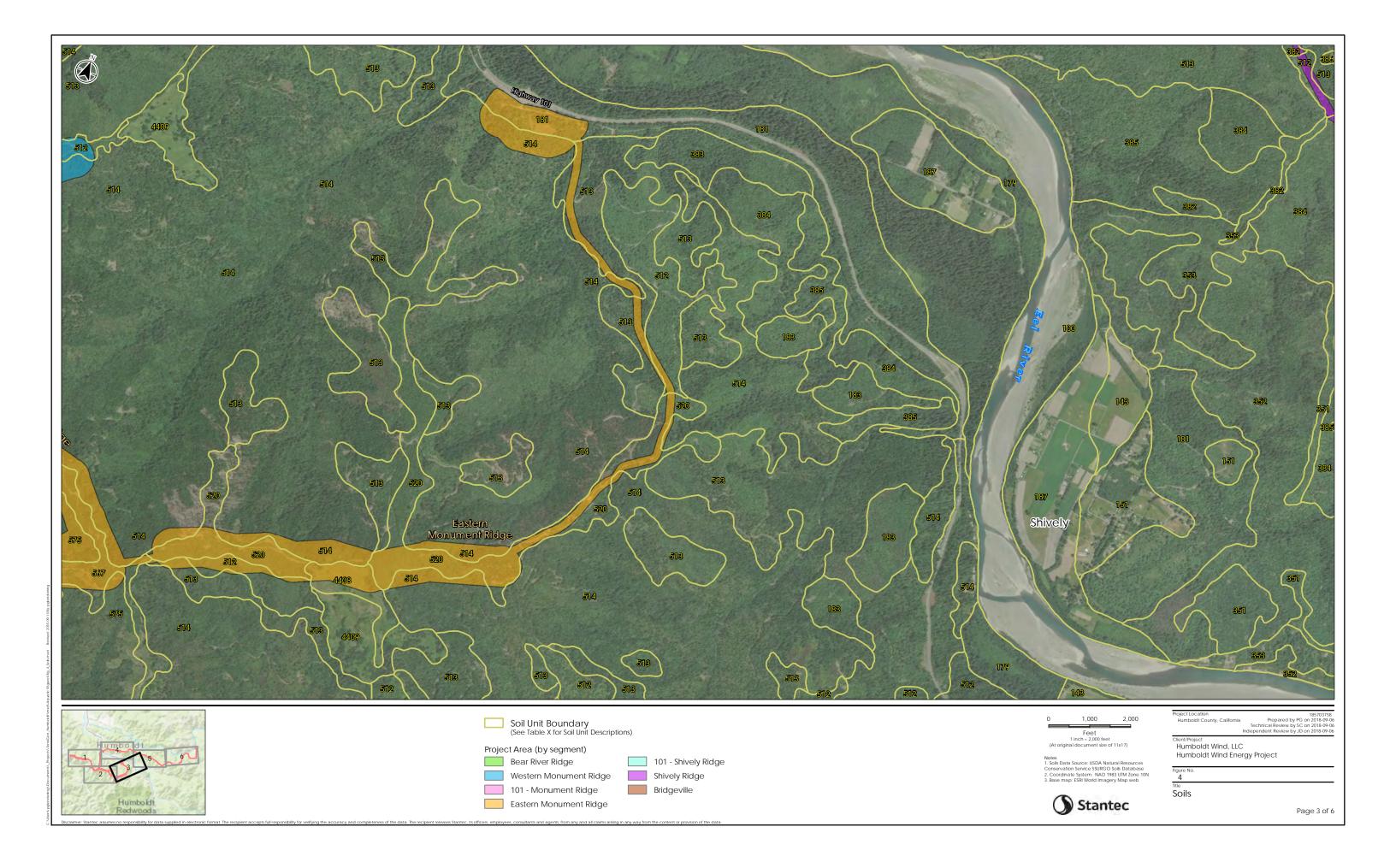
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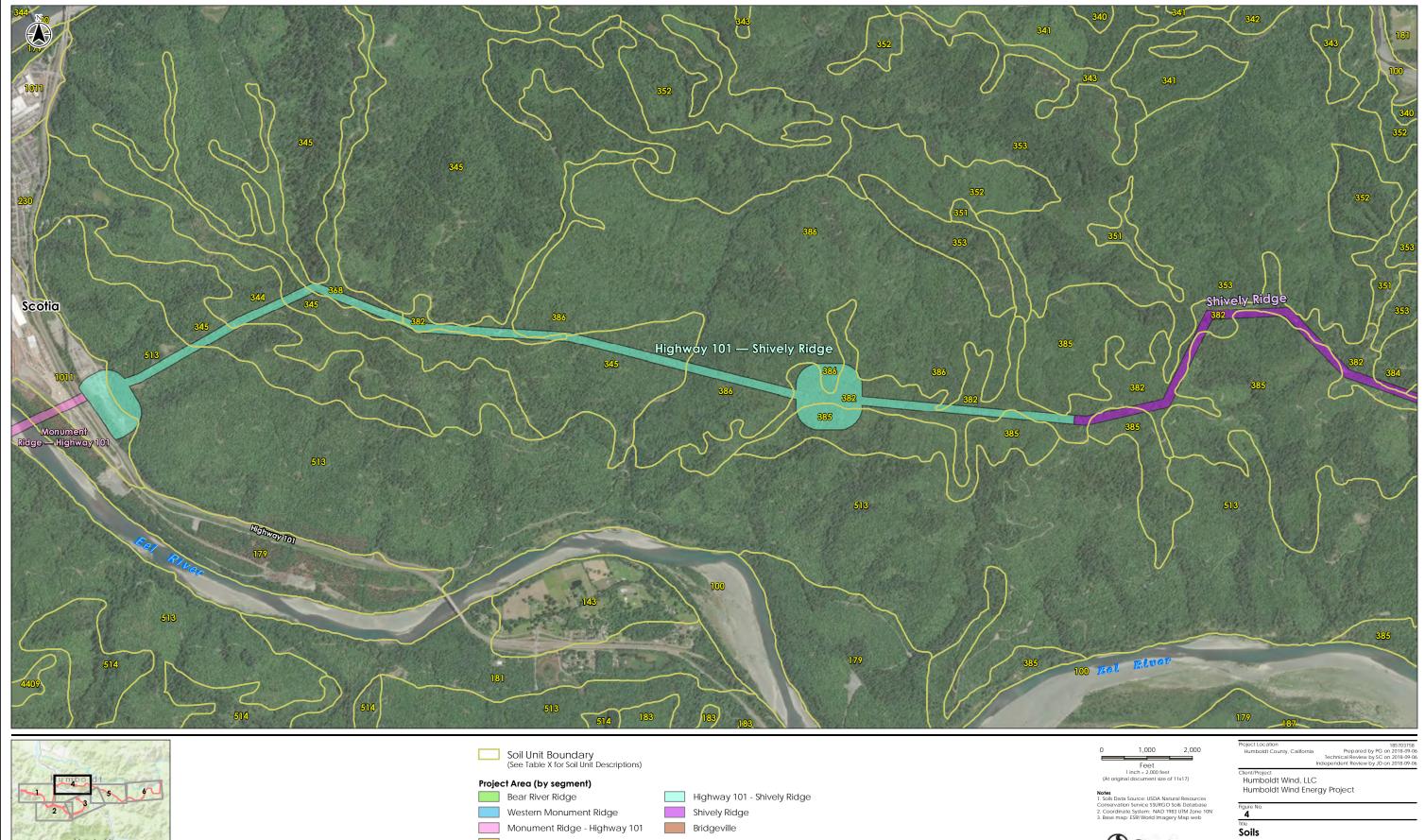


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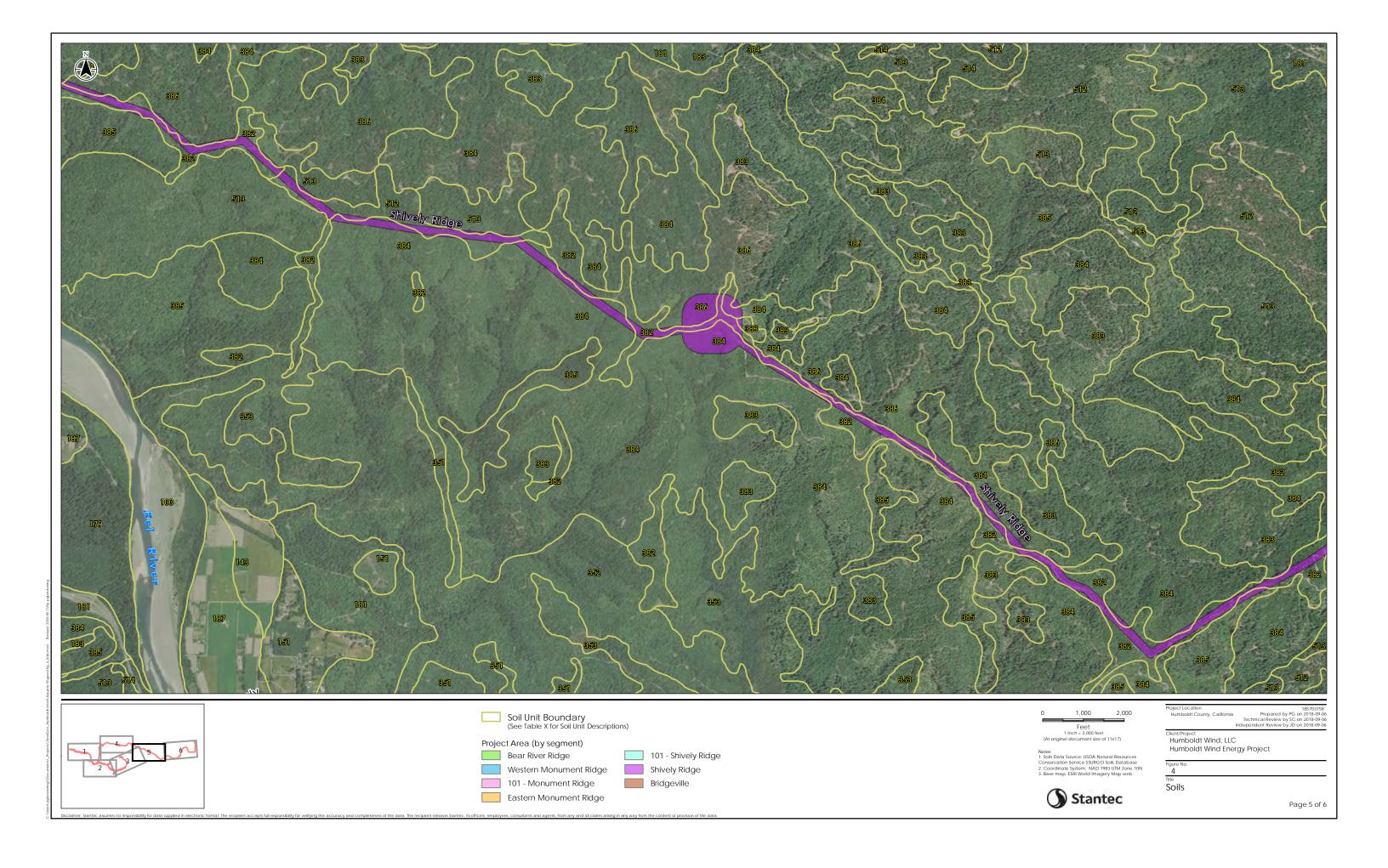
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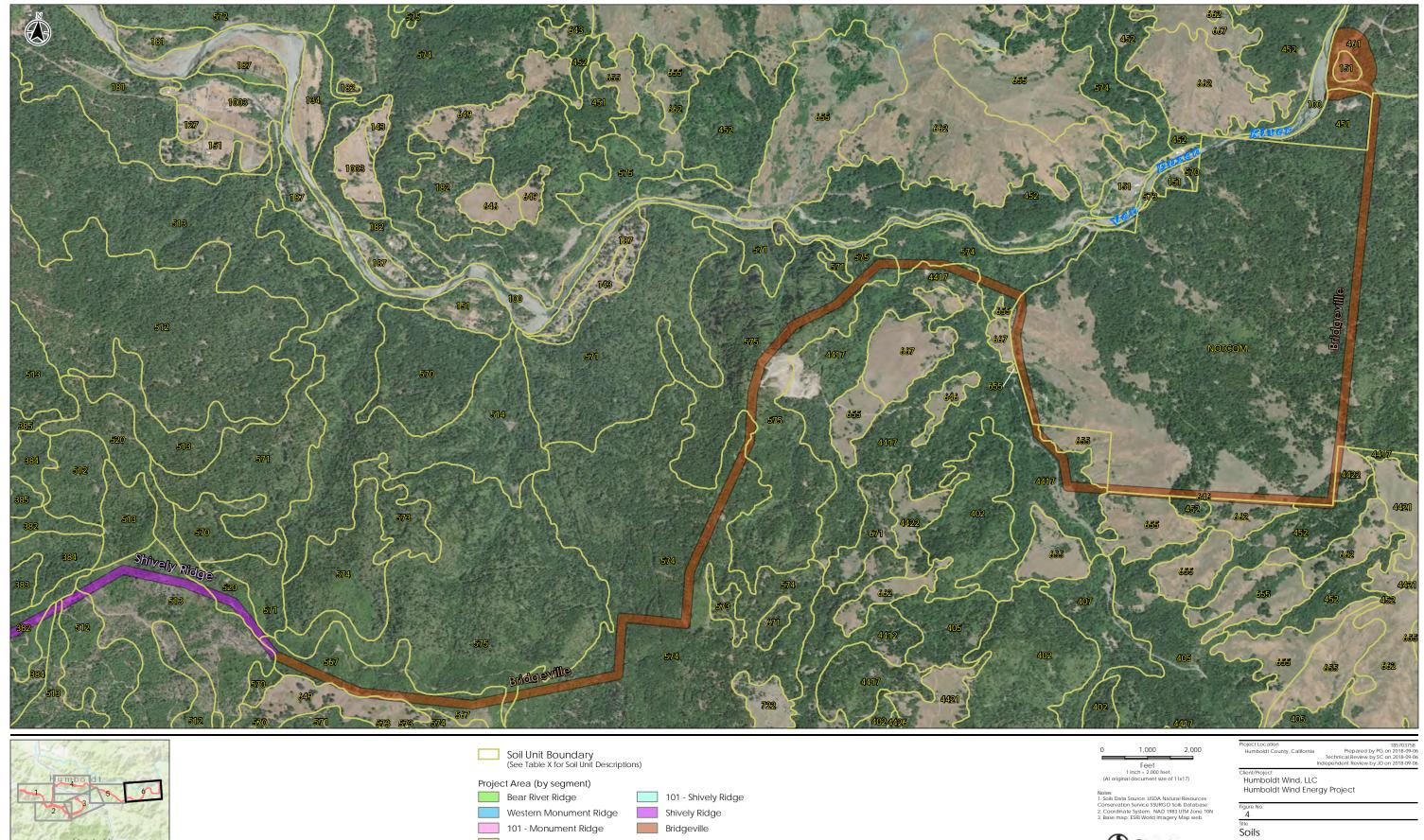
Humboldt

Bridgeville



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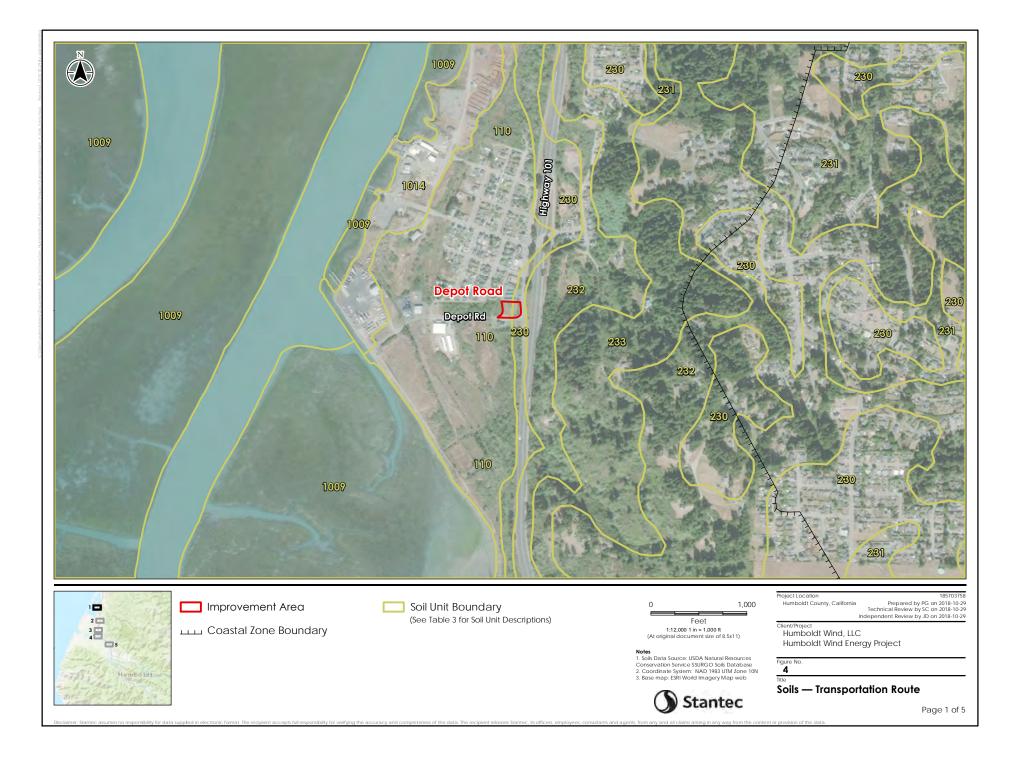


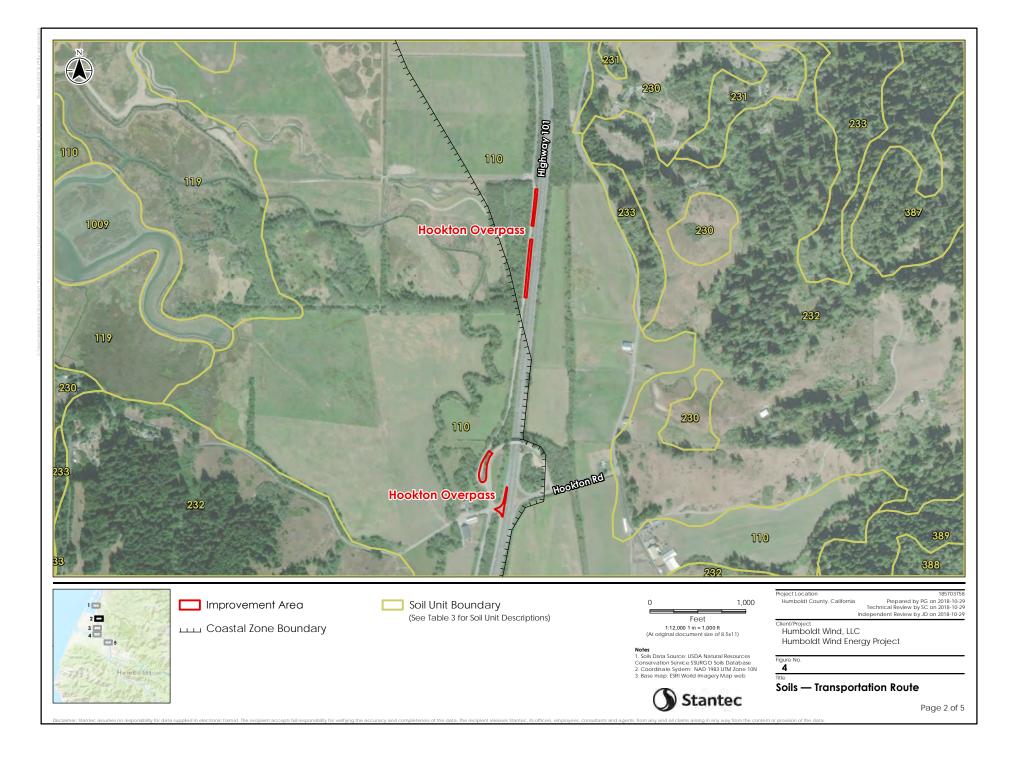
Eastern Monument Ridge

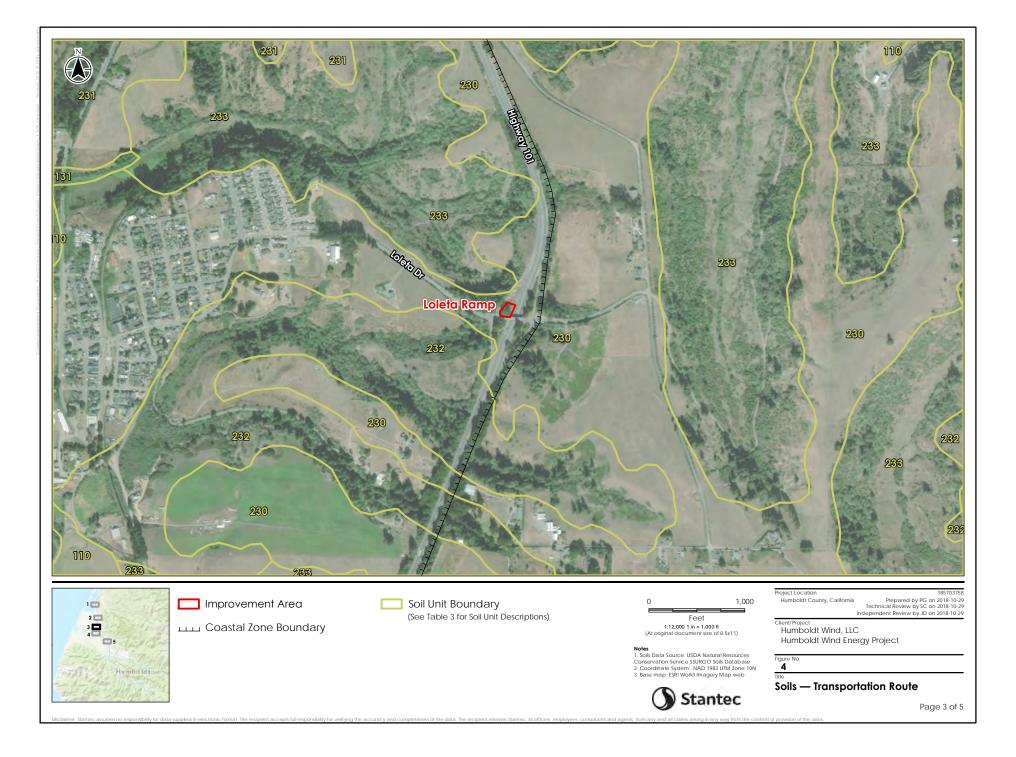
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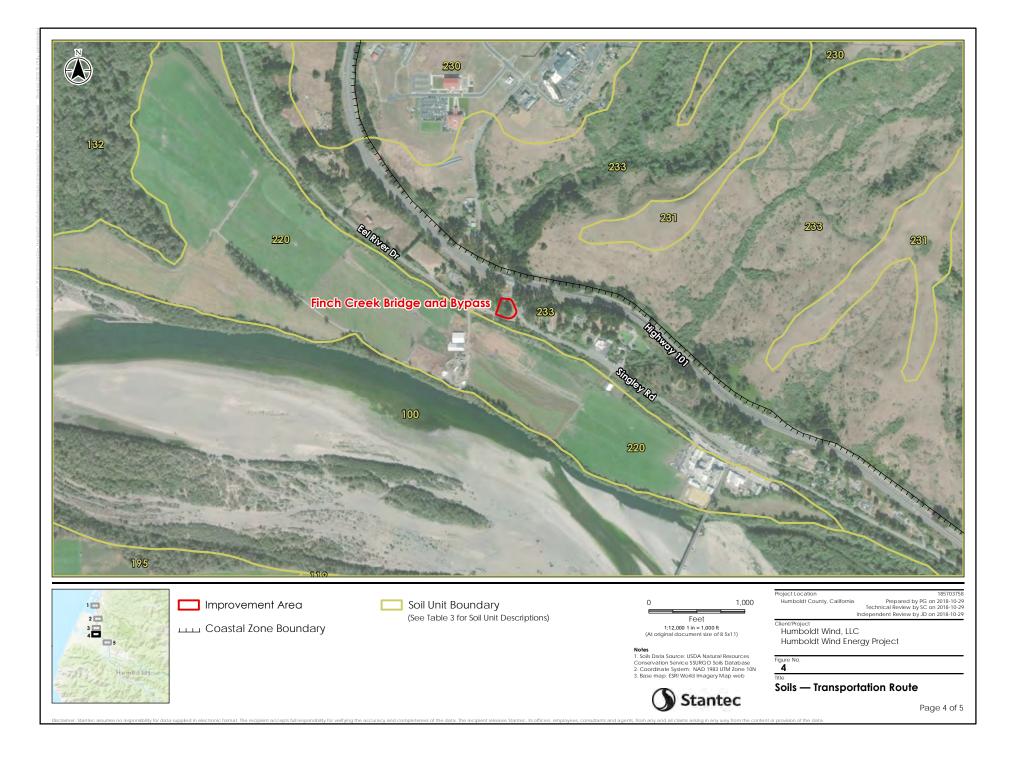


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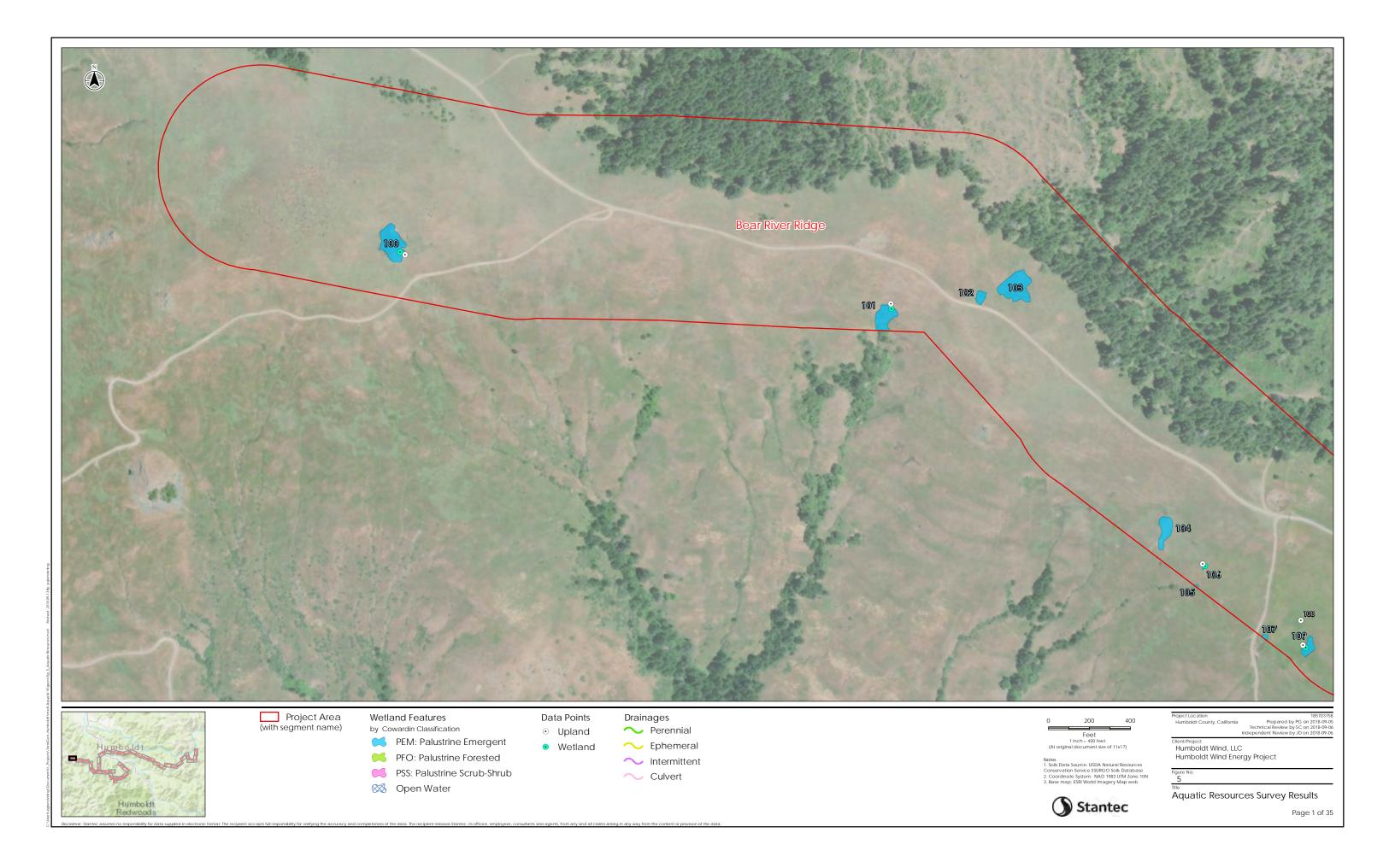


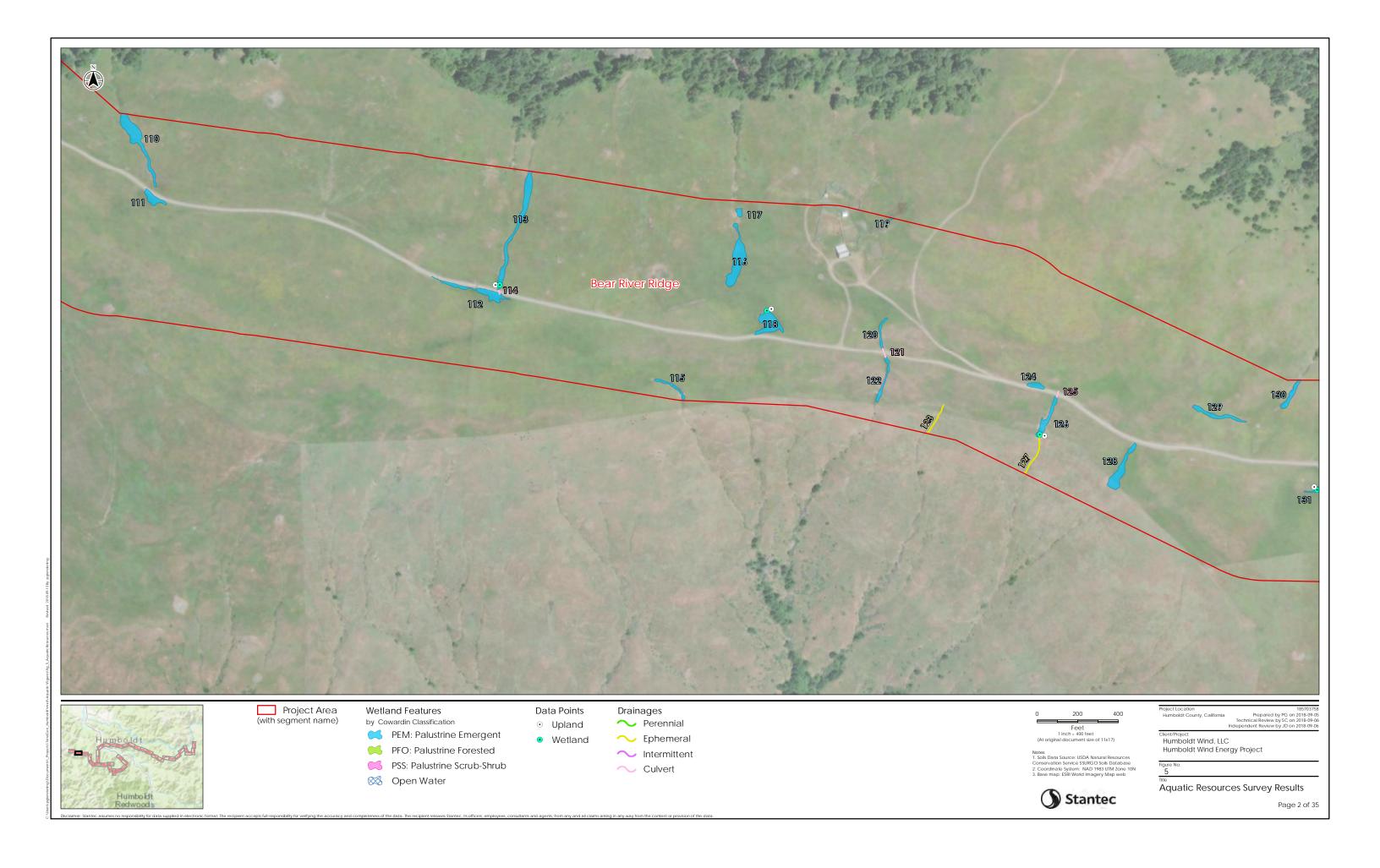


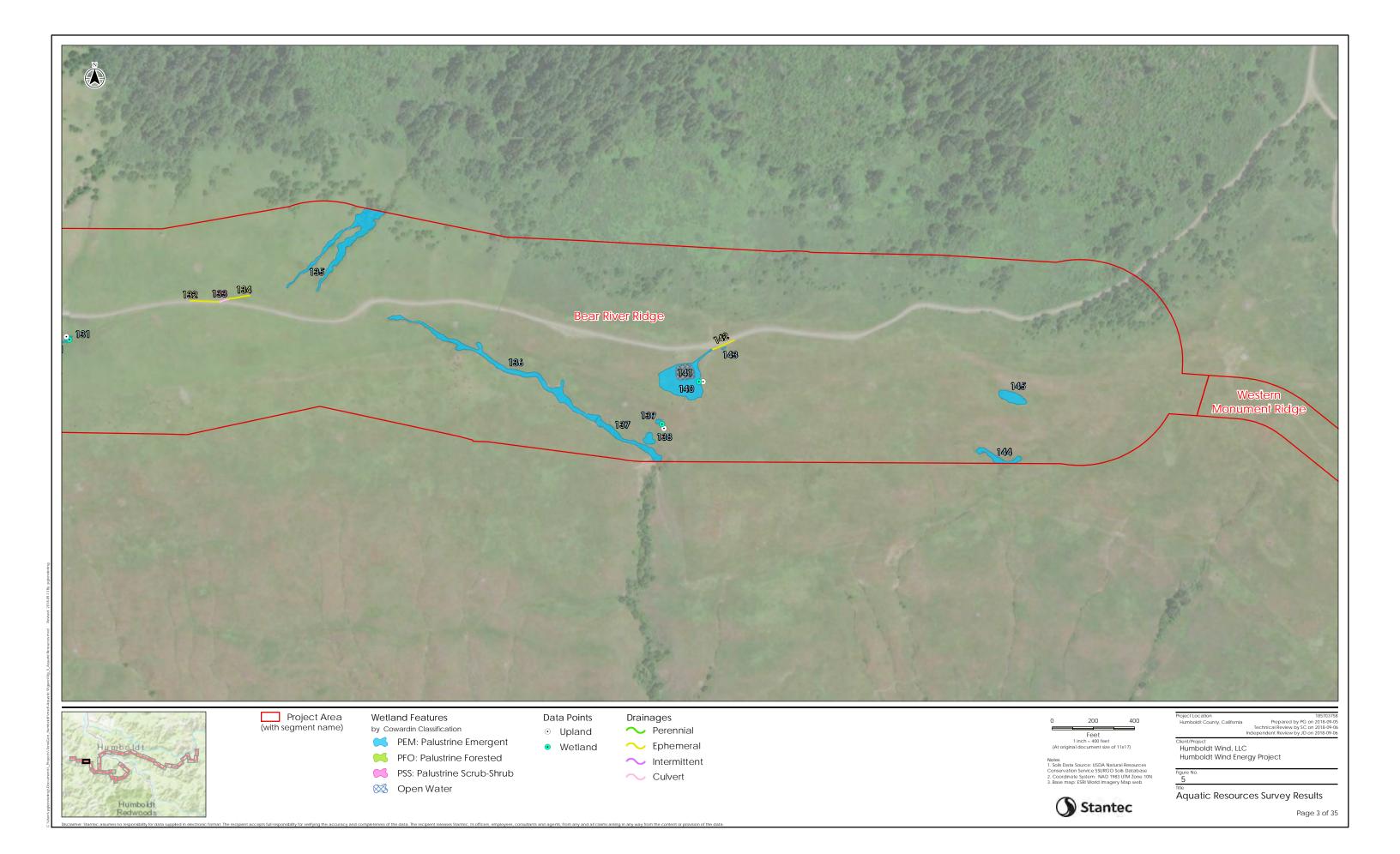


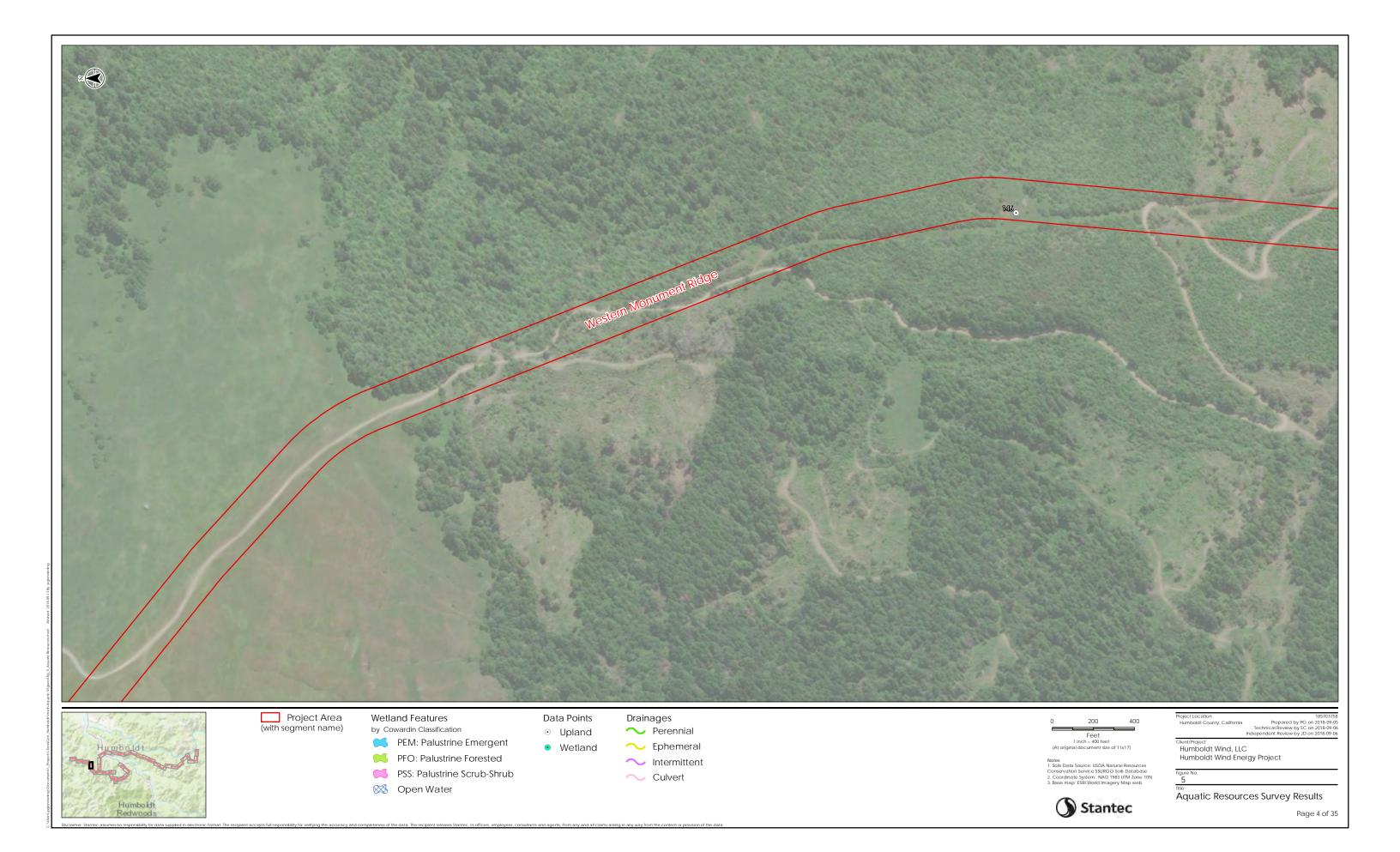


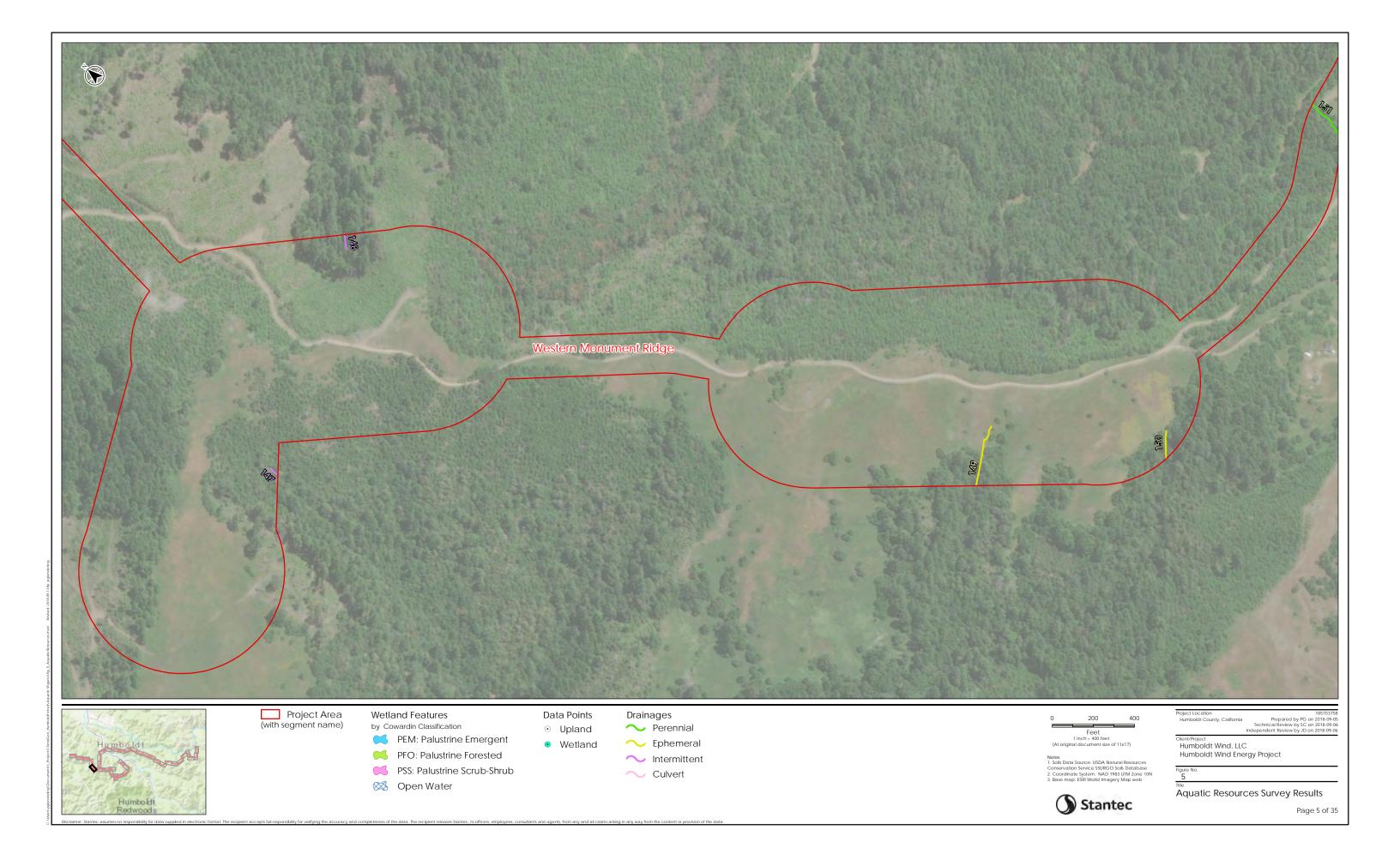


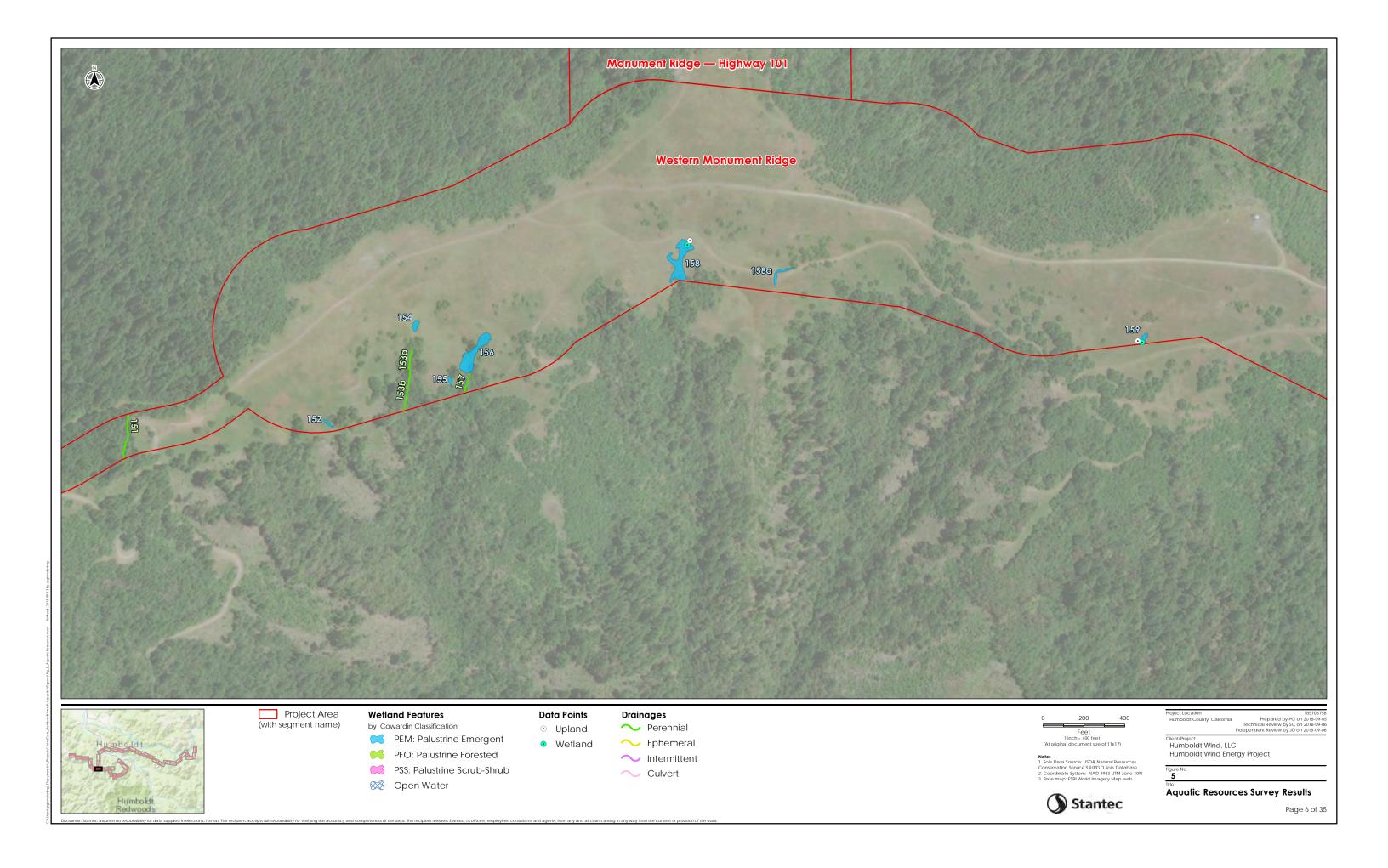


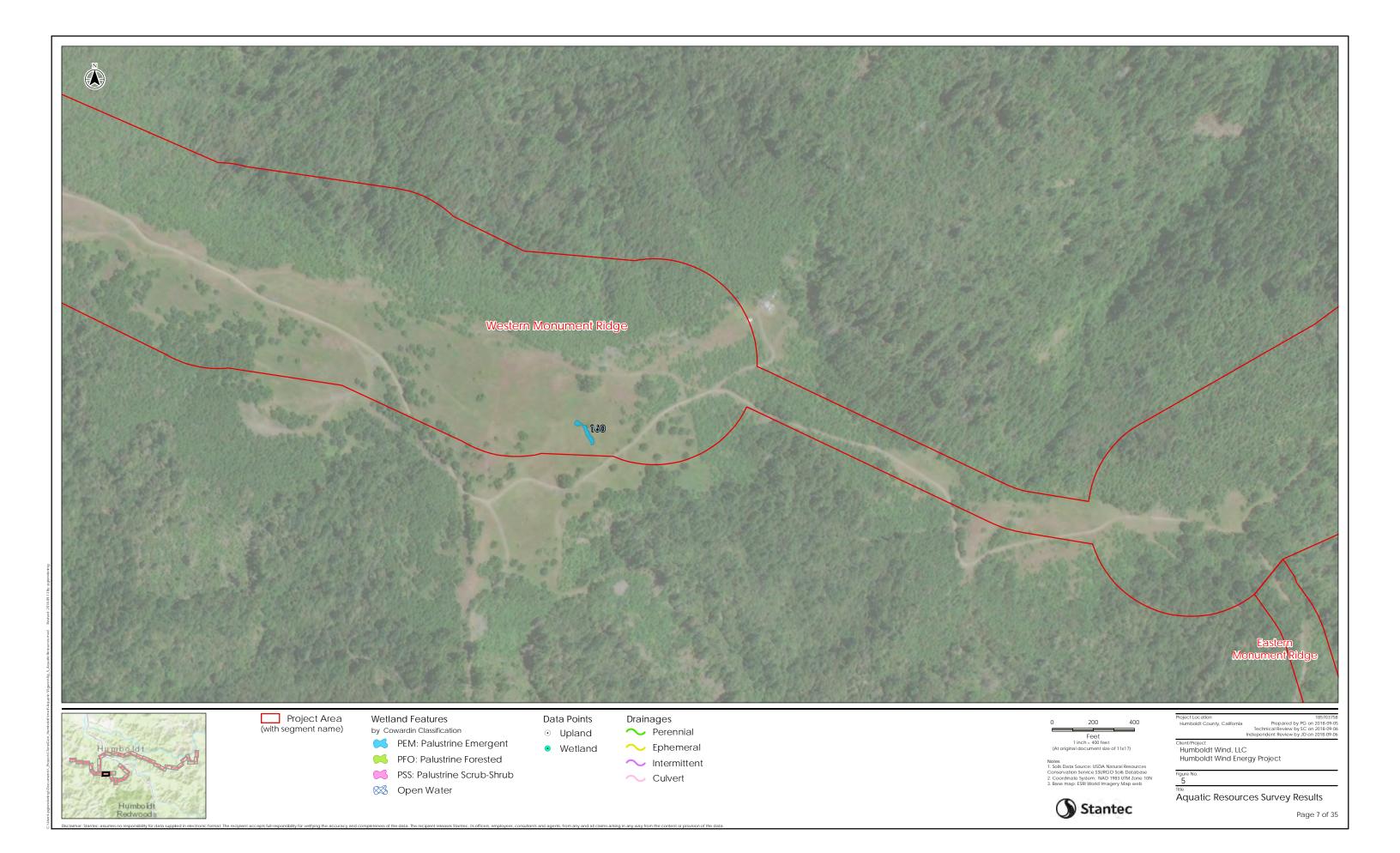






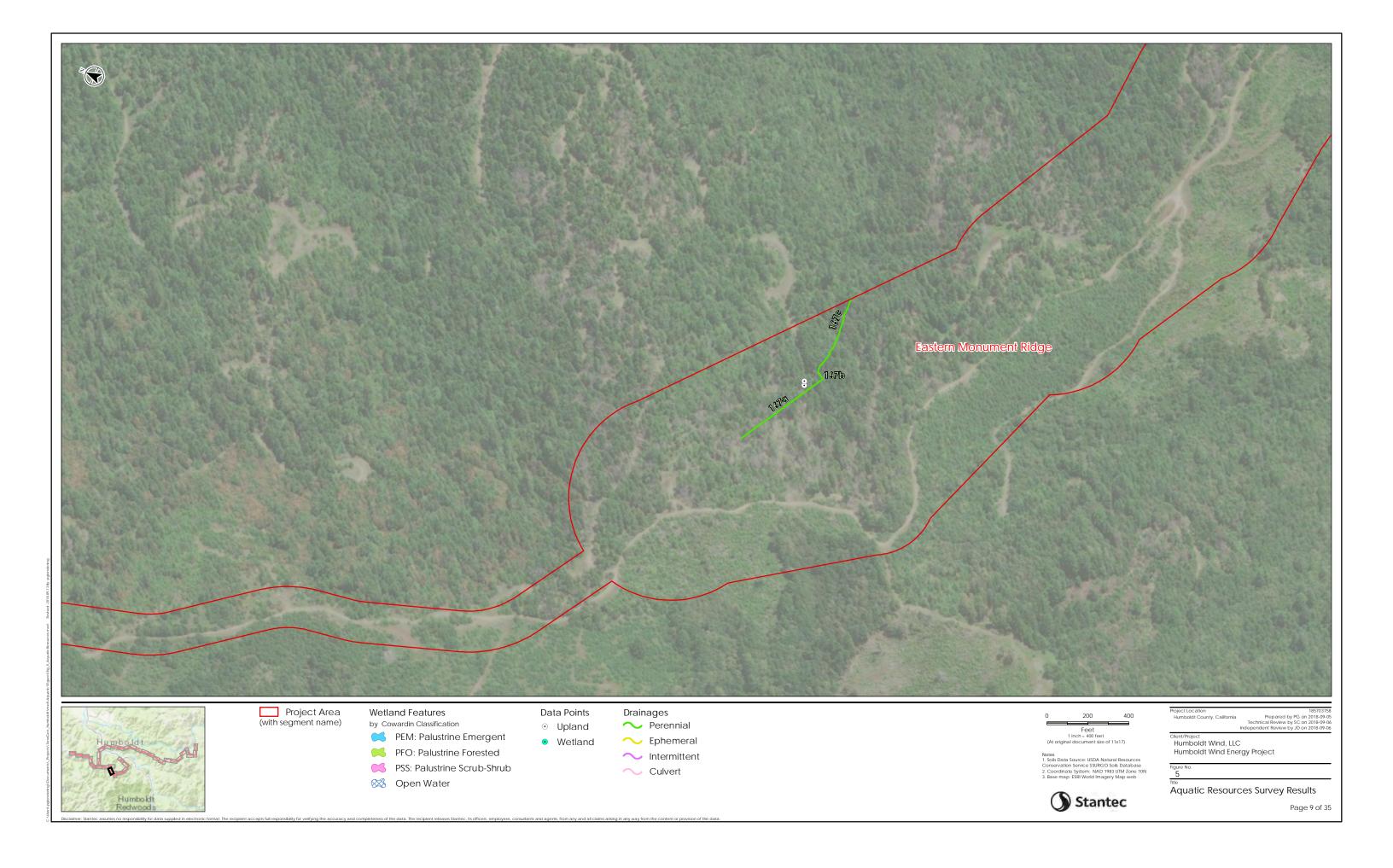


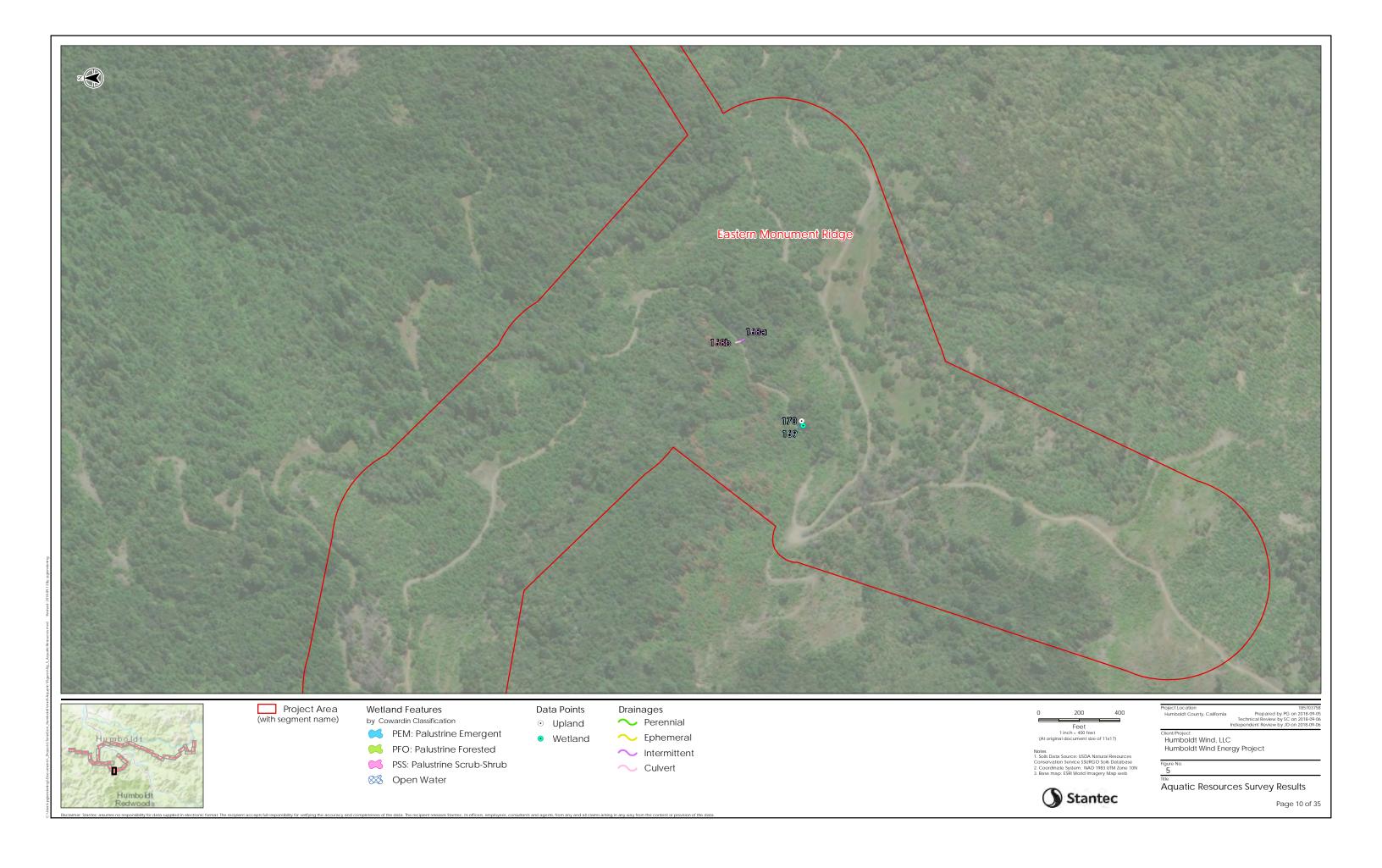


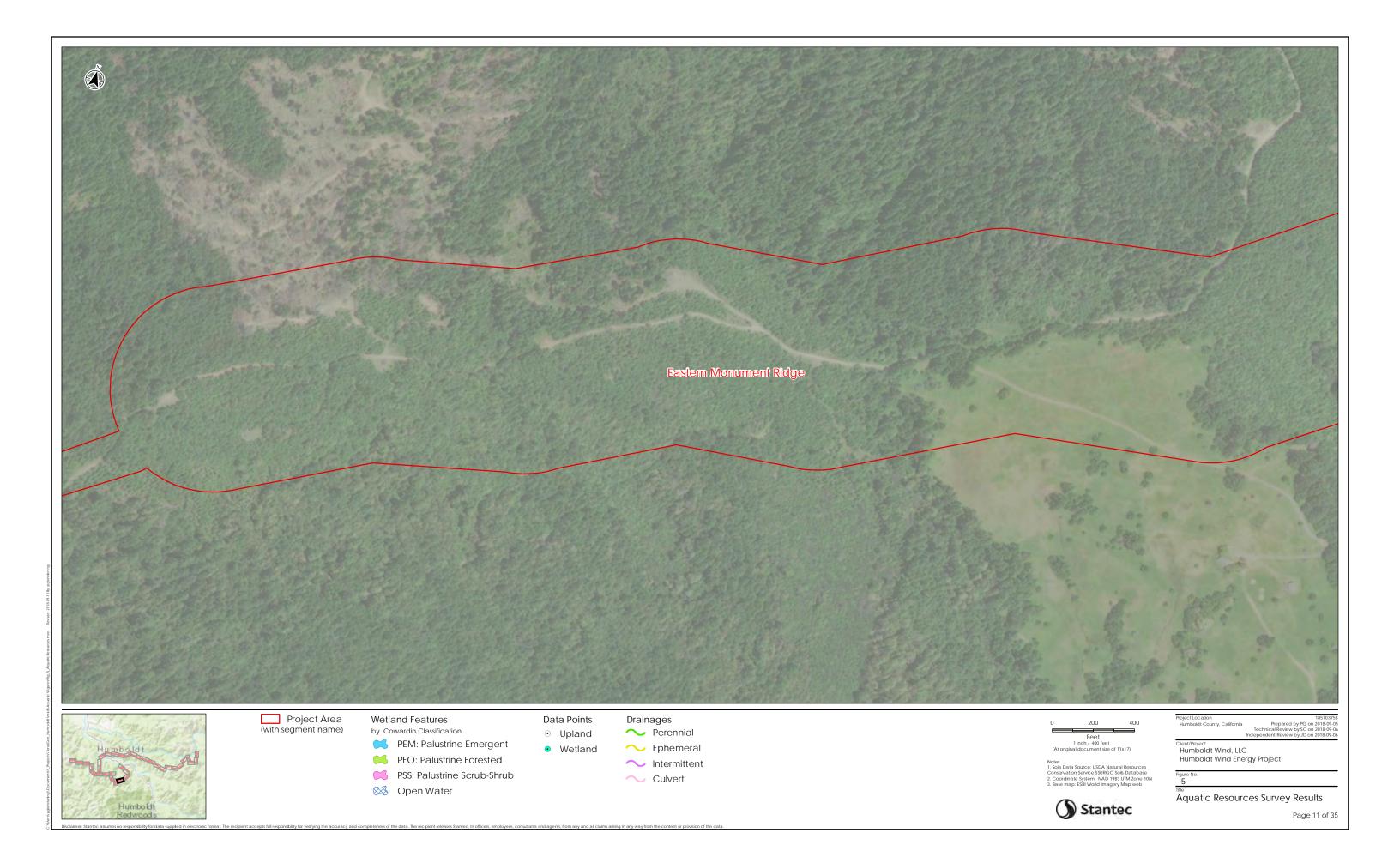


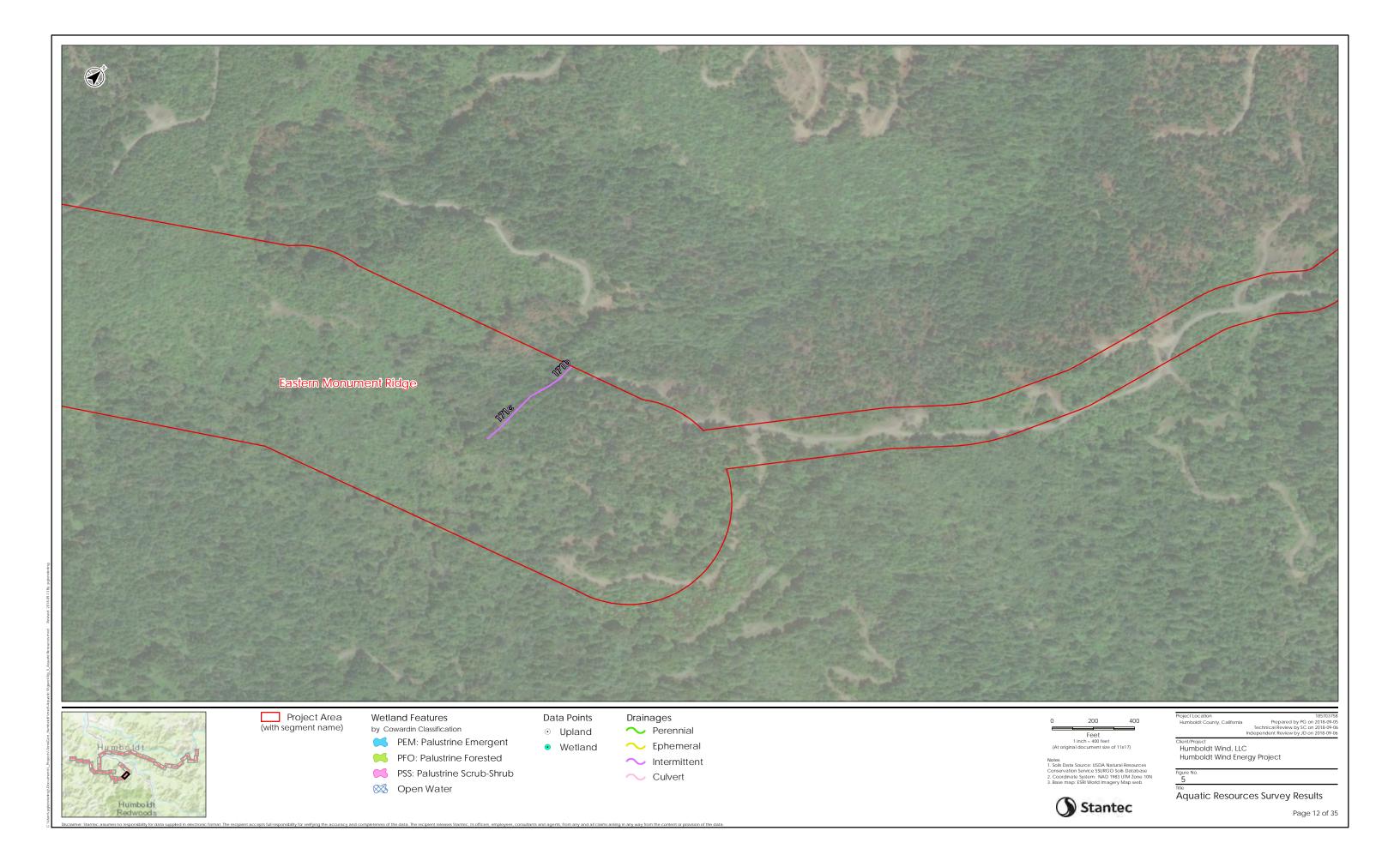


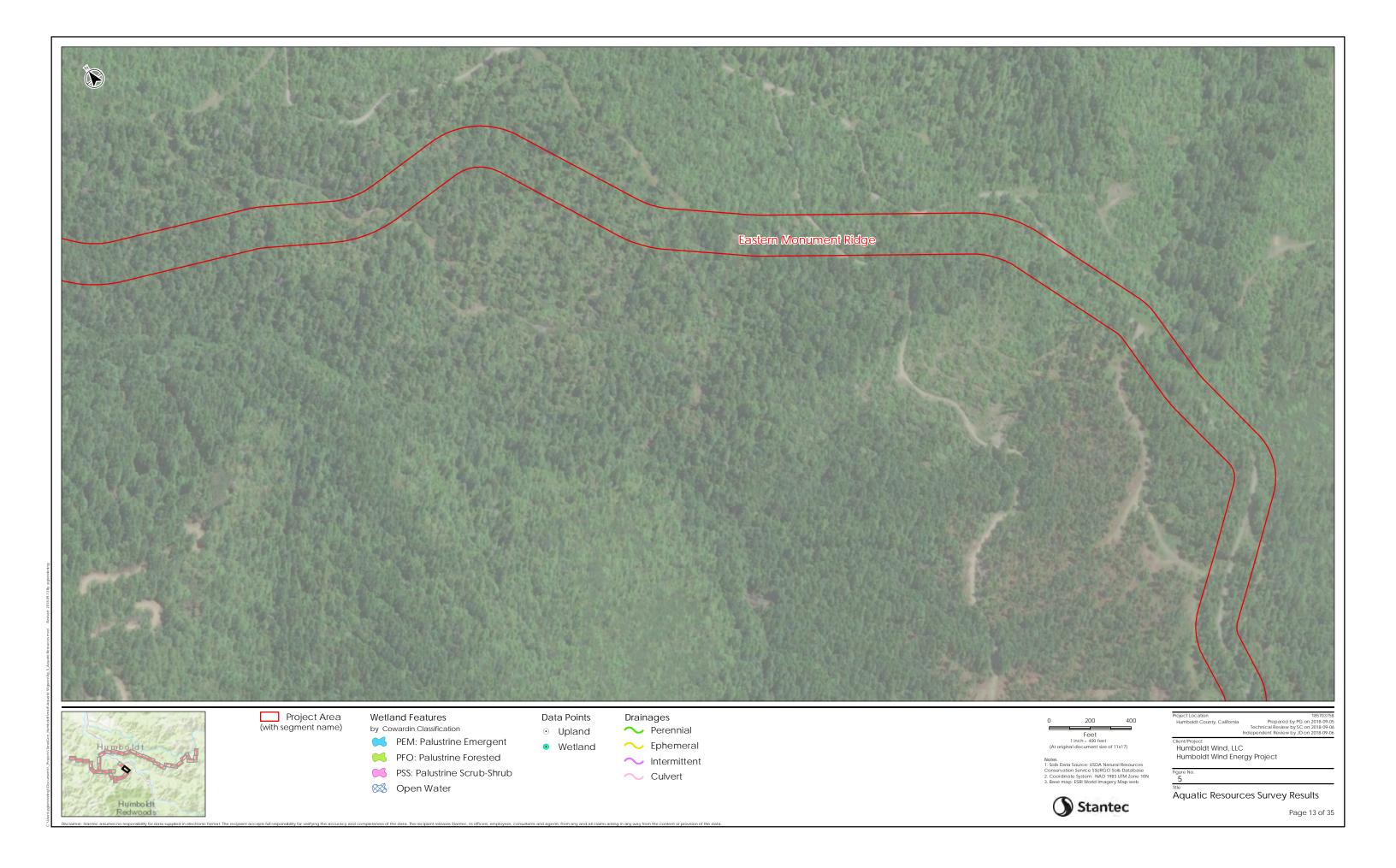
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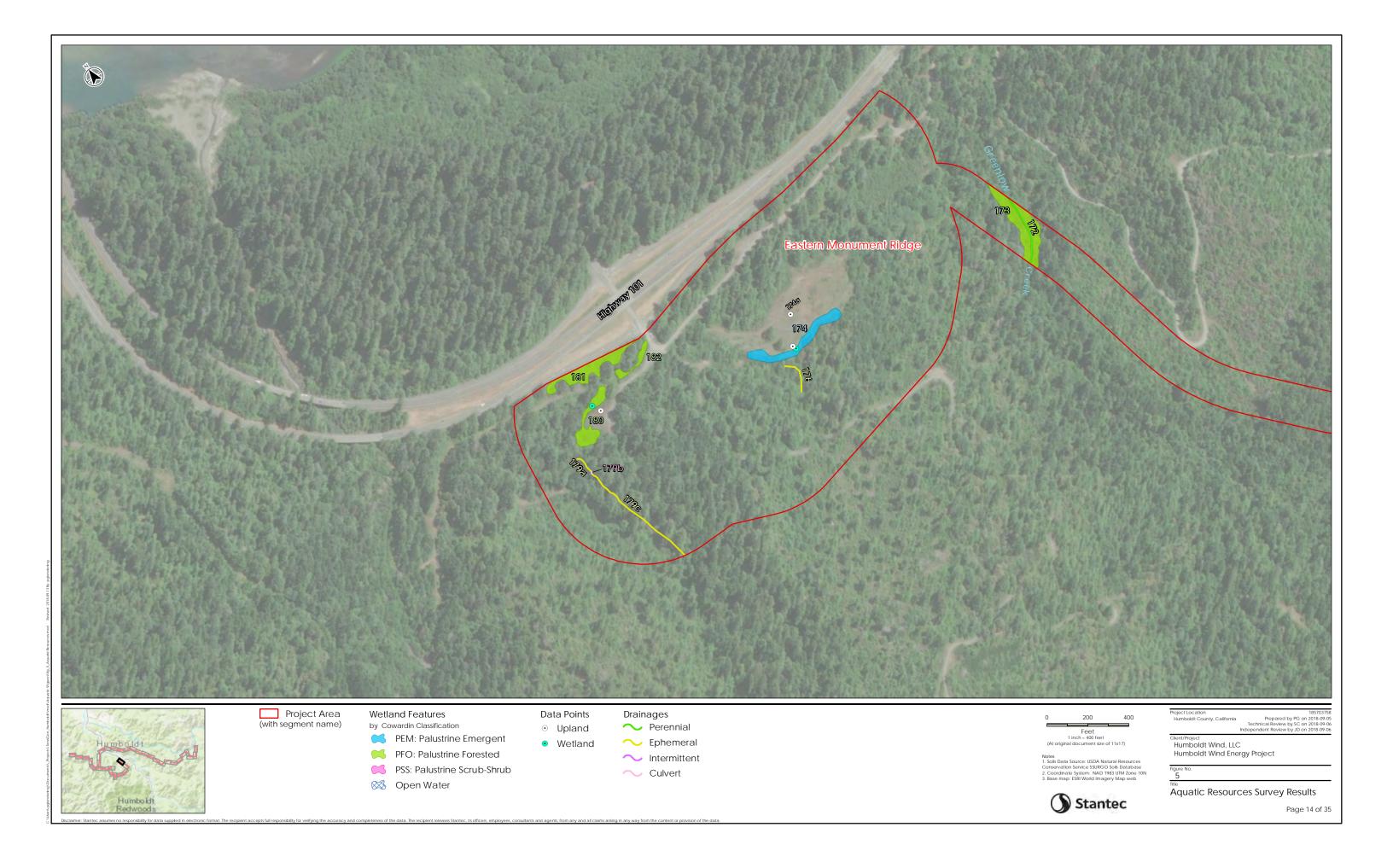


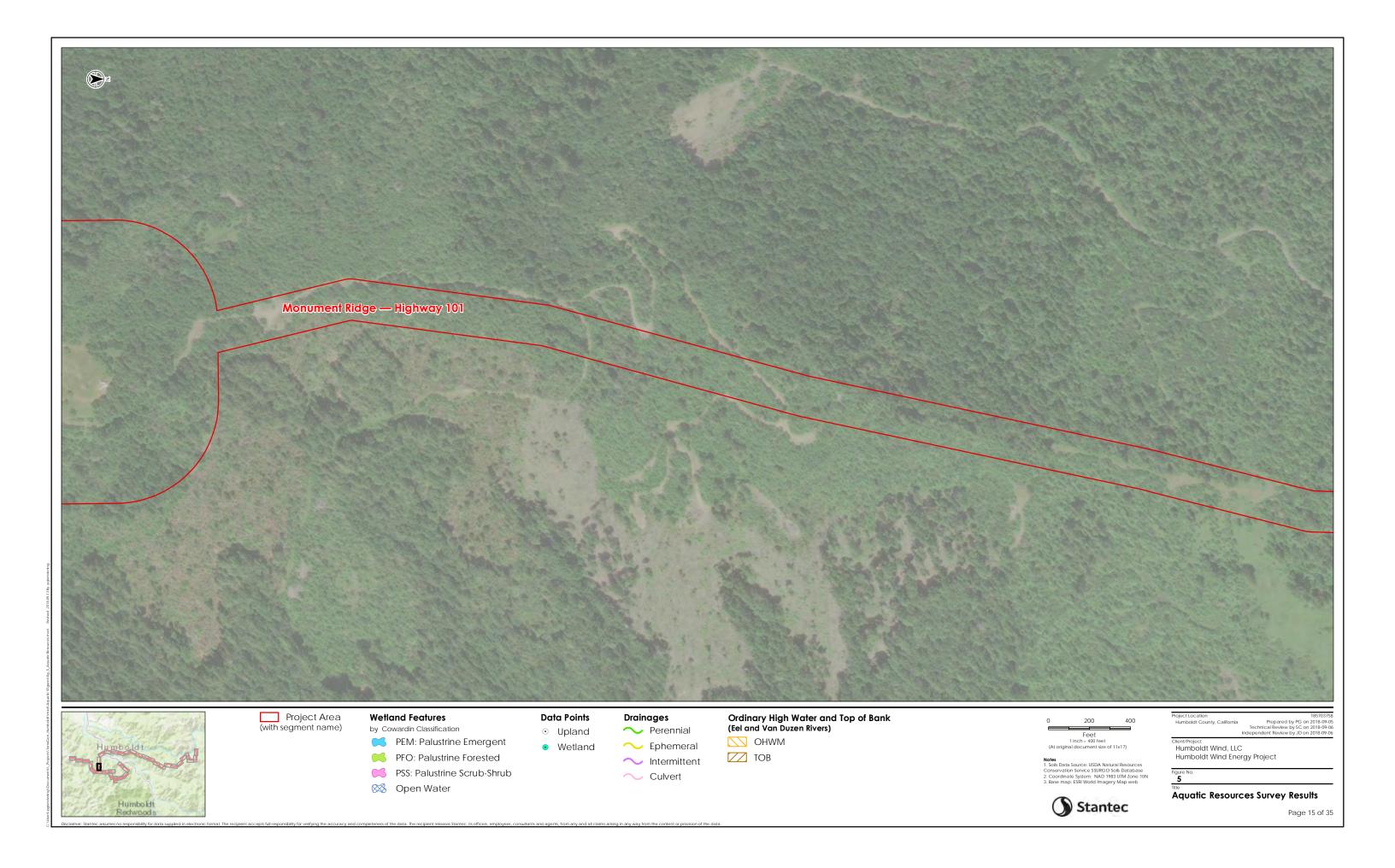


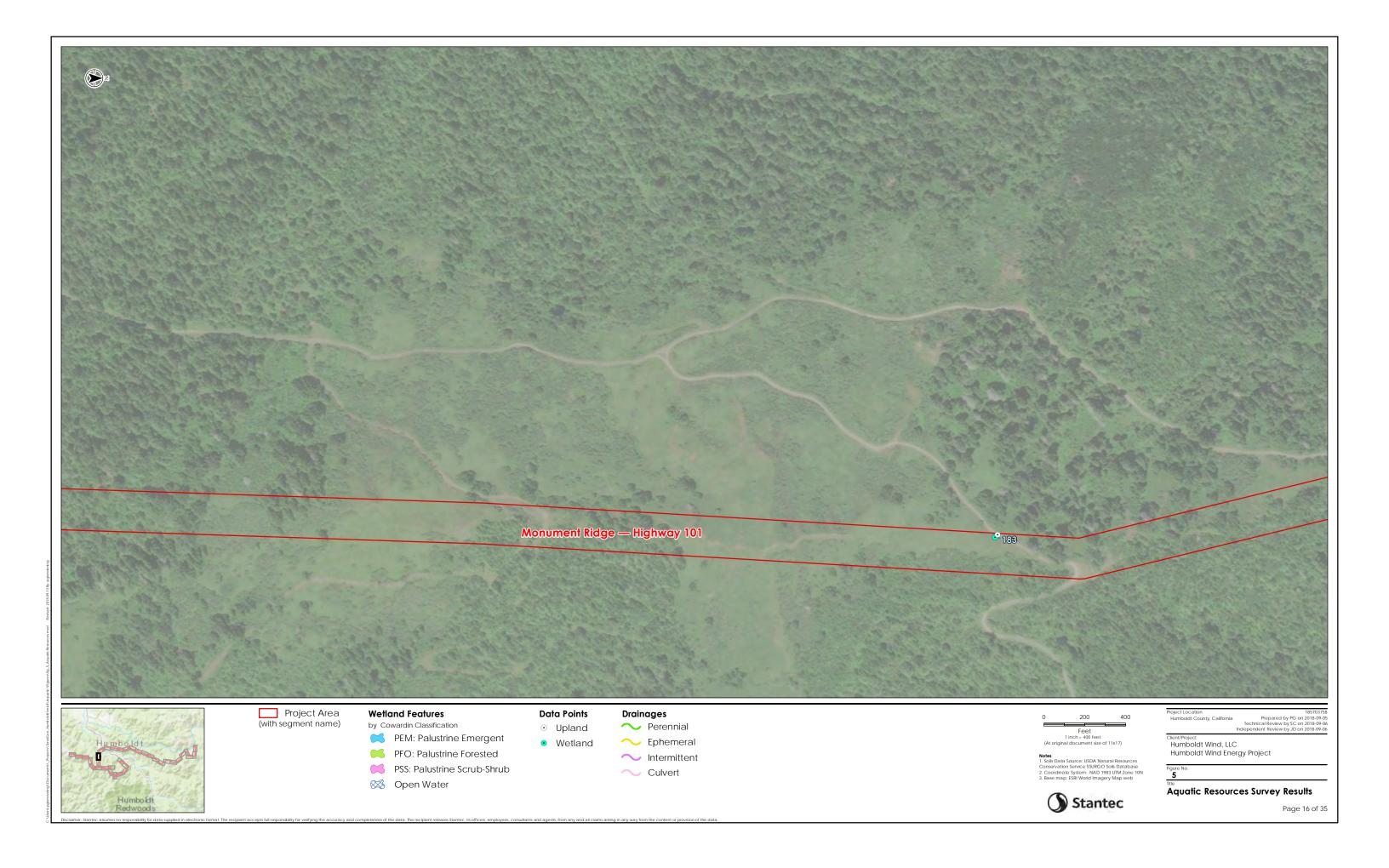


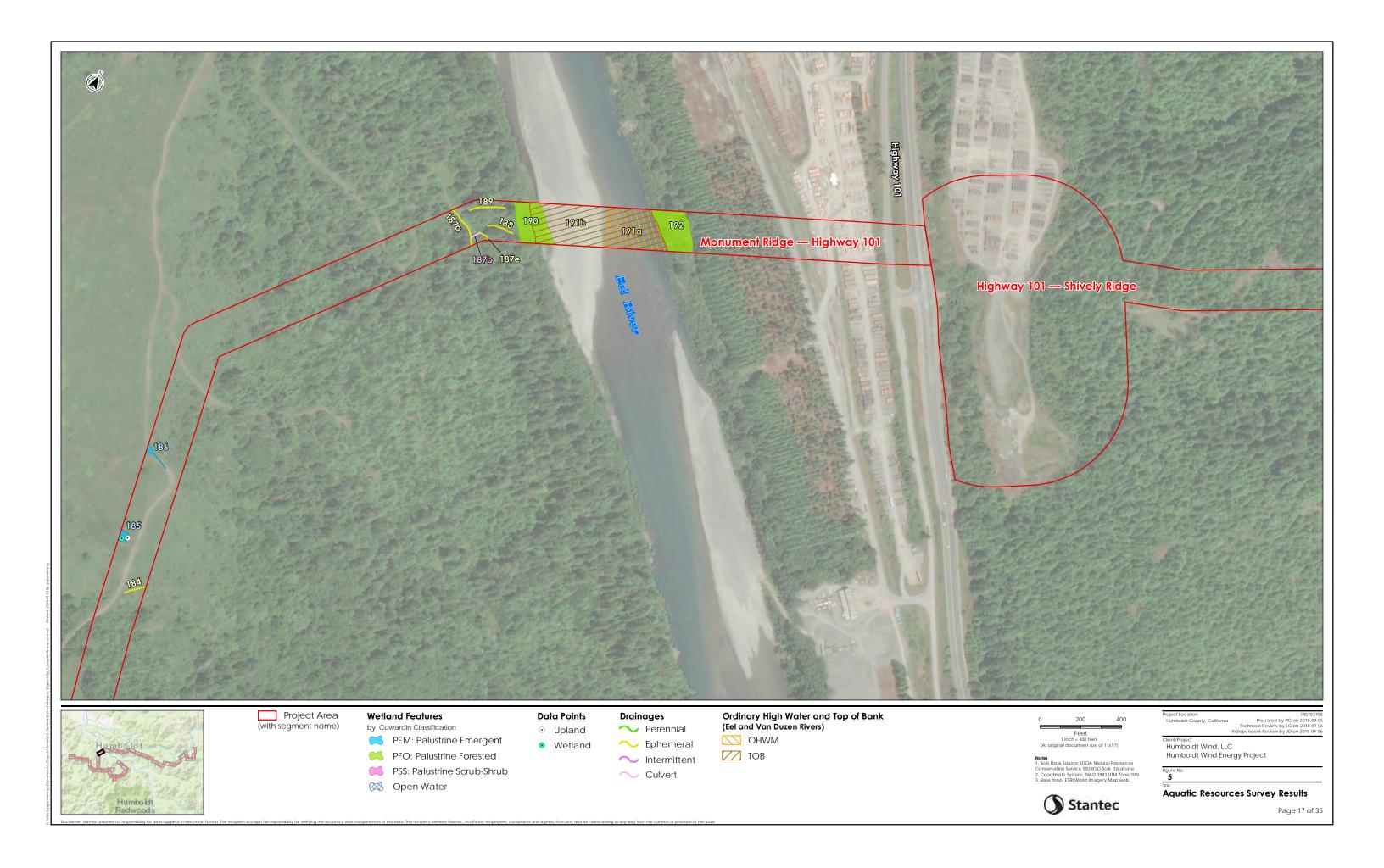


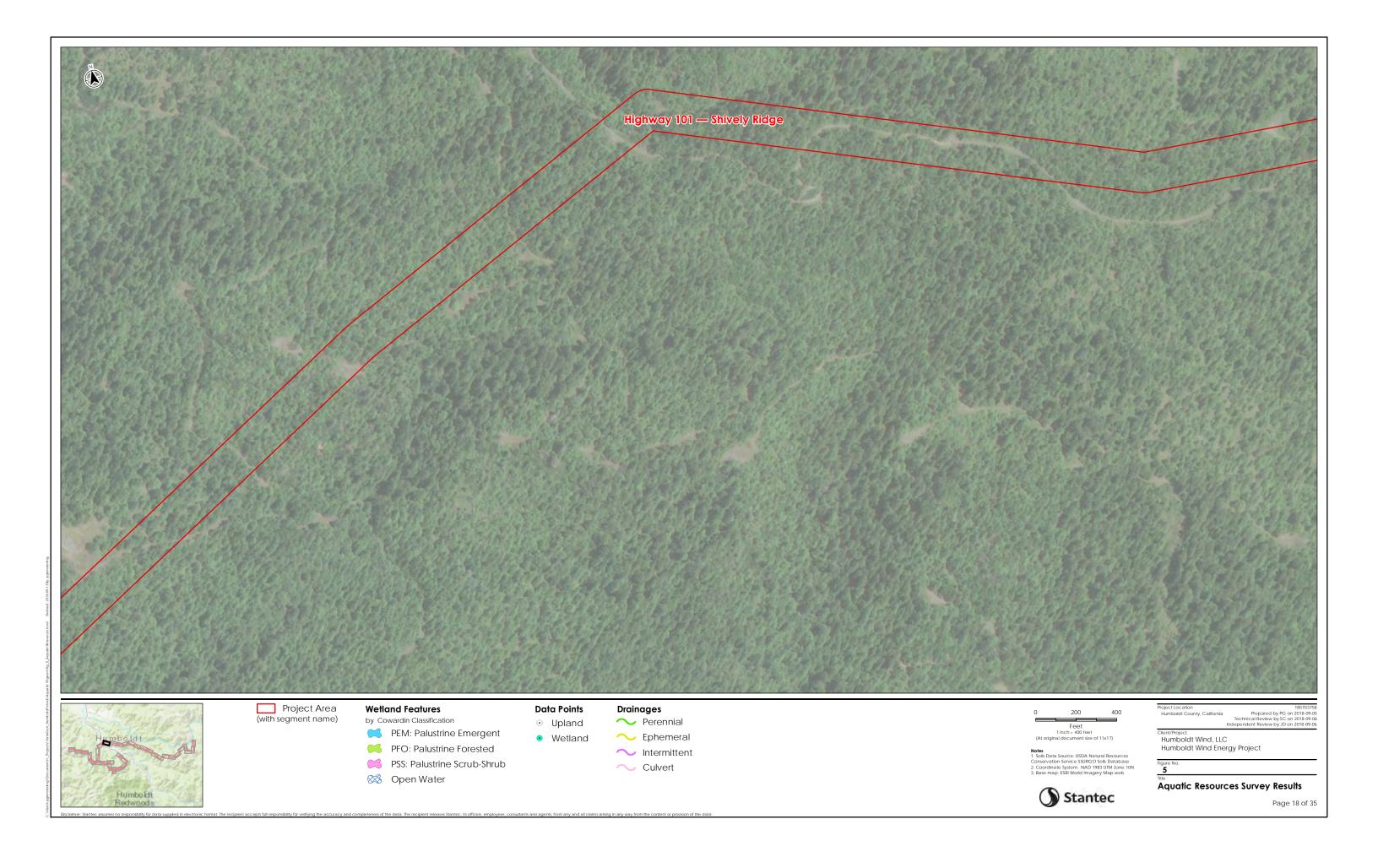


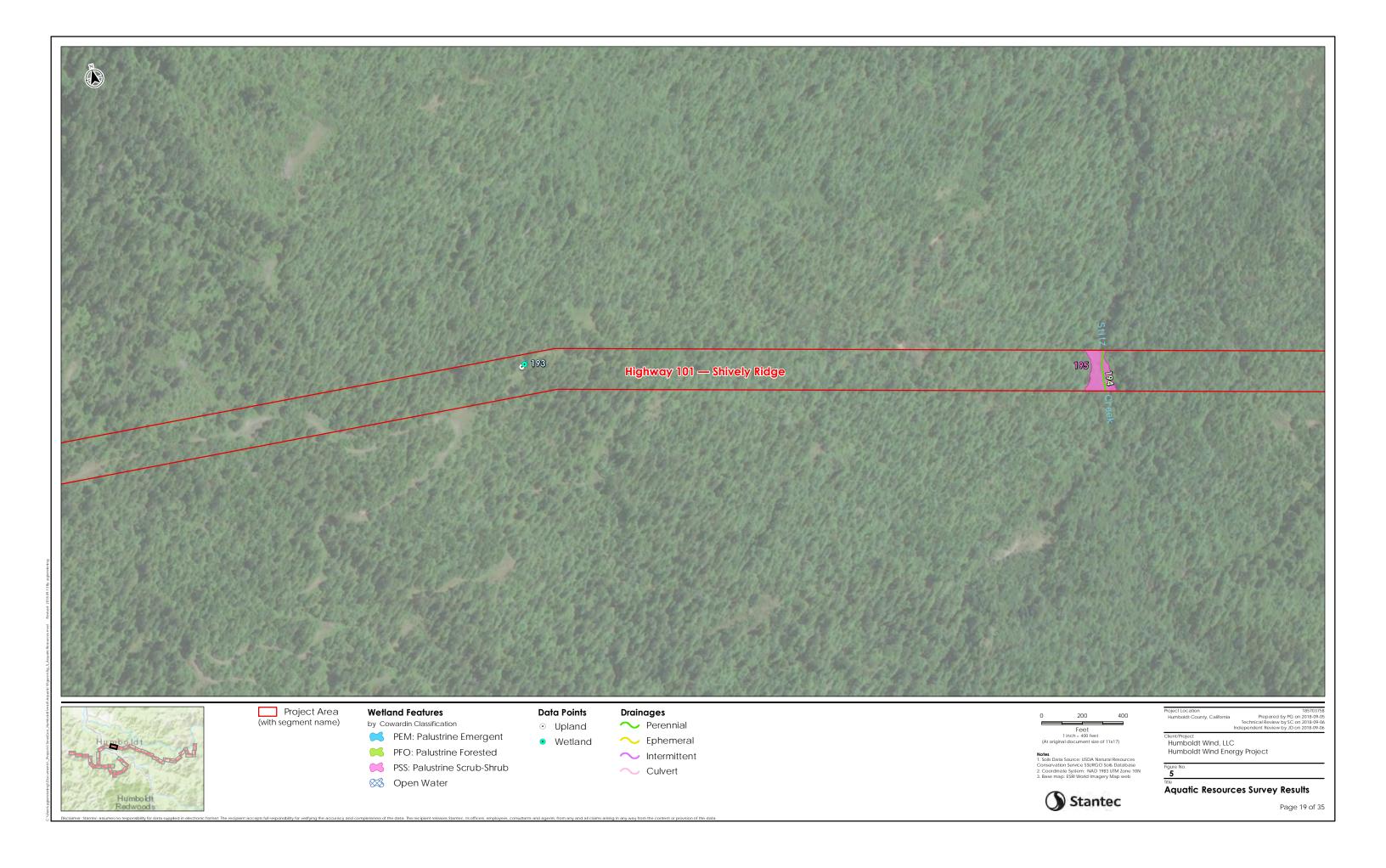


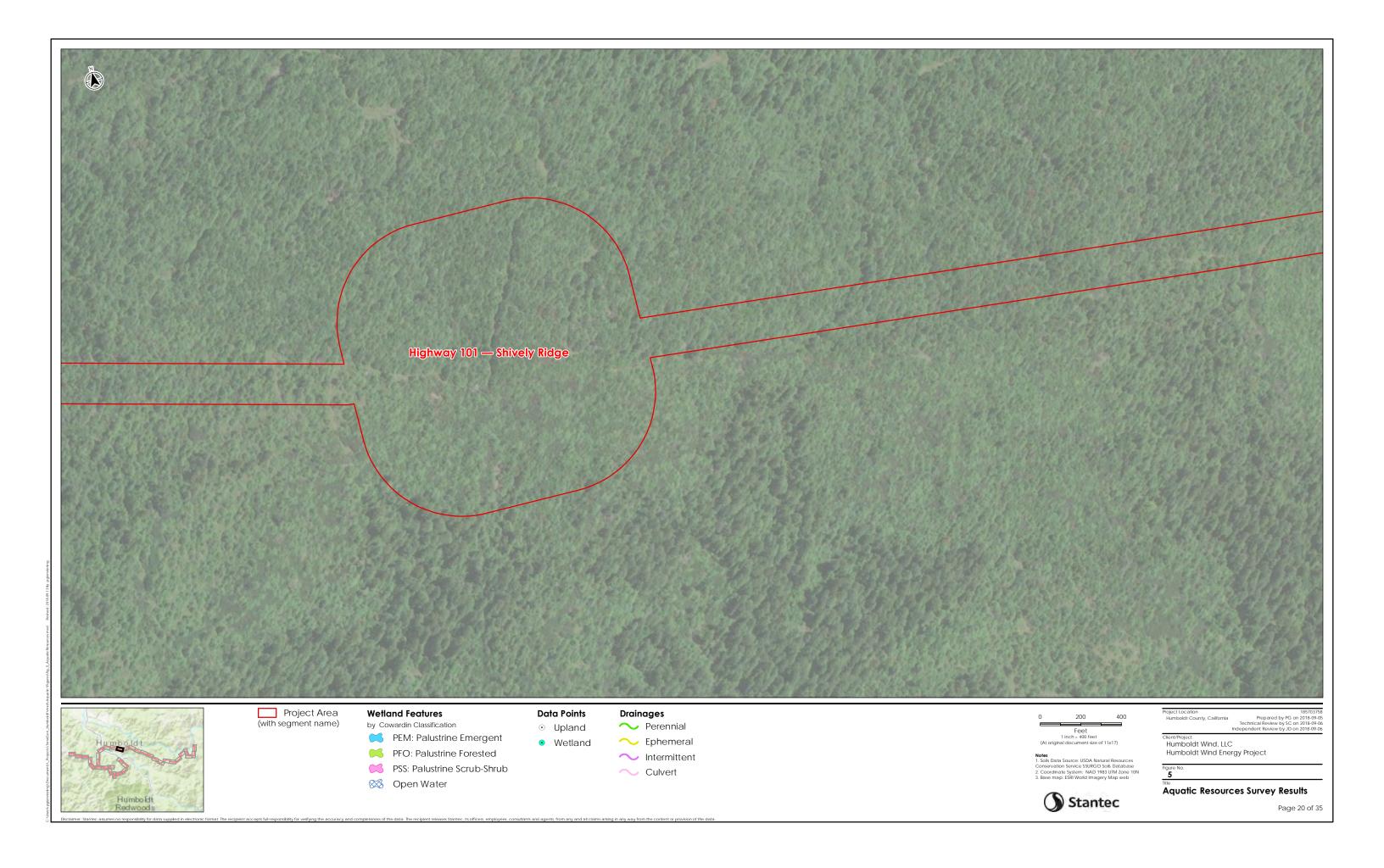


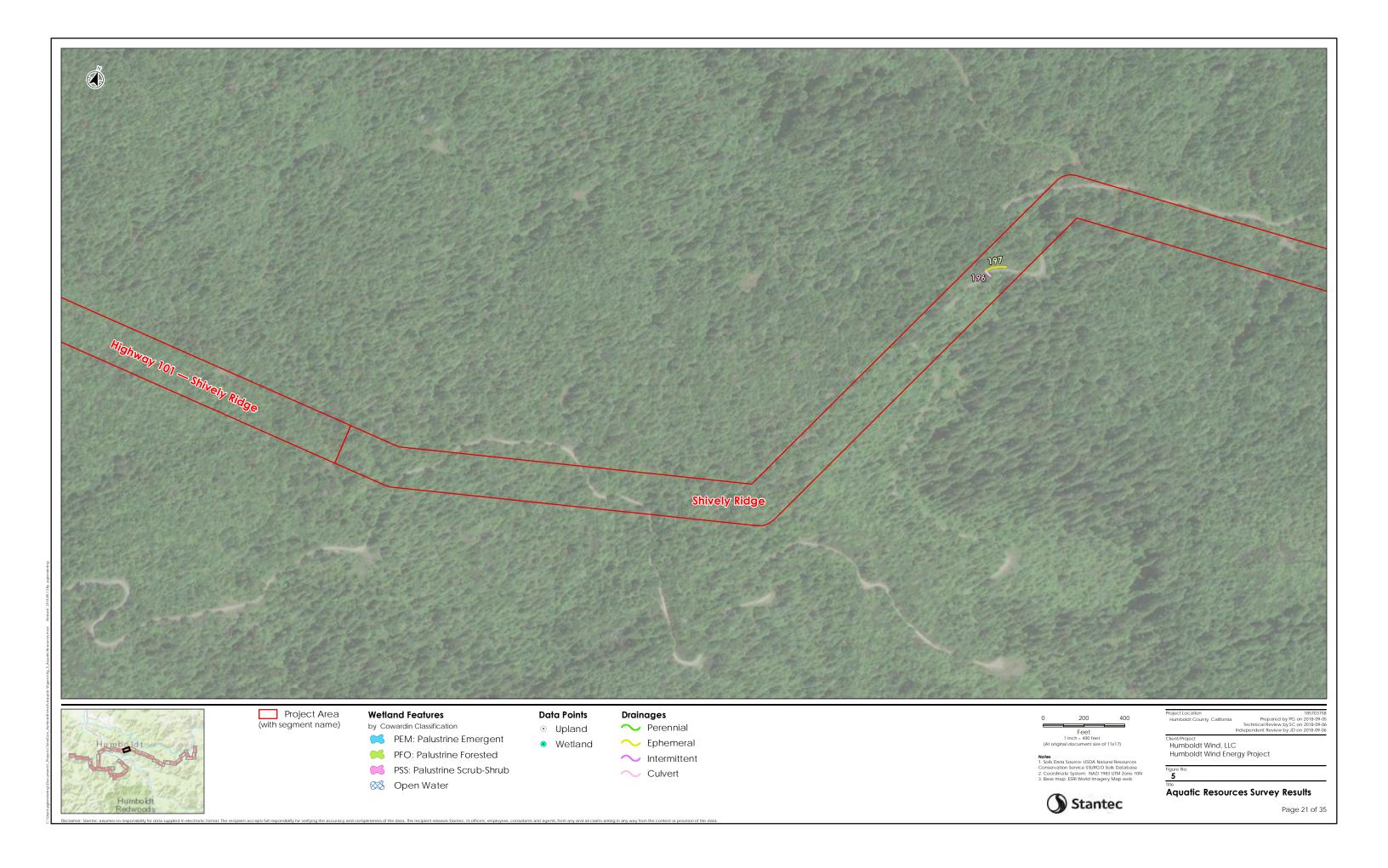


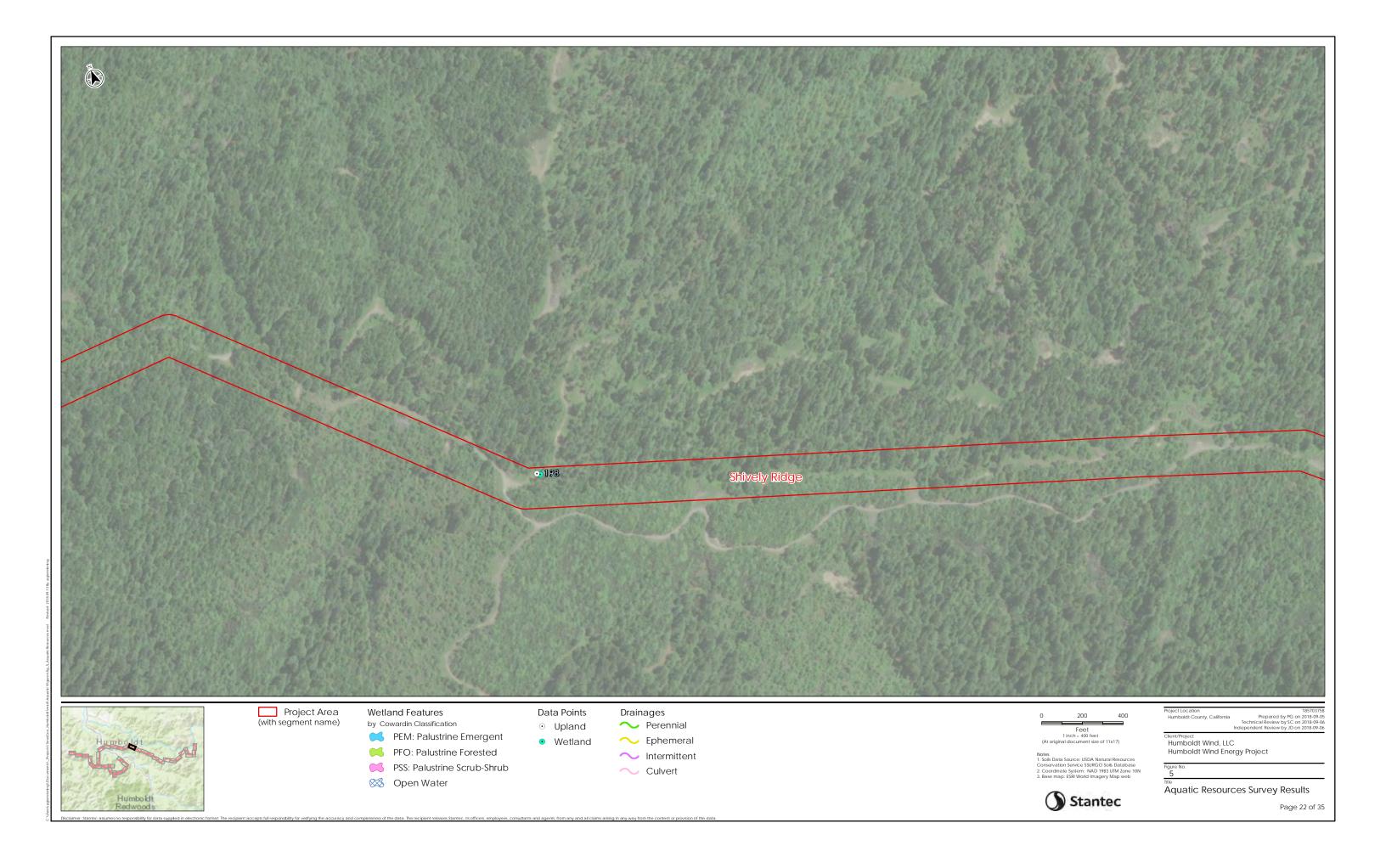


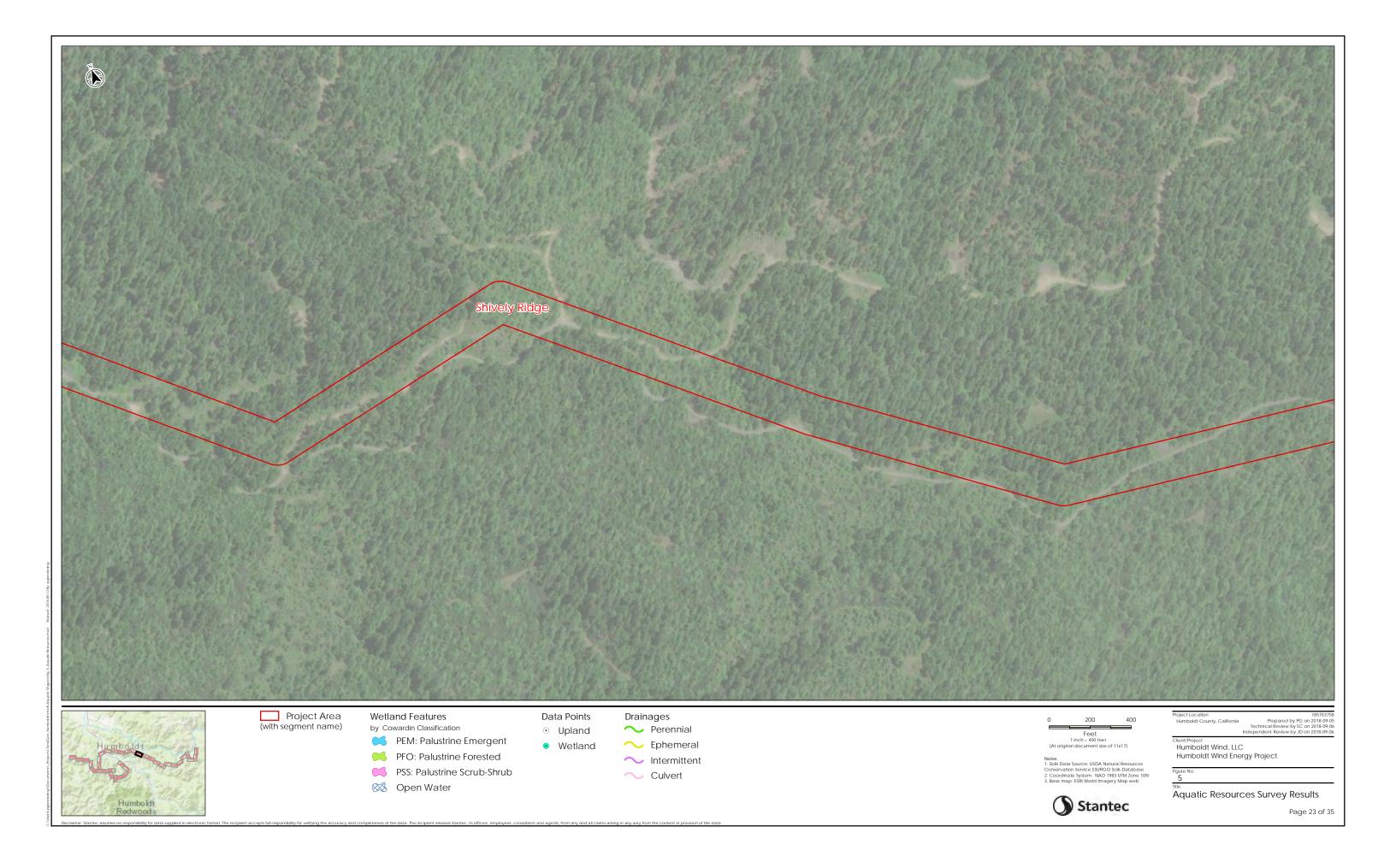


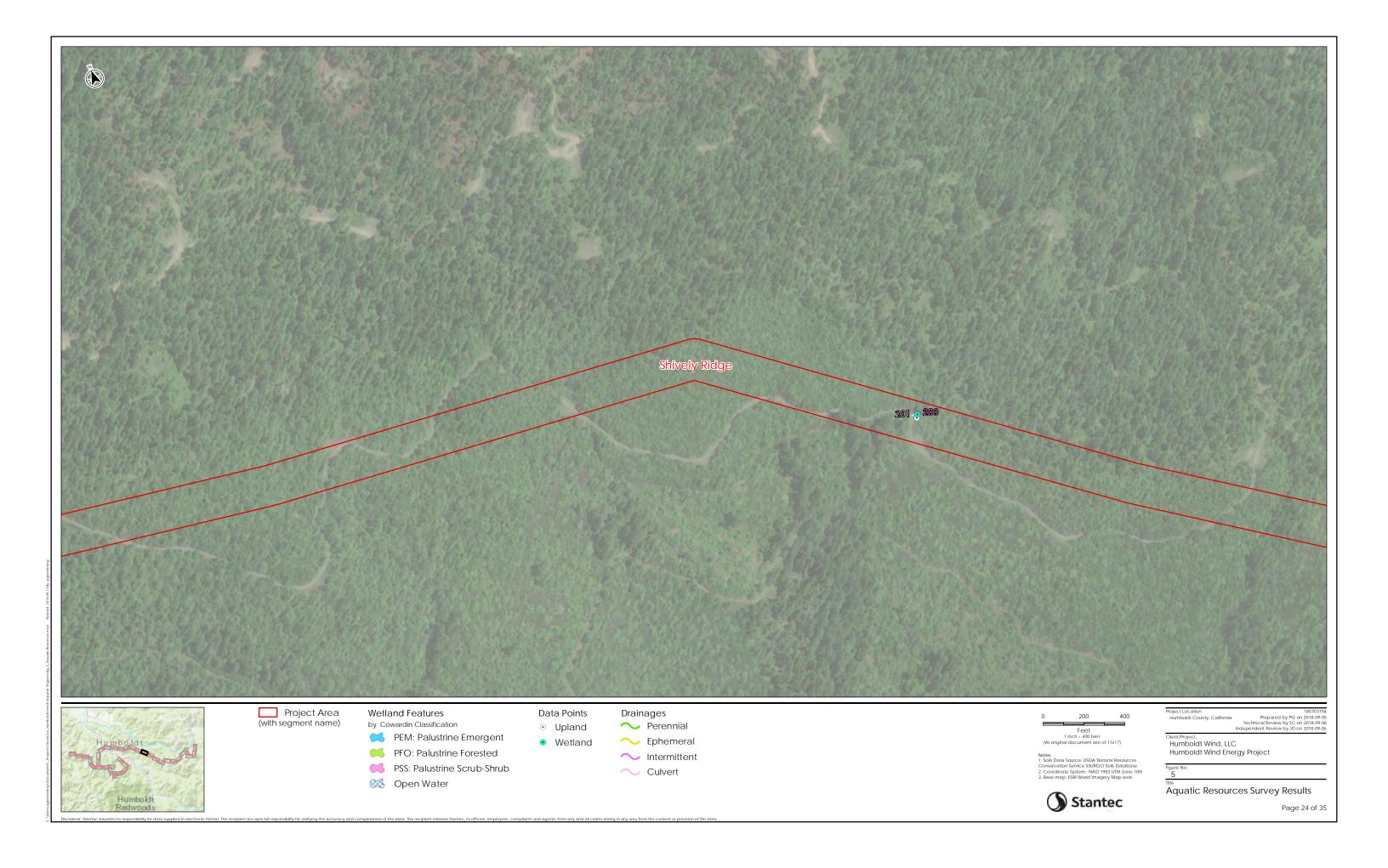


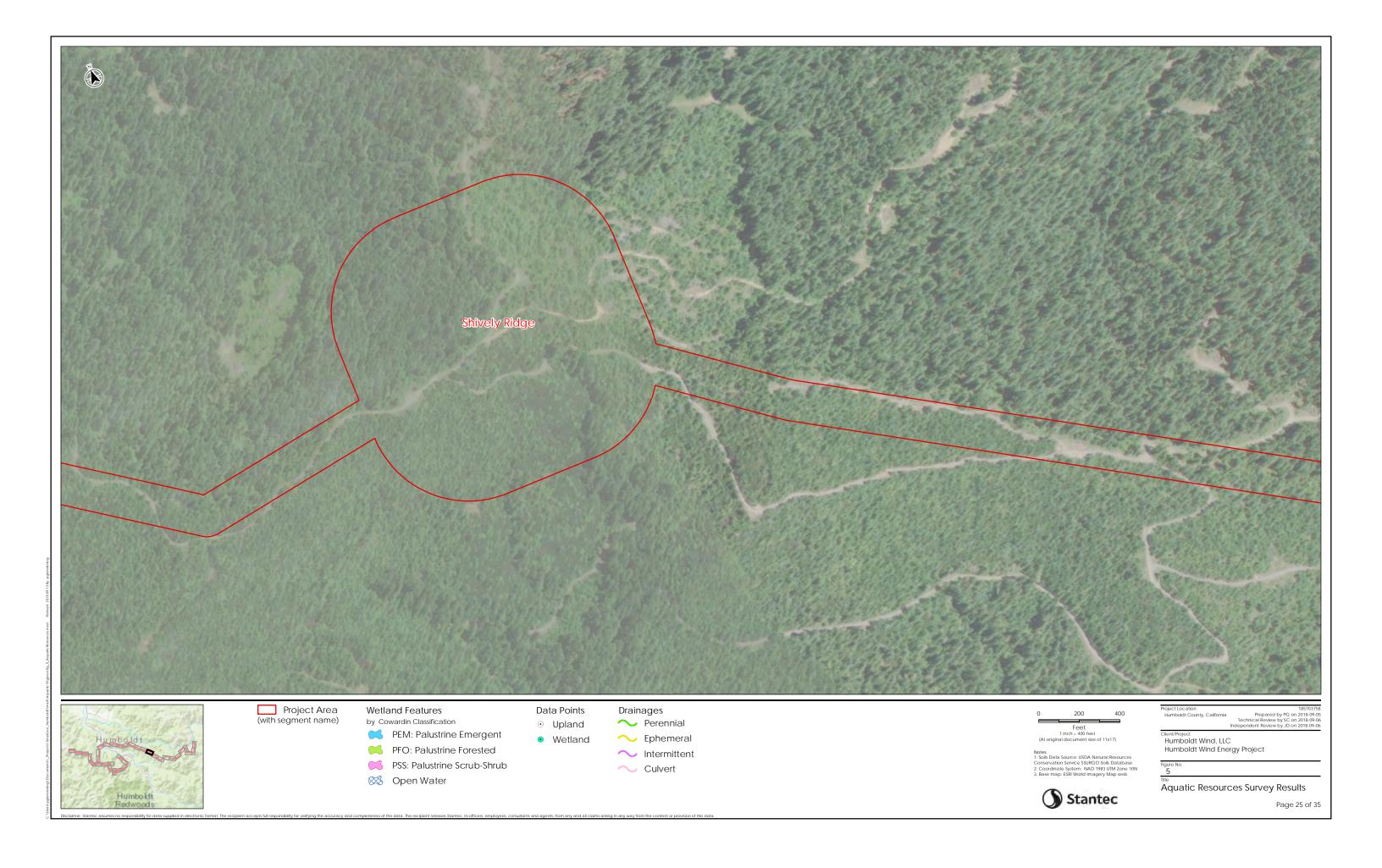


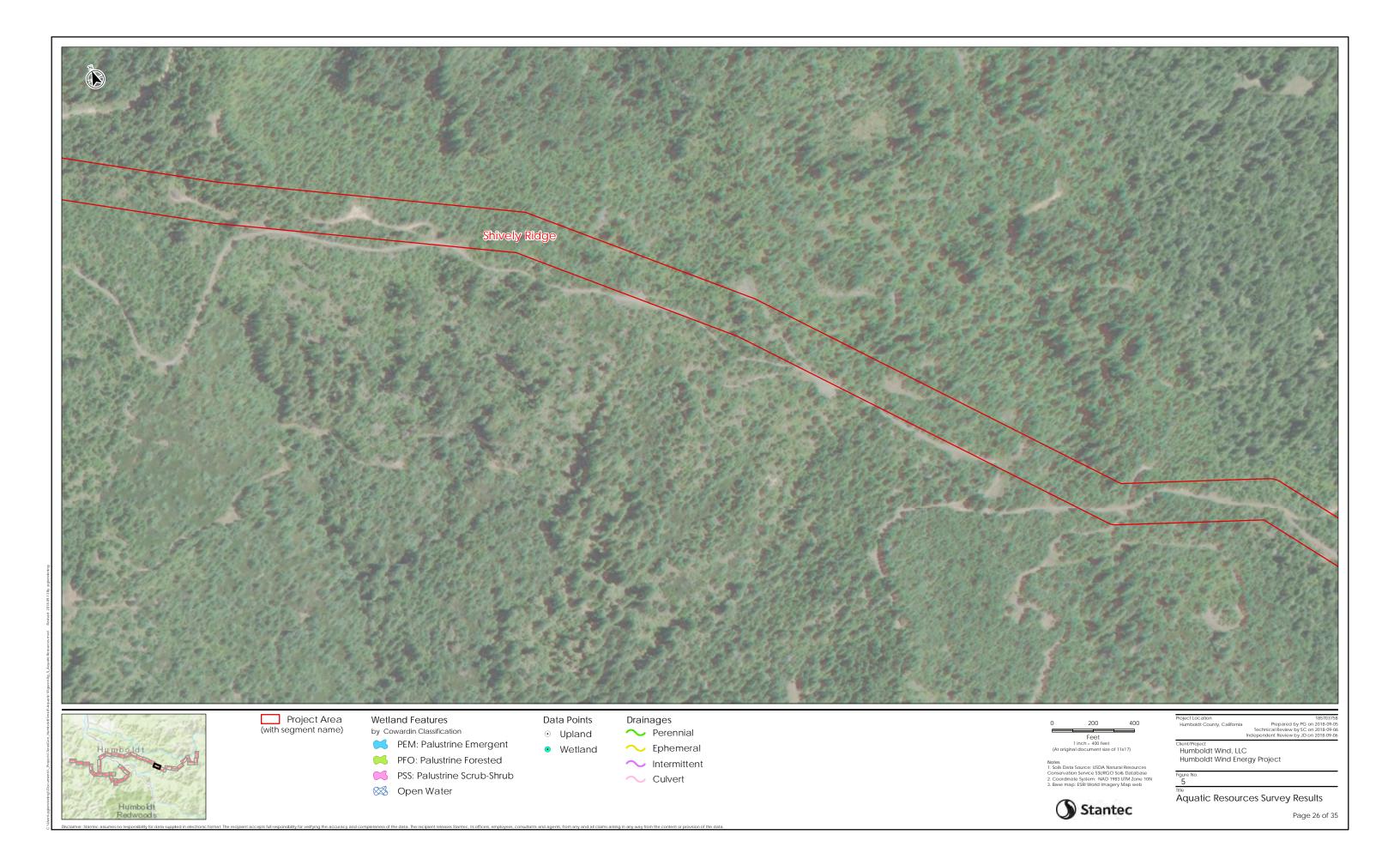


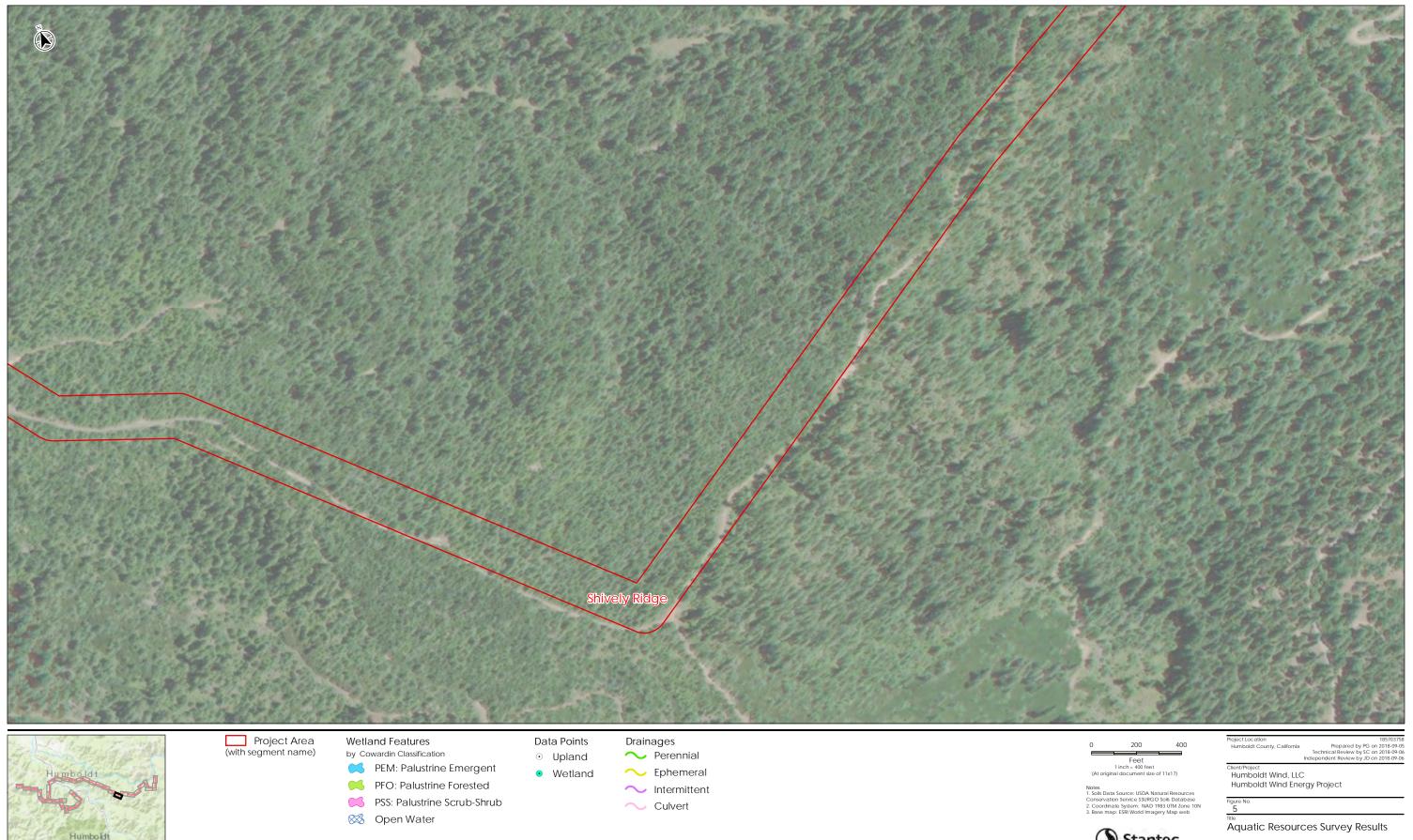






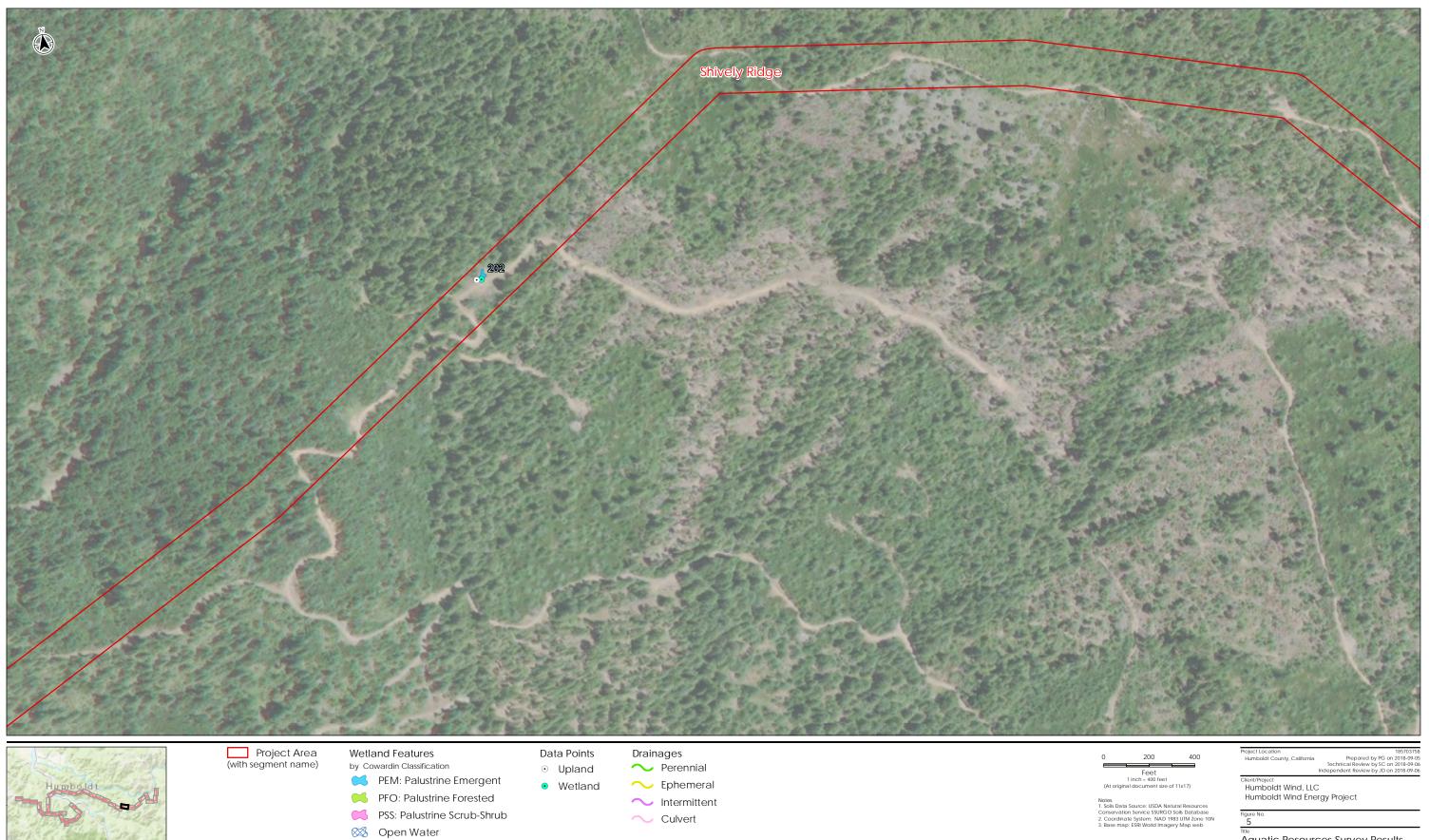






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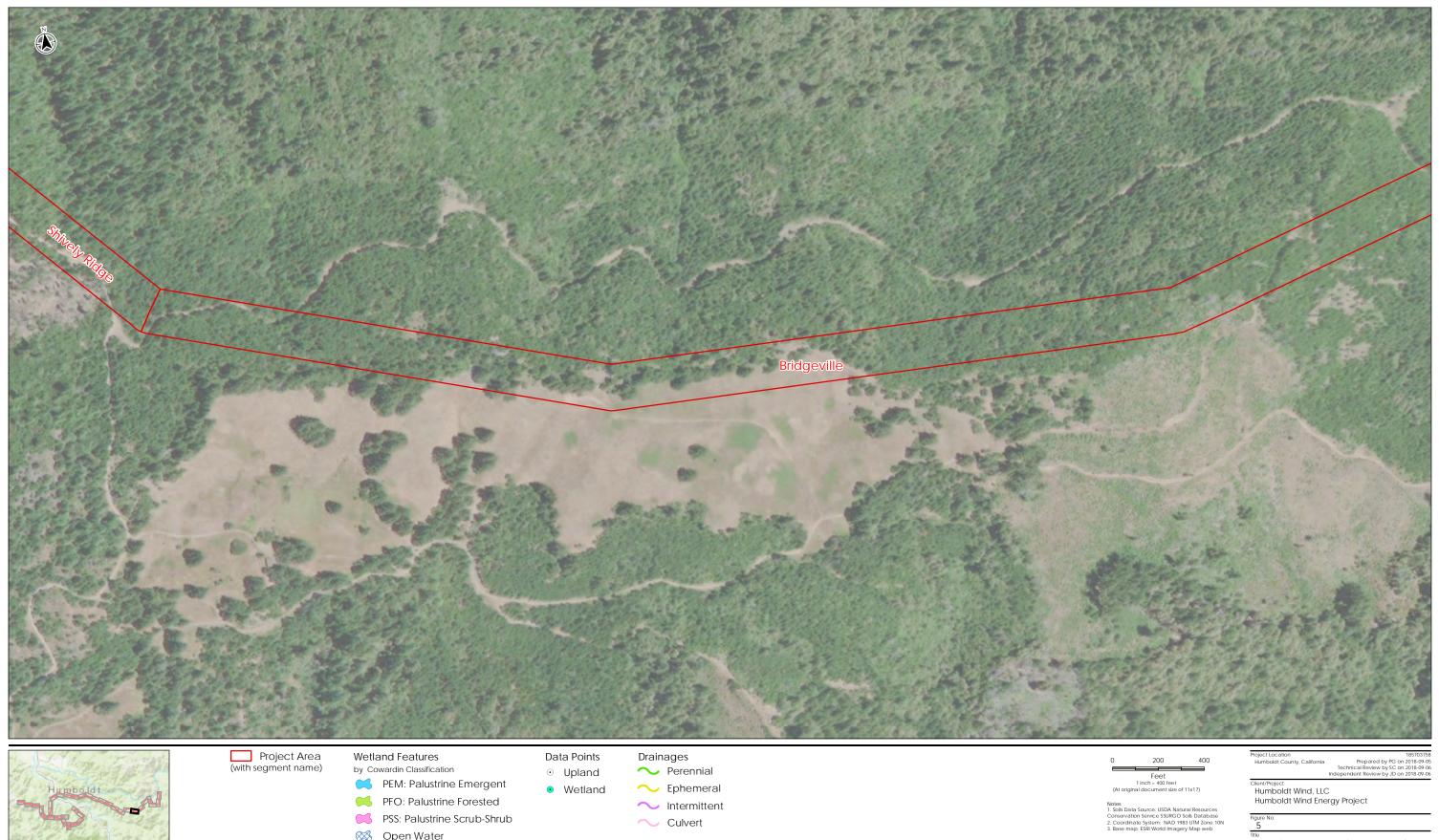


lumbok



Aquatic Resources Survey Results

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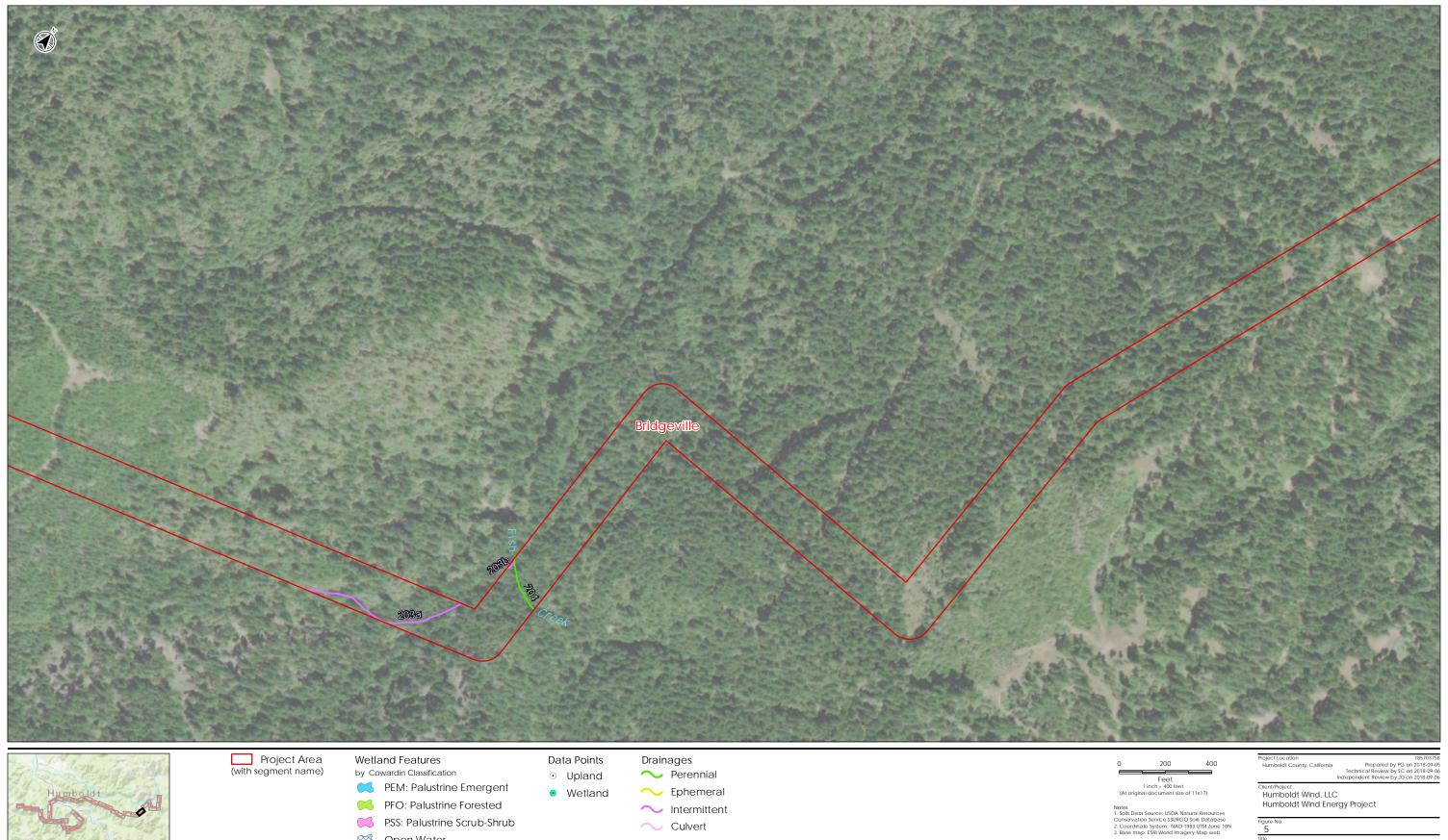
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- 🐼 Open Water

Stantec

Aquatic Resources Survey Results

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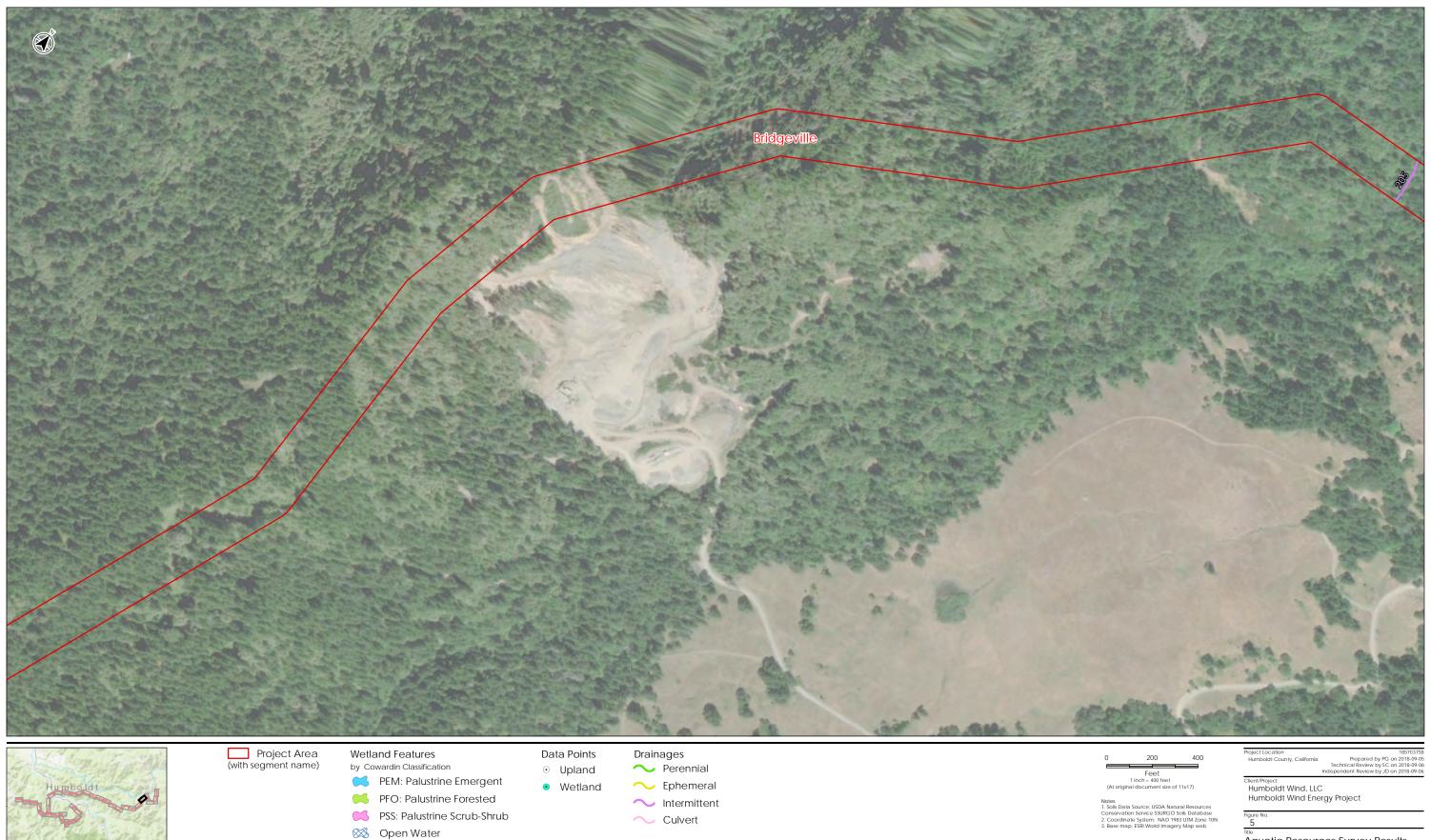
🐼 Open Water

lumbold



Aquatic Resources Survey Results

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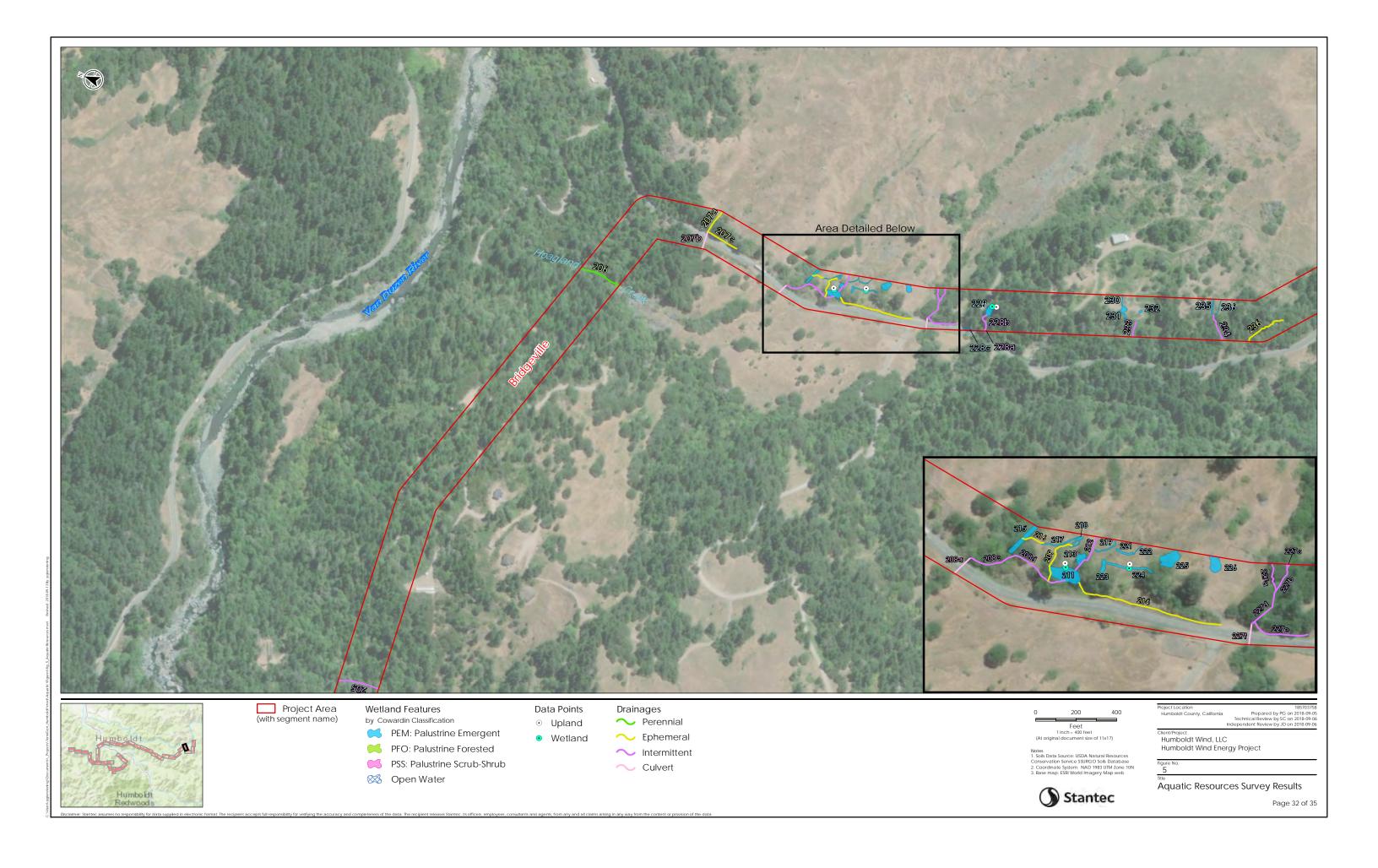


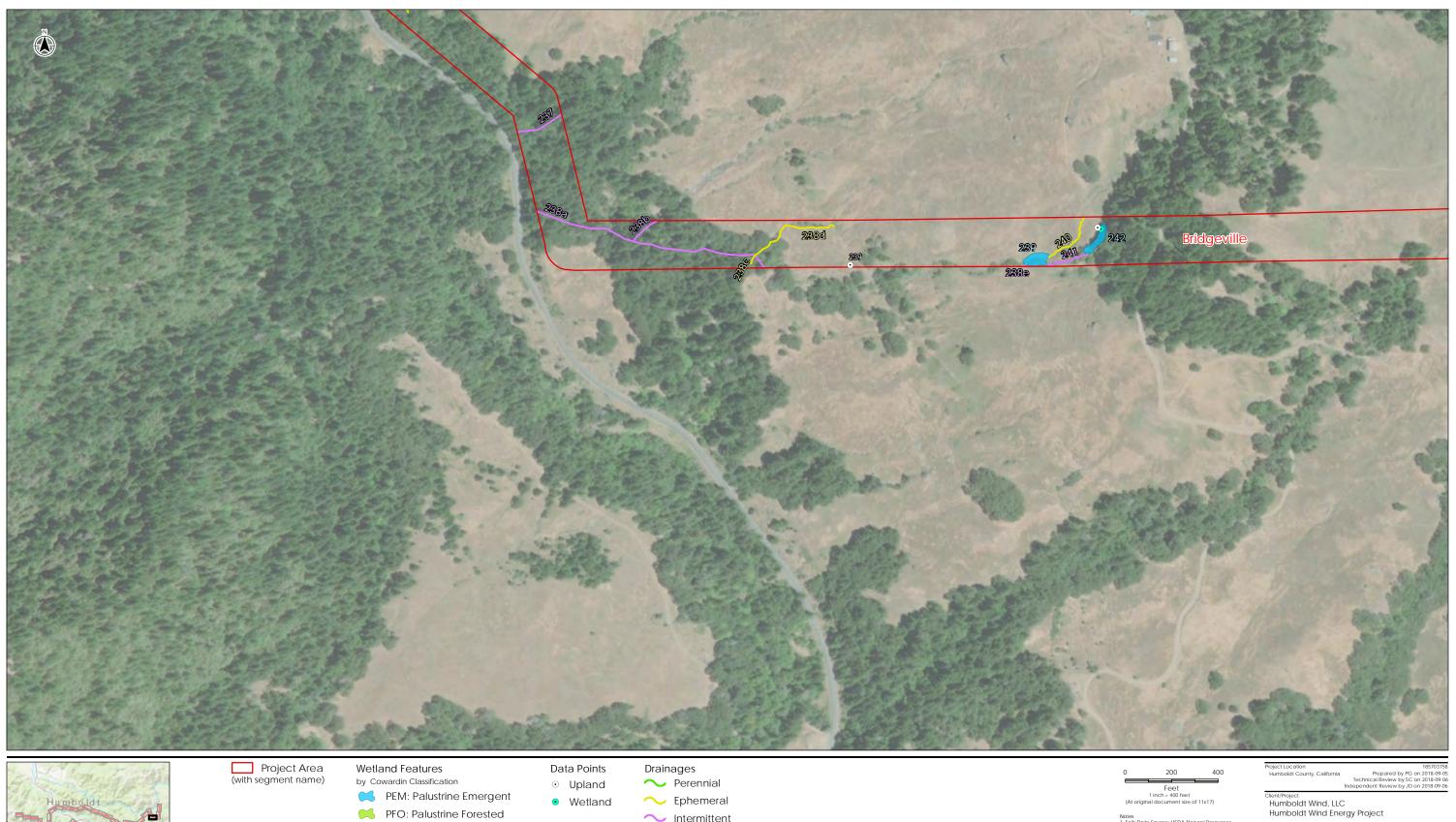
lumbok



Aquatic Resources Survey Results

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- PFO: Palustrine Forested PSS: Palustrine Scrub-Shrub
- 🐼 Open Water

Wetland

🔨 Ephemeral  $\sim$  Intermittent 🔨 Culvert

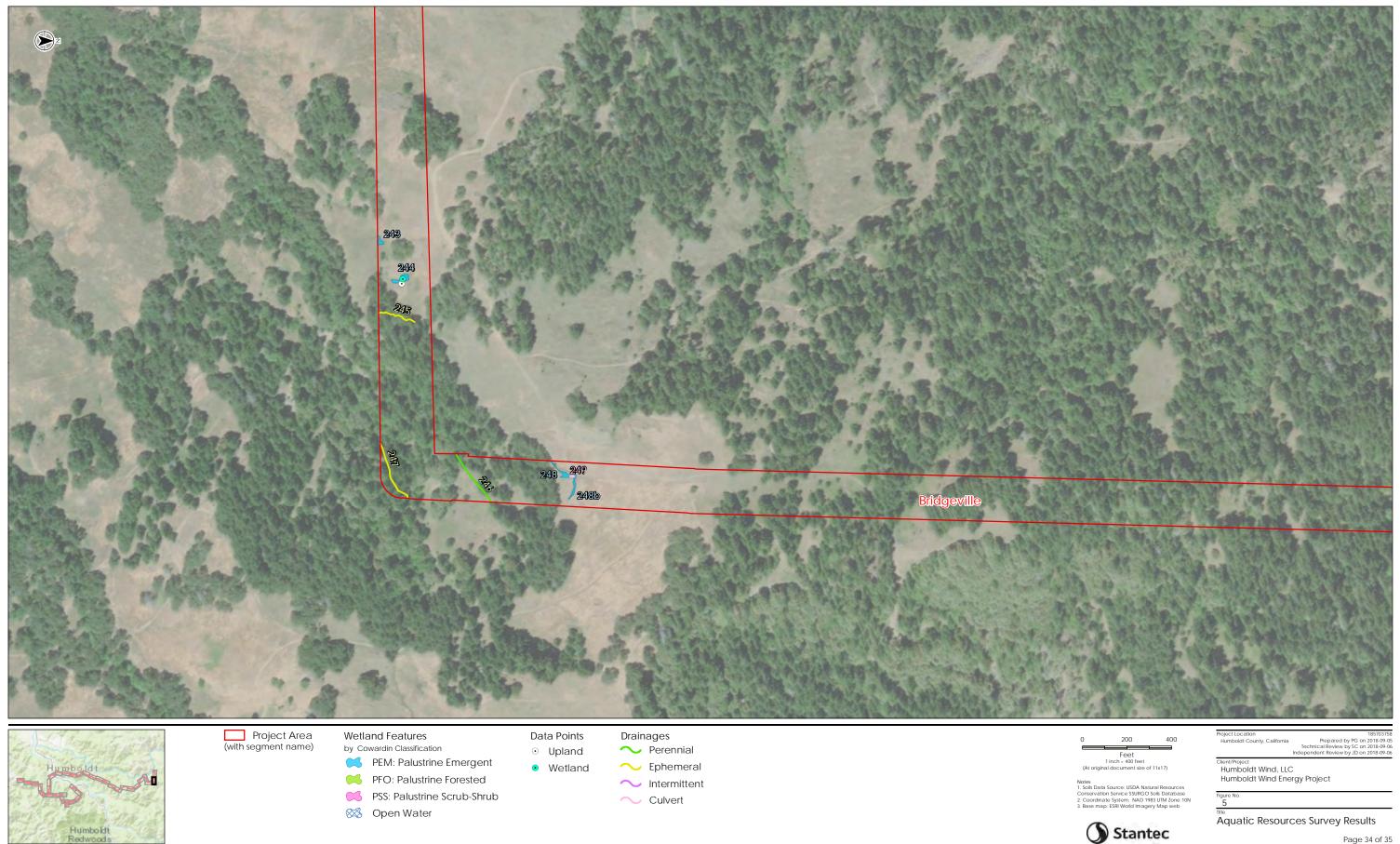
Notes 1. Soils Data Source: USDA Natural Resources Conservation Service SSURGO Solis Database 2. Coordinate System: NAD 1983 UTM Zone 10N 3. Base map: ESRI World Imagery Map web



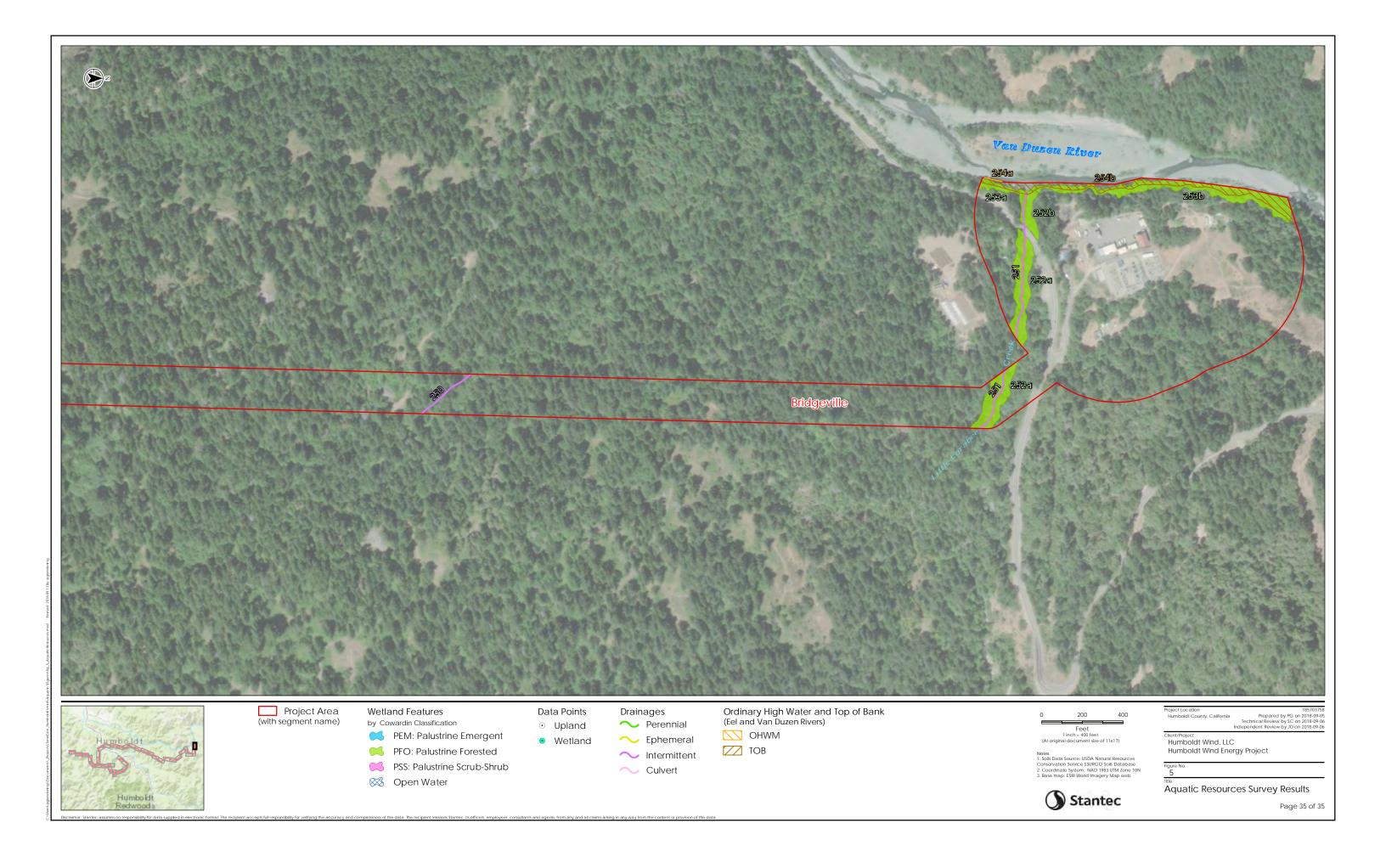
Aquatic Resources Survey Results

Figure No 5

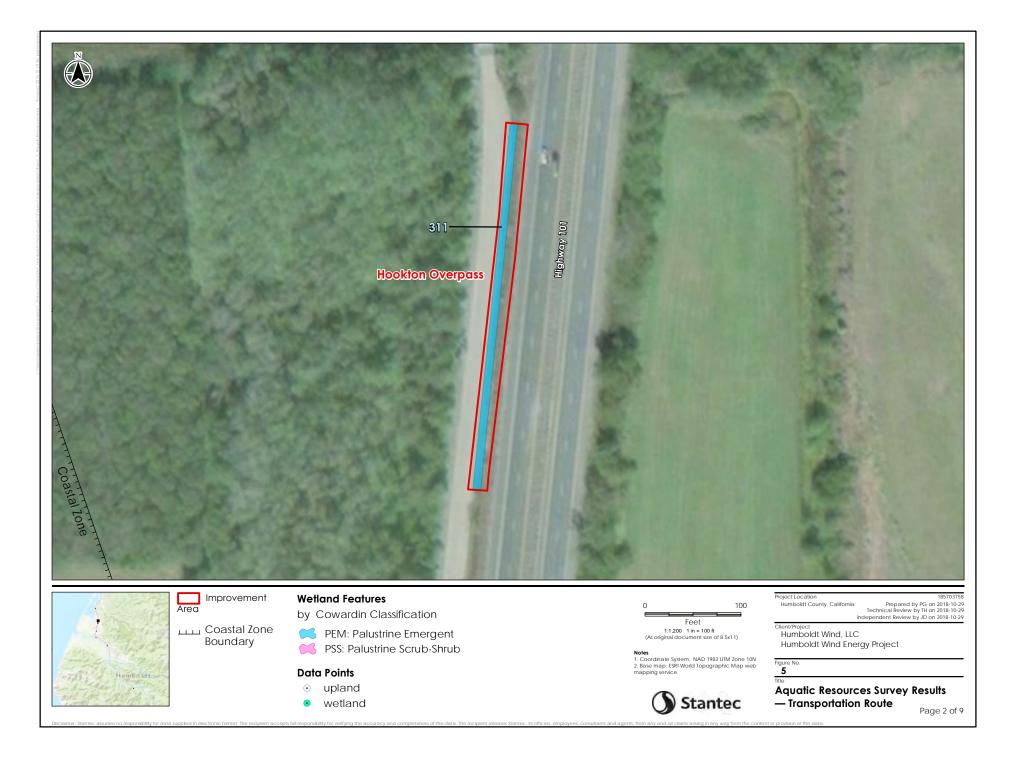
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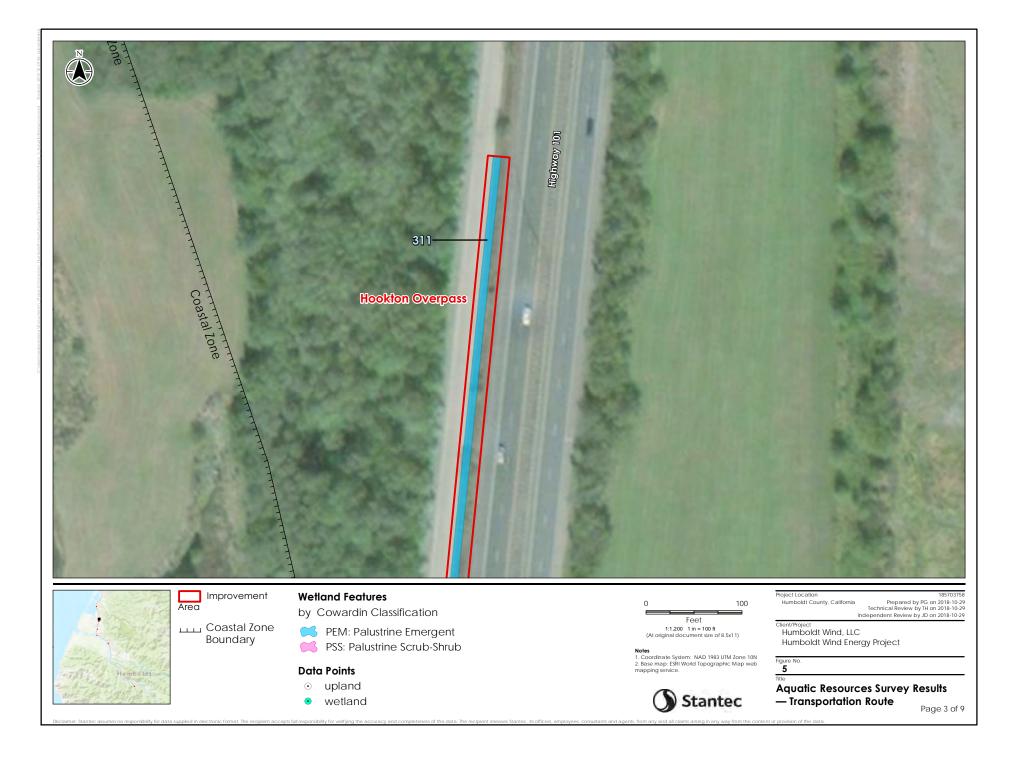


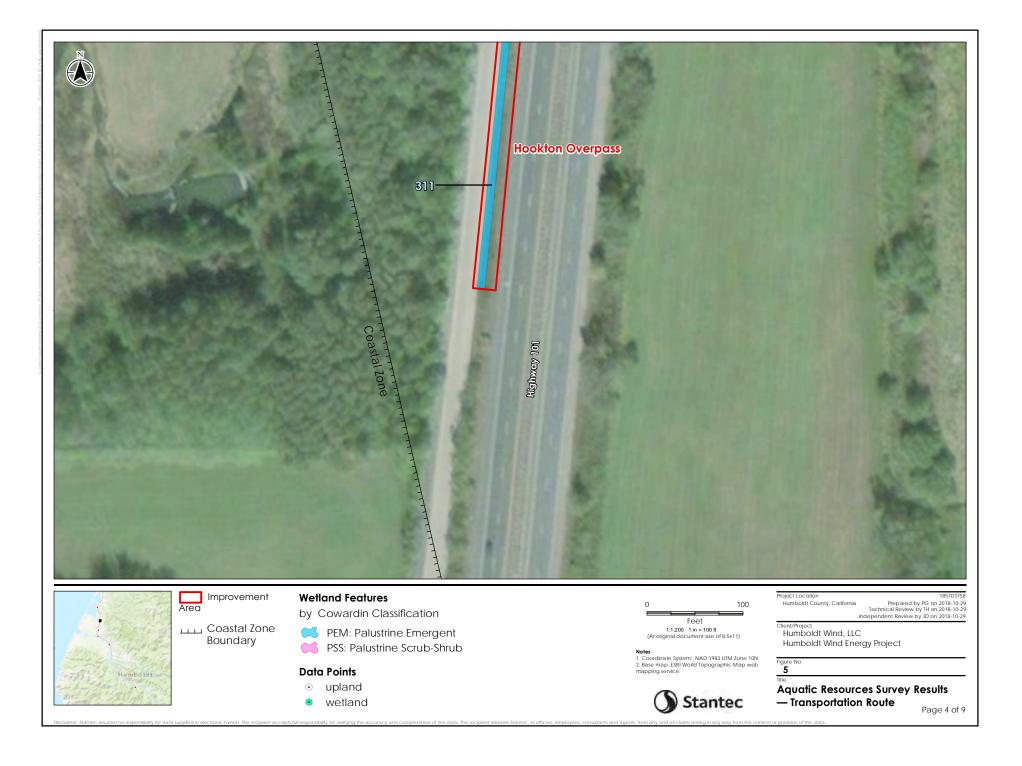
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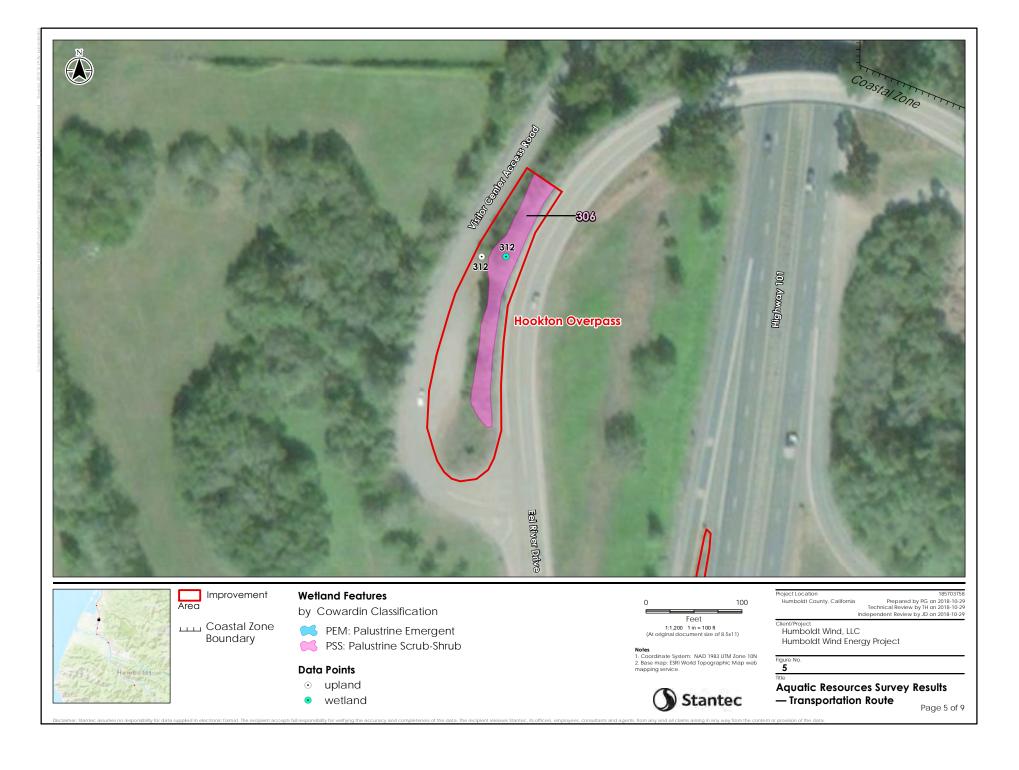


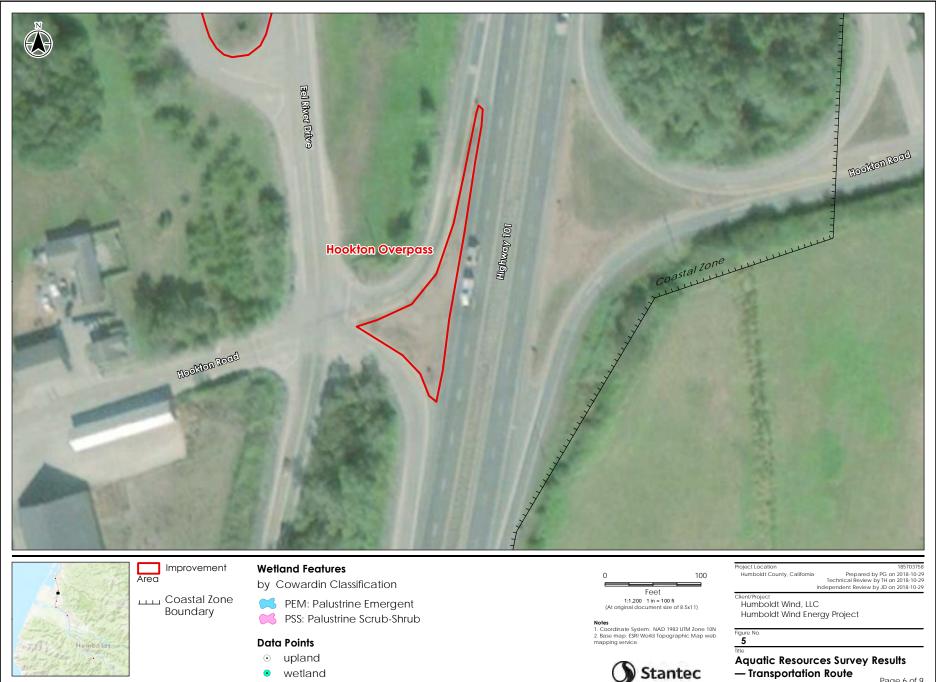




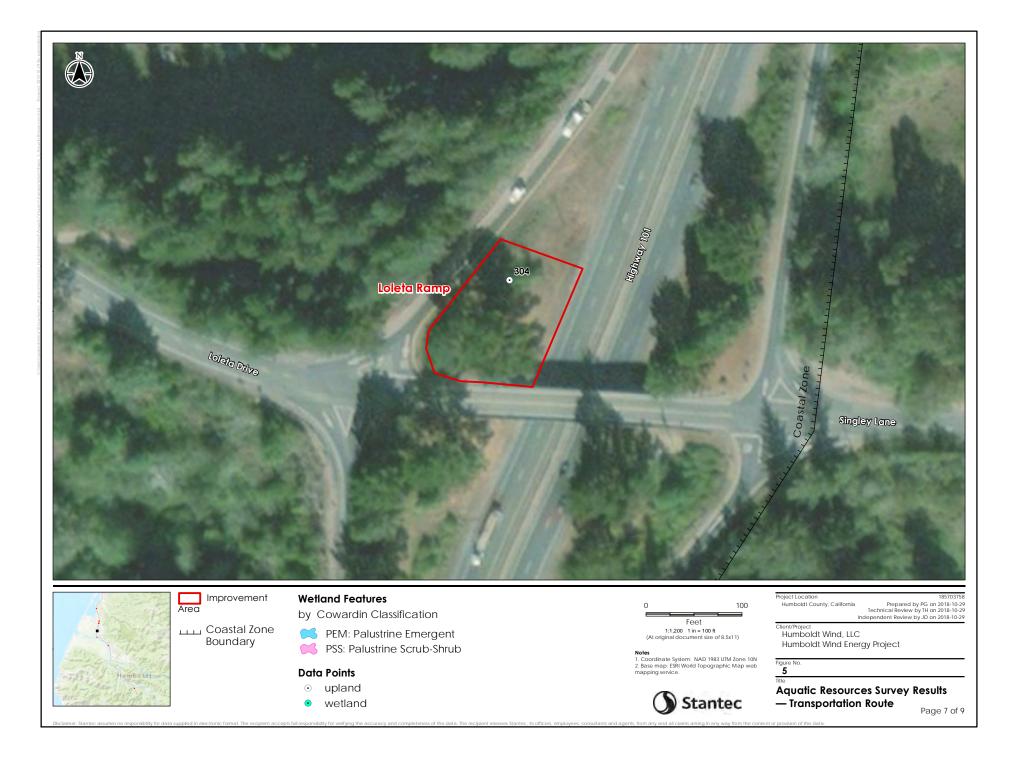


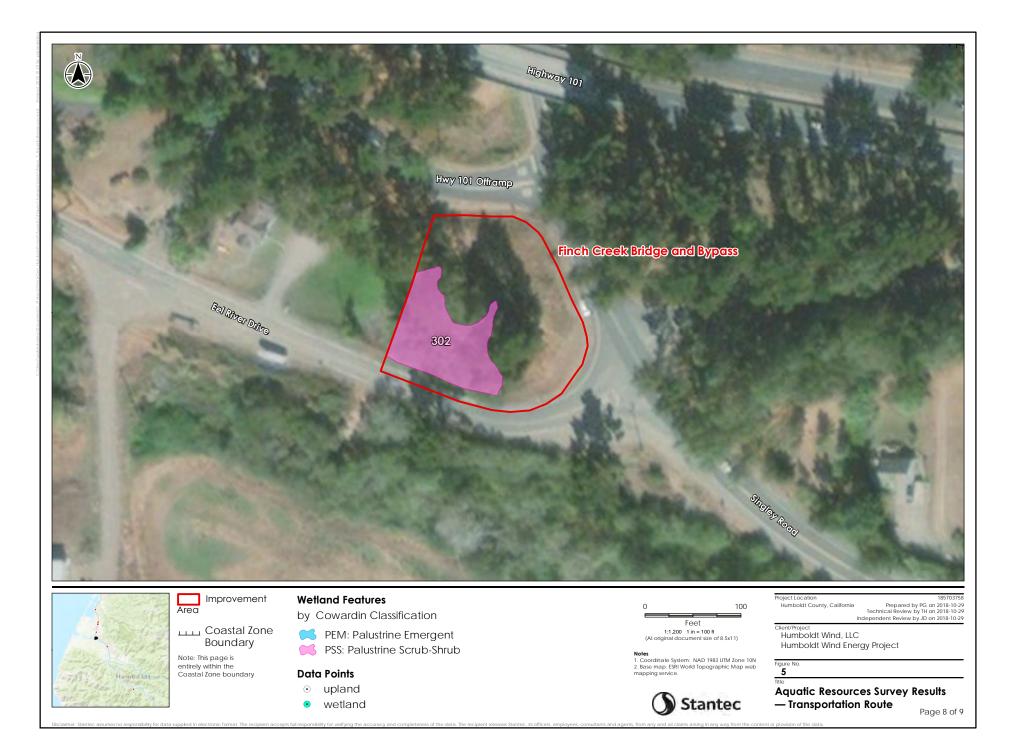






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### Area Improvement

LLLI Coastal Zone Boundary

Note: This page is entirely outside of the Coastal Zone boundary

#### Wetland Features

by Cowardin Classification

PEM: Palustrine EmergentPSS: Palustrine Scrub-Shrub

#### Data Points

• upland

wetland

0 100 Feet 1:1,200 1 in = 100 ft (At original document size of 8.5x1 1)

(At original document size of 8.5x11)

Notes 1. Coordinate System: NAD 1983 UTM Zone 10N 2. Base map: ESRI World Topographic Map web mapping service.



roject Location 185703758 Humboldt County, California Prepared by PG on 2018-10-29 Technical Review by TH on 2018-10-29 Independent Review by JD on 2018-10-29

Client/Project Humboldt Wind, LLC Humboldt Wind Energy Project

Figure No. 5

Aquatic Resources Survey Results — Transportation Route Page 9 of 9

# **APPENDICES**

## Appendix A PLANT SPECIES OBSERVED

#### Table A-1. Plant Species Observed

Scientific Name	Common Name	Wetland Indicator Status <sup>1</sup>	Origin
Ado	oxaceae (Muskroot Family)		
Sambucus nigra ssp. caerulea	blue elderberry	FAC	native
Anacardi	aceae (Sumac or Cashew Fam	ily)	
Toxicodendron diversilobum	poison oak	FAC	native
Apiacea	e (Umbelliferae) (Carrot Famil	y)	
Daucus carota	carrot	FACU	non-native (invasive)
Torilis arvensis	field hedge parsley	-	non-native (invasive)
	Araceae (Arum Family)		
Lemna minor	smaller duckweed	OBL	native
Ar	aliaceae (Ginseng Family)	•	
Hedera helix	English ivy	FACU	non-native (invasive)
Hydrocotyle ranunculoides	marsh pennywort	OBL	native
	lochiaceae (Pipevine Family)	•	1
Asarum caudatum	creeping wild ginger	FACU	native
Asteraceae	e (Compositae) (Sunflower Fai	nily)	
Achillea millefolium	yarrow	FACU	native
Arctotheca prostrata	prostrate cape weed	-	non-native (invasive)
Artemisia douglasiana	California mugwort	FACW	native
Baccharis pilularis	coyote brush	-	native
Bellis perennis	English lawn daisy	-	non-native (invasive)
, Carduus pycnocephalus ssp. pycnocephalus	Italian thistle	-	non-native
Cichorium intybus	chicory	FACU	non-native
Helminthotheca echioides	bristly ox-tongue	FAC	non-native (invasive)
Hypochaeris glabra	smooth cats ear	-	non-native (invasive)
Hypochaeris radicata	hairy cats ear	FACU	non-native (invasive)
Leontodon saxatilis	hawkbit	FACU	non-native
Leucanthemum vulgare	oxe eye daisy	FACU	non-native (invasive)
Madia elegans	common madia	-	native
Matricaria discoidea	pineapple weed	FACU	native
Symphyotrichum sp.	-	-	-
Tragopogon porrifolius	salsify	-	non-native
B	Retulaceae (Birch Family)		
Alnus rubra	red alder	FAC	native
Corylus cornuta ssp. californica	beaked hazelnut	FACU	native
Brassicac	eae (Cruciferae) (Mustard Fan	nily)	L
Nasturtium officinale	watercress	OBL	native
Raphanus sativus	jointed charlock	-	non-native (invasive)
	ressaceae (Cypress Family)	•	
Sequoia sempervirens	coast redwood	-	native
	yperaceae (Sedge Family)	•	1
Carex amplifolia	ample leaved sedge	OBL	native
Carex bolanderi	Bolander's sedge	FAC	native
Carex hendersonii	Henderson's sedge	FAC	native

Scientific Name	Common Name	Wetland Indicator Status <sup>1</sup>	Origin	
Carex praegracilis	field sedge	FACW	native	
Cyperus eragrostis	tall cyperus	FACW	native	
Isolepis cernua	low bulrush	OBL	native	
Scirpus microcarpus	mountain bog bulrush	OBL	native	
Denn	staedtiaceae (Bracken Family)		•	
Pteridium aquilinum var. pubescens	western bracken fern	FACU	native	
D	ipsacaceae (Teasel Family)			
Dipsacus fullonum	wild teasel	FAC	non-native (invasive)	
Dryop	teridaceae (Wood Fern Family	)	· · · ·	
Polystichum munitum	western sword fern	FACU	native	
Equ	uisetaceae (Horsetail Family)		•	
Equisetum arvense	common horsetail	FAC	native	
Equisetum telmateia ssp. braunii	giant horsetail	FACW	native	
	Ericaceae (Heath Family)		1	
Arctostaphylos columbiana	redwood manzanita	-	native	
Pyrola aphylla	leafless wintergreen	-	native	
• • •	e (Leguminosae) (Legume Fam	nilv)		
Acmispon americanus var. americanus	Spanish lotus	FACU	native	
Lotus corniculatus	bird's foot trefoil	FAC	non-native (invasive)	
Lotus tenuis	narrow-leaf bird's-foot trefoil	FACU	non-native	
Trifolium dubium	shamrock	FACU	non-native	
Trifolium fragiferum	strawberry clover	FACU	non-native	
Trifolium repens	white clover	FAC	non-native	
Zeltnera muehlenbergii	Muehlenberg's centaury	FACW	native	
Whipplea modesta	modesty	-	native	
	Iridaceae (Iris Family)		nauvo	
Iris douglasiana	Douglas iris	-	native	
	Juncaceae (Rush Family)			
Juncus balticus ssp. ater	Baltic rush FACW		native	
Juncus bolanderi	Bolander's rush	OBL	native	
Juncus bufonius	common toad rush	FACW	native	
Juncus effusus	common bog rush	FACW	native	
Juncus occidentalis	slender juncus	FACW	native	
Juncus patens	rush	FACW	native	
Juncus tenuis	slender rush	FAC	native	
Juncus xiphioides	iris leaved rush	OBL	native	
•	aceae (Labiateae) (Mint Family)			
Mentha pulegium	pennyroyal	OBL	non-native (invasive)	
Prunella vulgaris	self heal	FACU	native	
Stachys ajugoides	-		native	
	Lauraceae (Laurel Family)	OBL	10000	
Umbellularia californica	California bay	FAC	native	
	Linaceae (Flax Family)			
Hesperalinan micronthum	small flower western flax	_	native	
Hesperolinon micranthum Linum bienne		-	native	
	flax	-	non-native	

Appendix A Plant Species Observed

Scientific Name	Common Name	Wetland Indicator Status <sup>1</sup>	Origin
	Lythraceae (Loosestrife Family		
Lythrum hyssopifolia	hyssop loosestrife	OBL	non-native
	Myricaceae (Wax MyrtleFamily)	)	•
Morella californica	California wax myrtle	FACW	native
	Myrsinaceae (MyrsineFamily)		
Lysimachia arvensis	scarlet pimpernel	FAC	non-native
On	agraceae (Evening-Primrose Fai	mily)	
Epilobium sp.	-	-	-
	Phrymaceae (Lopseed Family)		
Parentucellia viscosa	yellow parentucellia	FAC	non-native (invasive)
Mimulus aurantiacus	sticky monkeyflower	FACU	native
Mimulus guttatus	yellow monkey flower	OBL	native
Mimulus moschatus	musk monkeyflower	OBL	native
	Pinaceae (Pine Family)	•	•
Picea sitchensis	Sitka spruce	FAC	native
Pinus radiata	Monterey pine	-	native (ornamental)
	Plantaginaceae (Plantain Family	/)	
Plantago lanceolata	ribwort	FACU	non-native (invasive)
Veronica anagallis-aquatica	water speedwell	OBL	non-native
	oaceae (Gramineae) (Grass Fam	ily)	L
Agrostis exarata	bentgrass	FACW	native
Agrostis pallens	Diego bent grass	UPL	native
Aira caryophyllea	silvery hairgrass	FACU	non-native (invasive)
Aira praecox	yellow hairgrass	-	non-native (invasive)
Alopecurus saccatus	foxtail	FACW	native
Anthoxanthum occidentale	California sweet grass	-	native
Anthoxanthum odoratum	sweet vernal grass	FACU	non-native (invasive)
Avena barbata	slim oat	-	non-native (invasive)
Briza maxima	rattlesnake grass	-	non-native (invasive)
Briza minor	little rattlesnake grass	FAC	non-native
Bromus diandrus	ripgut brome	-	non-native (invasive)
Bromus hordeaceus	soft chess	FACU non-na	
Cynodon dactylon	Bermuda grass	FACU	non-native (invasive)
Cynosurus cristatus	crested dogtail grass	FACU	non-native
Cynosurus echinatus	dogtail grass	-	non-native (invasive)
Dactylis glomerata	orchardgrass	FACU	non-native (invasive)
Danthonia californica	California oatgrass	FAC	native
Deschampsia elongata	hairgrass	FACW	native
Elymus glaucus ssp. glaucus	blue wild rye	FACU	native
Festuca arundinacea	reed fescue	FAC	non-native (invasive)
Festuca bromoides	brome fescue	FAC	non-native
Festuca myuros	rattail sixweeks grass	FACU	non-native (invasive)
Festuca perennis	Italian rye grass	FAC	non-native
Glyceria declinata	waxy mannagrass	FACW	non-native (invasive)
Holcus lanatus	common velvet grass	FAC	non-native (invasive)

Scientific Name	Common Name	Wetland Indicator Status <sup>1</sup>	Origin	
Hordeum marinum ssp. gussoneanum	barley	FAC	non-native	
Phalaris aquatica	Harding grass	FACU	non-native (invasive)	
Poa annua	annual blue grass FAC		non-native	
Poa palustris	fowl bluegrass	FAC	non-native	
Poa pratensis ssp. pratensis	Kentucky blue grass	lue grass FAC non-native (inv		
Polypogon monspeliensis	annual beard grass	FACW	non-native (invasive)	
Ро	lygonaceae (Buckwheat Fami	ly)		
Polygonum sp.	-	-	-	
Rumex acetosella	sheep sorrel	FACU	non-native (invasive)	
Rumex crispus	curly dock	FAC	non-native (invasive)	
Rumex pulcher	fiddleleaf dock	FAC	non-native	
Ra	nunculaceae (Buttercup Fami	ly)		
Ranunculus muricatus	buttercup	FACW	non-native	
RI	hamnaceae (Buckthorn Family	y)		
Ceanothus integerrimus	deer brush	-	native	
	Rosaceae (Rose Family)			
Rosa nutkana	Nootka rose	FAC	native	
Rubus armeniacus	Himalayan blackberry	FAC	non-native (invasive)	
Rubus parviflorus	thimbleberry	FACU	native	
Rubus ursinus	California blackberry	FACU	native	
	Salicaceae (Willow Family)			
Populus trichocarpa	black cottonwood	FAC	native	
Salix exigua	narrowleaf willow	FACW	native	
Salix hookeriana	coastal willow	FACW	native	
Salix laevigata	polished willow	FACW	native	
Salix lasiolepis	arroyo willow	FACW	native	
Salix sitchensis	Coulter willow	FACW	Native	
Si	apindaceae (Soapberry Family	y)		
Acer macrophyllum	bigleaf maple	FACU	native	
Т	hemidaceae (Brodiaea Family	r)		
Brodiaea elegans ssp. elegans	harvest brodiaea	FACU	native	
	Typhaceae (Cattail Family)			
Typha latifolia	broadleaf cattail	OBL	native	
	Urticaceae (Nettle Family)			
Urtica dioica	stinging nettle	FAC	native	
N	loodsiaceae (Cliff Fern Family	/)		
Athyrium filix-femina var. cyclosorum	western lady fern	FAC	native	

<sup>1</sup> FAC = facultative. FACU = facultative upland, FACW = facultative wetland, OBL = obligate, UPL = upland. Status based on Lichvar, R. W., D. L. Banks, W. N. Kirchner, and N. C. Melvin. 2016. The National Wetland Plant List: 2016 wetland ratings. Phytoneuron 2016-30: 1-17. Published 28 April 2016. ISSN 2153 733X.

## Appendix B WETLAND DETERMINATION DATA FORMS

WETLAND DETERMINATION D	ATA FOF	RM – V	Vestern Mo	ountains, Valleys, a	and Coast Regio	n 100 wet
Project/Site: Humboldt Wind Energy Project		City/County: Humboldt		s station		
Applicant/Owner: Humboldt Wind, LLC					Sampling Date:	
Applicant/Owner: Humboldt Wind, LLC Investigator(s): J. HUS(M, S. Creer, A.	1 mple	Sil	ing	State: <u>CA</u>	Sampling Point: _	100 Lu)
Landform (hillslone terrace etc.): Willslone	CONCRAJ	Sectio	n, Township, F	Range:		<i></i>
Landform (hillslope, terrace, etc.): <u>MillSlope</u>	1	_ Local	relief (concave 1620	e, convex none): Blav	slop	ie (%). <sup>0</sup>
Subregion (LRR): <u>A: Northwest Forests and Coas</u> Soil Map Unit Name Peaked - Oce ambou Se	tLat:	24.20.		Long: <u>40.455662</u>	Datum	n:
HUNDER OUNT OUNT	TOLIN	UN I	MANUX.	DOV NWI class	ification TC/110	
Are climatic / hydrologic conditions on the site typical for th	is time of ye	ear? Ye	es No	(If no, explain ir	ו Remarks.)	
Are Vegetation $\underline{1^{\circ}}$ , Soil $\underline{1^{\circ}}$ , or Hydrology $\underline{N}$	significantly	/ disturb	ed? Are	e "Normal Circumstances		Νο
Are Vegetation, Soil, or Hydrology	naturally pro	oblemat		needed, explain any ans		
SUMMARY OF FINDINGS – Attach site map				logations transmis		
Hydrophytic Vegetation Present? Yes X		Juni	ping point	locations, transec	ts, important fea	tures, etc.
· · · · · · · · · · · · · · · · · · ·	NO		Is the Sample	d Area		
Wetland Hydrology Present? Yes			within a Wetla		No	
Remarks: For WL 100			······································			
VEGETATION – Use scientific names of plan	its.					
Tree Stratum (Plot size:)	Absolute	Domir	ant Indicator	Dominance Test wo	rksheet:	
1)	<u>% Cover</u>	Specie	es? <u>Status</u>	Number of Dominant	Species	
				That Are OBL, FACW	, or FAC:	(A)
				Total Number of Dom	inant 2	2
4.				Species Across All St	rata:	(B)
				Percent of Dominant S	Species 1001	$\gamma$
Sapling/Shrub Stratum (Plot size:)		_ = 10tai	Cover	That Are OBL, FACW		(A/B)
1				Prevalence Index wo		
2				Total % Cover of:		
3				OBL species	× 1 =	
4				FACW species	x 2 =	
J				FAC species	X 3 =	
Herb Stratum (Plot size: Meter nadius		= Totai	Cover	FACU species	× 4 = × 5 =	
1. JUNCUS ERFUSUS	30	Y	FACW	Column Totals:		(B)
2. Holaus labatus	4 A	Y	FAC			(B)
3. Festuca perennis	5	N	FAC	Prevalence Index		
4. Bellis percennis	-2		UPL	Hydrophytic Vegetati		
5. Hypochaercis radianta			FACU	1 - Rapid Test for I 2 - Dominance Tes		n
6. Kuthisk ace to serio	4		FACI)	3 - Prevalence Inde		
7. RUMEX CRISPUS	<u> </u>		TAC	4 - Morphological A		
8. UNDSUVUS PULLIDATUS	<u>-2</u> -		UPL_	data in Remark	s or on a separate she	et)
9. Tr. Polium repens			FAC	5 - Wetland Non-V		
10. Menthe pilegin	<u></u> -		OBL	Problematic Hydroj	phytic Vegetation <sup>1</sup> (Ex	plain)
11. Elymus glavers ssp.glacu		V	FACU	<sup>1</sup> Indicators of hydric soi	and wetland hydroloc	
Woody Vine Stratum (Plot size:)	87 =	Total C	over	be present, unless distu	irbed or problematic.	
1)						
2				Hydrophytic Vegetation	<b>N</b> .	
1 1		Total C		Present? Yes	s <u>X</u> No	
% Bare Ground in Herb Stratum		i otar Ci	over			-

Remarks:

		100 י
		Sampling Point:
	the indicator or confirm the	he absence of indicators.)
ofile Description: (Describe to the dep	th needed to document the indicator or confirm th	
epth <u>Matrix</u>	Redox Features Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture Remarks
nches) Color (moist) %	$1 \times 10^{5/2}$ G C M C	You AND
-7 10483/2 88	$\frac{101218}{2000}$	
	7.51K73 7 6 M -	( )
-12 TOYR 3/2 85	1042 5/8 15 C M C	lay lam
	,	
·		
	I=Reduced Matrix, CS=Covered or Coated Sand Gra	ins. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
ydric Soil Indicators: (Applicable to al	LI BRs. unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
	Sandy Redox (S5)	2 cm Muck (A10)
_ Histosol (A1)	Stripped Matrix (S6)	Red Parent Material (TF2)
_ Histic Epipedon (A2)	Loamy Mucky Mineral (F1) (except MLRA 1)	Very Shallow Dark Surface (TF12)
_ Black Histic (A3)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
Hydrogen Sulfide (A4)	Depleted Matrix (F3)	
Depleted Below Dark Surface (A11)	$\mathbf{X}$ Redox Dark Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and
Thick Dark Surface (A12)		the second he proposit
	Doploted Dark Surface (E7)	wetland hydrology must be present,
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)	Depleted Dark Surface (F7) Redox Depressions (F8)	wetland hydrology must be present, unless disturbed or problematic.
Sandy Mucky Mineral (S1)		
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Restrictive Layer (if present):	Redox Depressions (F8)	unless disturbed or problematic.
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Restrictive Layer (if present): Type:	Redox Depressions (F8)	unless disturbed or problematic.
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Restrictive Layer (if present): Type: Depth (inches):	Redox Depressions (F8)	unless disturbed or problematic.
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Restrictive Layer (if present): Type: Depth (inches):	Redox Depressions (F8)	unless disturbed or problematic.
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Restrictive Layer (if present): Type: Depth (inches):	Redox Depressions (F8)	unless disturbed or problematic.

Wetland Hydrology Indicato Primary Indicators (minimum	rs: of one required; ch	eck all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1)     High Water Table (A2)     Saturation (A3)     Water Marks (B1)     Sediment Deposits (B2)     Drift Deposits (B3)     Algal Mat or Crust (B4)     Iron Deposits (B5)     Surface Soil Cracks (B6)     Inundation Visible on Ae     Sparsely Vegetated Com	rial Imagery (B7)	<ul> <li>Water-Stained Leaves (B9) (exception</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Livin</li> <li>Presence of Reduced Iron (C4)</li> <li>Recent Iron Reduction in Tilled Sci</li> <li>Stunted or Stressed Plants (D1) (In</li> <li>Other (Explain in Remarks)</li> </ul>	4A, and 4B)
Field Observations: Surface Water Present? Water Table Present? Saturation Present?	Yes No Yes No Yes No	X       Depth (inches):         Y       Depth (inches):         Y       Depth (inches):         Y       Depth (inches):         oring well, aerial photos, previous inspective	Wetland Hydrology Present? Yes No ctions), if available:

.

WETLAND DETERMINATION DAT	TA FORI	M – Western Mou	untains, Valleys, and	d Coast Region 100 up
Project/Site: Humboldt Wind Energy Project		City/County: Humbo	ldt	Sompling Data 2/1/18
Applicant/Owner: Humboldt Wind, LLC		engreeding. <u>Francisc</u>	State: CA	Sampling Point: 10 (Up)
Investigator(s): J. Holson S. Cnew, S.Toma, A. Lov	10/022	Section Township R		
Landform (hillslope, terrace, etc.):	- Standing Contact	Local relief (concave	ange.	
Subregion (LRR): <u>A: Northwest Forests and Coast</u>	[at:_12	201501		Slope (%): <u>1 ()</u>
Soil Map Unit Name: Peaked-Ocean house-Por	_ ∟ai. <u>-12</u> ehan w	CANNIX 5-		
Are climatic / hydrologic conditions on the site typical for this	time of vor	COMPLE -		
Are Vegetation, Soil, or Hydrology sig				
Are Vegetation, Soil, or Hydrology na				oresent? Yes No
			eeded, explain any answe	
SUMMARY OF FINDINGS – Attach site map s		sampling point l	ocations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes No	× × ×	Is the Sampler	4 4 4 4 4	
Hydric Soil Present?     Yes X     No       Wetland Hydrology Present?     Yes No		Is the Sampled within a Wetla	nd? Yes	No X
Remarks:				
for WL 100	1994 - A			
VEGETATION – Use scientific names of plants	S.			
		Dominant Indicator	Dominance Test works	sheet:
1	% Cover	Species? Status	Number of Dominant Sp	
2			That Are OBL, FACW, o	
3			Total Number of Domina Species Across All Strat	_
4				(-/ ]
Sapling/Shrub Stratum (Plot size:)		= Total Cover	Percent of Dominant Sp That Are OBL, FACW, o	
1			Prevalence Index work	sheet:
2				Multiply by:
3				x 1 =
4				x 2 =
5			FACU species	x 3 =
Herb Stratum (Plot size: Meter Kadis -		= Total Cover		× 5 =
1. Festura perennis	30	Y FAC		(A) (B)
2. Holcus lanatus	5	N FAC	Prevalence Index :	
3. Juncus efforus	<u></u> _	N FACW	Hydrophytic Vegetation	
4. Hypochaeris radicata	35	Y PACU	1 - Rapid Test for Hy	drophytic Vegetation
5. FRITUCE Myuros	$\frac{20}{2}$	$\underline{\mathcal{Y}} = [\underline{\mathcal{H}}(\underline{\mathcal{Y}})]$	2 - Dominance Test	is >50%
6. <u>Plantago lanceslato</u> 7. Dellis perennis	<u></u>	N-FACU	3 - Prevalence Index	1
8. JUNCUS OCCIDENTALIS		FACIN	4 - Morphological Ad	laptations <sup>1</sup> (Provide supporting or on a separate sheet)
9. Cynosvius Pellingtus		1 Pla	5 - Wetland Non-Vas	
10. Dantmonia californica	1	FAC		nytic Vegetation <sup>1</sup> (Explain)
11			<sup>1</sup> Indicators of hydric soil a	and wetland hydrology must
Woodu Vine Stratum (Dist %	103 =	Total Cover	be present, unless disturt	ed or problematic.
Woody Vine Stratum         (Plot size:)           1				
2			Hydrophytic Vegetation	_
		Total Cover		No 🔀
% Bare Ground in Herb Stratum				
Remarks:				

SO		L
----	--	---

Sampling Point: \_ []

100 up

UD

	ription: (		the dep				or commu	the absence of indicators.)	
Depth	Calar	Matrix (moist)		Color (moist)	<u>x Feature</u> %	s Type	Loc <sup>2</sup>	Texture Remarks	
<u>(inches)</u> こしみ	104R	2.5/2	95	104R 546	5		m	loam	
		ę							
						<u></u>			
					-				
					-				
			lation DN	1=Reduced Matrix, C		d or Co		rains. <sup>2</sup> Location: PL=Pore Lining, M	l=Matrix.
Type: C=C Ivdric Soil	Indicator	ion, D=Dep s: (Applic	able to al	I LRRs, unless othe	rwise not	ed.)		Indicators for Problematic Hydri	
Histoso				Sandy Redox (				2 cm Muck (A10)	
Histic E	pipedon (/	A2)		Stripped Matrix				Red Parent Material (TF2)	- <b>F</b> 4 2 )
	listic (A3)			Loamy Mucky			ept MLRA 1)	) Very Shallow Dark Surface (T Other (Explain in Remarks)	F1Z)
Hydrog	en Sulfide	(A4)		Loamy Gleyed		2)		Other (Explain in Remarks)	
		Dark Surfac	e (A11)	Depleted Matri				<sup>3</sup> Indicators of hydrophytic vegetati	on and
	ark Surfac			Redox Dark Su				wetland hydrology must be pre	
Sandy I				Depleted Dark Redox Depres				unless disturbed or problematic	
Sandy Restrictive				Redox Deples					
	•							1	
								Hydric Soil Present? Yes X	No
Remarks:				-					
IYDROL									
Wetland H				ed: chock all that an	aby)			Secondary Indicators (2 or mor	re required)
Primary Ind	licators (m	ninimum of a	one requi	ed; check all that app			) (oxcent	Water-Stained Leaves (B9	

Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 of mole required)
Surface Water (A1)       Water-Stained         High Water Table (A2)       MLRA 1, 2,         Saturation (A3)       Salt Crust (B1)         Water Marks (B1)       Aquatic Inverter         Sediment Deposits (B2)       Hydrogen Sulf         Drift Deposits (B3)       Oxidized Rhize         Algal Mat or Crust (B4)       Presence of R         Iron Deposits (B5)       Recent Iron Re	d Leaves (B9) (except       Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         e, 4A, and 4B)       Drainage Patterns (B10)         11)       Drainage Patterns (B10)         rebrates (B13)       Dry-Season Water Table (C2)         fide Odor (C1)       Saturation Visible on Aerial Imagery (C9)         cospheres along Living Roots (C3)       Geomorphic Position (D2)         Reduced Iron (C4)       Shallow Aquitard (D3)         Reduction in Tilled Soils (C6)       FAC-Neutral Test (D5)         ressed Plants (D1) (LRR A)       Raised Ant Mounds (D6) (LRR A)
Field Observations:	
Surface Water Present? Yes No X_ Depth (inches	·s):
Water Table Present? Yes <u>No </u> Depth (inches	
Saturation Present? Yes No Depth (inche	es): Wetland Hydrology Present? Yes No <u>\</u>
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho	atos previous inspections) if available:
Remarks:	

•			101 wet
WETLAND DETERMINATION DAT		Nestern Mour	Itains, Valleys, and Coast Region $\frac{101 \text{ wet}}{\sqrt{9}000000000000000000000000000000000$
Project/Site: Humpolat Wind Energy Project		ounty <u>indimotio</u>	State: CA Sampling Bale:
Applicant/Owner: Humboldt VVInd, LLC			State Sampling Folint
nvestigator(s): A. Lovelan, S. Juha			
_andform (hillslope, terrace, etc.):	Local	relief (concave, o	onvex, none): Slope (%):
Subregion (LRR): <u>A: Northwest Forests and Coast</u>	Lat: -123.947	7773	Long: 40.457924 Datum:
Soil Map Unit Name: Forhaux-praced-b	NASON	Complex_	30 NWI classification:
Are climatic / hydrologic conditions on the site typical for this	time of year? Y	es 🔼 No _	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology si	gnificantly distur	bed?N Are "I	Normal Circumstances" present? Yes <u></u> No
Are Vegetation, Soil, or Hydrology na			eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map s			ocations transects important features, etc.
Hydrophytic Vegetation Present? Yes <u>Y</u> No		Is the Sampled	Area
Hydric Soil Present? Yes <u>Y</u> No		within a Wetlan	$\mathbf{v}$
Domorka	)	~	
Remarks: SCADONA) WL,	wiad	<u>с</u>	
Ť			
VEGETATION – Use scientific names of plant	·s.		
		ninant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		cies? <u>Status</u>	Number of Dominant Species
1			That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3			Species Across All Strata:(B)
4			Percent of Dominant Species $100$ (A/B)
Sapling/Shrub Stratum (Plot size:)	= Tc	tal Cover	
1.			Prevalence Index worksheet:
2.			Total % Cover of: Multiply by:
3.			OBL species x1 =
4.			FACW species x 2 =
5			FAC species         x 3 <sup>2</sup> FACU species         x 4 =
lue li'eus	= Tc	tal Cover	UPL species x 5 =
Herb Stratum (Plot size: 1 M dram	10 )	I FAC	Column Totals: (A) (B)
1. Festica perennuls	$\frac{13}{20}$	FAC	All second s
2. Holcus ignatus	2 N	I IPL	Prevalence Index = B/A =
3. Tripolium arvense 4 Bellis perennis			Hydrophytic Vegetation Indicators:
5. Huden marinum	5	FAC	<ul> <li>1 - Rapid Test for Hydrophytic Vegetation</li> <li>2 - Dominance Test is &gt;50%</li> </ul>
6. CUMOSURUS PULLIANUS		1785	$3$ - Prevalence Index is $\leq 3.0^{1}$
2 Mentra sullaium	1.0	JBC	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8. RUMEX ORISPUS		FAC	data in Remarks or on a separate sheet)
9.		<u> </u>	5 - Wetland Non-Vascular Plants <sup>1</sup>
10			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11.			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
·	() = To	tal Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)			
1	· ·····		Hydrophytic X
2			Vegetation // No No
% Bare Ground in Herb Stratum	= To	tal Cover	

Remarks:

		101	wet
mpling	Point.	00	5

SOIL								Sampling Point
Profile Des	cription: (Describe	to the dep	oth needed to docu	ment the i	ndicator	or confirm	the absence of in	
Depth	Matrix			ox Feature				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks
0-5	10 YR 3/1	90	104R 3/3	10	C	P.L	Sandy Clay	bann
5-12	12422	85	1042-4/10			$\overline{\Omega}$	h J C	<u> </u>
turned Current	10 10 1			- 10-	<u></u>	<u> </u>		
			13412 4/4	3	harse-	H La		
	<u>,</u>							
		<u> </u>		-			••••••••••••••••••••••••••••••••••••••	
								-
<sup>1</sup> Type: C=C	oncentration, D=Dep	letion RM	=Reduced Matrix C	S=Covered	t or Cost	d Sand Gr	ains <sup>2</sup> l ocation:	PL=Pore Lining, M=Matrix.
	Indicators: (Applic					eu Saliu Gi		Problematic Hydric Soils <sup>3</sup> :
Histosol			Sandy Redox (		,		2 cm Muc	•
	pipedon (A2)		Stripped Matrix					nt Material (TF2)
	istic (A3)		Loamy Mucky I		I) (excen	t MI RA 1)		low Dark Surface (TF12)
	en Sulfide (A4)		Loamy Gleyed			c m=ro ( 1)		plain in Remarks)
	d Below Dark Surfac	e (A11)	Depleted Matrix		/			
	ark Surface (A12)	· · ·	Redox Dark Su				<sup>3</sup> Indicators of I	ydrophytic vegetation and
Sandy N	Aucky Mineral (S1)		Depleted Dark		7)			drology must be present,
Sandy C	Gleyed Matrix (S4)		Redox Depress	ions (F8)				urbed or problematic.
Restrictive	Layer (if present):							
Туре:								×(
Depth (in	ches):						Hydric Soil Prese	ent? Yes No
Remarks:			IN CAPTON				-	
HYDROLO	GY					wolldes.		
	drology Indicators:						······································	
	cators (minimum of c		d: check all that appl	v)			Socondony	ndiactors (2 or more required)
		ne require		af estimation and a second				ndicators (2 or more required)
	Water (A1)		Water-Sta			except		Stained Leaves (B9) (MLRA 1, 2,
-	ater Table (A2)			1, 2, 4A, a	nd 4B)			and 4B)
Saturati			Salt Crust					e Patterns (B10)
	larks (B1)		Aquatic In					ason Water Table (C2)
	nt Deposits (B2)		Hydrogen					on Visible on Aerial Imagery (C9)
	posits (B3)		/ ·			Living Root		rphic Position (D2)
	at or Crust (B4)		Presence					Aquitard (D3)
	posits (B5)					d Soils (C6)		eutral Test (D5)
	Soil Cracks (B6)			Stressed	Plants (D	1) (LRR A)	Raised	Ant Mounds (D6) ( <b>LRR A</b> )
	on Visible on Aerial I			plain in Re	marks)		Frost-H	eave Hummocks (D7)
	Vegetated Concave	e Surface (	B8)					
Field Obser	vations:							
Surface Wate	er Present? Y	es	No 🔀 Depth (in	ches):				
Water Table	Present? Y	es	No 🔀 Depth (in	ches):				
Saturation P			No <u>×</u> Depth (inc				nd Hydrology Pres	ent? Yes / No
(includes cap	oillary fringe)							
Describe Re	corded Data (stream	gauge, mo	onitoring well, aerial p	photos, pre	evious ins	pections), i	f available:	· · · · · · · · · · · · · · · · · · ·
Remarks:	· Arid				di <i>dista</i>			· · · · · · · · · · · · · · · · · · ·
	UNC	* K G	phitosph	rere!	S (2)	10'7		
			r i		32.0024	6 T		

# WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region 101 up

Project/Site: Humboldt Wind Energy Project	City/County: <u>Humboldt</u>		Sampling Date: 07/09/3	
Applicant/Owner: Humboldt Wind, LLC		State: <u>CA</u>	Sampling Point: 201	
Investigator(s): <u>AWVELES S, S, TONA</u>	_ Section, Township, Range		^	
Landform (hillslope terrace, etc.); HILSLOPE	Local relief (concave, con			
Submission (LPD): A: Northwest Forests and Coast Lat: -1	.23.947787 Lo	ong: <u>40.4579</u>	18 Datum:	
Soil Map Unit Name: Forhaux-peated-dolason	complex 30-502	Sor NWI classifi	ication: <u>NOVK</u>	
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes <u>X</u> No	(If no, explain in I	Remarks.)	
Are Vegetation, Soil, or Hydrology significant	ly disturbed? ${\cal N}$ Are "Noi	rmal Circumstances"	present? Yes X No _	
Are Vegetation, Soil, or Hydrology naturally r	problematic? N (If neede	ed, explain any answ	ers in Remarks.)	
		ations transact	s important features e	tc.

# SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No <u>X</u> No No	ls the Sampled Area within a Wetland?	Yes	No _X
Remarks: UPLAND	PT.	WL 200	)		

- `	Absolute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size:)	% Cover	Species?		Number of Dominant Species That Are OBL, FACW, or FAC:	(A)
1 2 3				Total Number of Dominant Species Across All Strata:	(B)
4		 = Total Co	ver	Percent of Dominant Species That Are OBL, FACW, or FAC:50	(A/B)
Sapling/Shrub Stratum (Plot size:)				Prevalence Index worksheet:	
1	_			Total % Cover of: Multiply by:	_
2			<u></u>	OBL species X 1 =	_
3.	-			FACW species $\bigcirc$ x 2 = $\bigcirc$	
4				FAC species $23 \times 3 = 69$	-
5					-
· · · · ·		= Total Co	over	FACU species × 4 =	-
Herb Stratum (Plot size: I M Odius)					-
1. RUMEX CRISPUS	3		FAC	Column Totals: <u>35</u> (A) <u>119</u>	_ (B) <sup>`</sup>
2. HULCUS langtus	5	eCuire.	FAC	Prevalence Index = $B/A = 3.4$	
3. Mentha pulacum		~~~~	OBL	Hydrophytic Vegetation Indicators:	
4. Bellis perennis			LIPL	1 - Rapid Test for Hydrophytic Vegetation	
		Y	FAC	$\sim$ 2 - Dominance Test is >50%	
5. Hordente marinum			FAC		
6. Festuca perennis				— 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
7. BROMUS hordeacious			FACUL	4 - Morphological Adaptations <sup>1</sup> (Provide supplication and the supplication of the sup	oorting
8. Cynosurus echinatus	_ <u> </u>	- <u> </u>	FACU	- 5 - Wetland Non-Vascular Plants <sup>1</sup>	
9. Hypochanis radicata			- Then	Problematic Hydrophytic Vegetation <sup>1</sup> (Explai	n)
10				<sup>1</sup> Indicators of hydric soil and wetland hydrology n	
11				be present, unless disturbed or problematic.	1450
50%= 19.5 20%= 8.2	4	_= Total Co	over		
Woody Vine Stratum (Plot size:)					
1				Hydrophytic	
2.				Vegetation Present? Yes No	
% Bare Ground in Herb Stratum3	· · · · · · · · · · · · · · · · · · ·	_= Total Co	over		
Remarks:					
UPIANOPT-NOHYd	hophi	the v	9-		
	,	l.	V		

SUIL
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101 up 201 Sampling Point: \_

Depth <u>Matrix</u> (inches) Color (moist) %	Redox Features	
	<u>Color (moist)</u> % Type <sup>1</sup> Loc <sup>2</sup>	
0-12 10YR 3/2 100		Sandy of Pustion man
	· · · · · · · · · · · · · · · · · · ·	- many cargo and
	· · · · · · · · · · · · · · · · · · ·	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=	=Reduced Matrix, CS=Covered or Coated Sand	Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all	LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2)	Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLRA	1) Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Depleted Matrix (F3)	2
Thick Dark Surface (A12) Sandy Mucky Mineral (S1)	Redox Dark Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Milleral (ST) Sandy Gleyed Matrix (S4)	<ul> <li>Depleted Dark Surface (F7)</li> <li>Redox Depressions (F8)</li> </ul>	wetland hydrology must be present,
Restrictive Layer (if present):		unless disturbed or problematic.
Туре:		
Depth (inches):		Hydric Soil Present? Yes No 📉
Remarks:	······································	
Vetland Hydrology Indicators:		
Primary Indicators (minimum of one required	Check all that apply)	
		Secondary Indicators (2 or more required)
Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
High Water Table (A2) Saturation (A3)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
<ul> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (except</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> </ul>
<ul> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (except</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> </ul>
<ul> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> </ul>	Water-Stained Leaves (B9) (except         MLRA 1, 2, 4A, and 4B)        Salt Crust (B11)        Aquatic Invertebrates (B13)        Hydrogen Sulfide Odor (C1)         X         Oxidized Rhizospheres along Living Ro	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) pots (C3) Geomorphic Position (D2)
<ul> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (except</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Qxidized Rhizospheres along Living Ro</li> <li>Presence of Reduced Iron (C4)</li> </ul>	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 cots (C3) Geomorphic Position (D2) Shallow Aquitard (D3)
<ul> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living Ro</li> <li>Presence of Reduced Iron (C4)</li> <li>Recent Iron Reduction in Tilled Soils (C6)</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9 pots (C3)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> </ul>
<ul> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living Ro</li> <li>Presence of Reduced Iron (C4)</li> <li>Recent Iron Reduction in Tilled Soils (C</li> <li>Stunted or Stressed Plants (D1) (LRR A)</li> </ul>	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         Drainage Patterns (B10)         Dry-Season Water Table (C2)         Saturation Visible on Aerial Imagery (C9)         Dots (C3)         Geomorphic Position (D2)         Shallow Aquitard (D3)         C6)       FAC-Neutral Test (D5)         A)       Raised Ant Mounds (D6) (LRR A)
<ul> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Surface Soil Cracks (B6)</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living Ro</li> <li>Presence of Reduced Iron (C4)</li> <li>Recent Iron Reduction in Tilled Soils (C</li> <li>Stunted or Stressed Plants (D1) (LRR A)</li> <li>Other (Explain in Remarks)</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>C6) FAC-Neutral Test (D5)</li> </ul>
<ul> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Surface Soil Cracks (B6)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Sparsely Vegetated Concave Surface (B</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living Ro</li> <li>Presence of Reduced Iron (C4)</li> <li>Recent Iron Reduction in Tilled Soils (C</li> <li>Stunted or Stressed Plants (D1) (LRR A)</li> <li>Other (Explain in Remarks)</li> </ul>	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         Drainage Patterns (B10)         Dry-Season Water Table (C2)         Saturation Visible on Aerial Imagery (C9)         Dots (C3)         Geomorphic Position (D2)         Shallow Aquitard (D3)         C6)       FAC-Neutral Test (D5)         A)       Raised Ant Mounds (D6) (LRR A)
<ul> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Surface Soil Cracks (B6)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Sparsely Vegetated Concave Surface (B</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living Ro</li> <li>Presence of Reduced Iron (C4)</li> <li>Recent Iron Reduction in Tilled Soils (C</li> <li>Stunted or Stressed Plants (D1) (LRR A)</li> <li>Other (Explain in Remarks)</li> </ul>	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         Drainage Patterns (B10)         Dry-Season Water Table (C2)         Saturation Visible on Aerial Imagery (C9)         Dots (C3)         Geomorphic Position (D2)         Shallow Aquitard (D3)         C6)       FAC-Neutral Test (D5)         A)       Raised Ant Mounds (D6) (LRR A)
<ul> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Surface Soil Cracks (B6)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Sparsely Vegetated Concave Surface (B</li> <li>ield Observations:</li> <li>urface Water Present? Yes N</li> </ul>	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Coxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C Stunted or Stressed Plants (D1) (LRR 1) Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         Drainage Patterns (B10)         Dry-Season Water Table (C2)         Saturation Visible on Aerial Imagery (C9)         Dots (C3)         Geomorphic Position (D2)         Shallow Aquitard (D3)         C6)       FAC-Neutral Test (D5)         A)       Raised Ant Mounds (D6) (LRR A)
<ul> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Surface Soil Cracks (B6)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Sparsely Vegetated Concave Surface (B</li> <li>Ield Observations:</li> <li>urface Water Present? Yes N</li> <li>Vater Table Present? Yes N</li> <li>Autivation Present? Yes N</li> </ul>	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Coxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C Stunted or Stressed Plants (D1) (LRR ) Other (Explain in Remarks) 8)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         Drainage Patterns (B10)         Dry-Season Water Table (C2)         Saturation Visible on Aerial Imagery (C9)         Dots (C3)         Geomorphic Position (D2)         Shallow Aquitard (D3)         C6)       FAC-Neutral Test (D5)         A)       Raised Ant Mounds (D6) (LRR A)
<ul> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Surface Soil Cracks (B6)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Sparsely Vegetated Concave Surface (B</li> <li>ield Observations:</li> <li>urface Water Present? Yes N</li> <li>Vater Table Present? Yes N</li> <li>aturation Present? Yes N</li> </ul>	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks) 8) Io X Depth (inches): Wet	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Saturation Visible on Aerial Imagery (C9)     Geomorphic Position (D2)     Shallow Aquitard (D3)     FAC-Neutral Test (D5) A)     Raised Ant Mounds (D6) (LRR A)     Frost-Heave Hummocks (D7)
<ul> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Surface Soil Cracks (B6)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Sparsely Vegetated Concave Surface (B</li> <li>ield Observations:</li> <li>iurface Water Present? Yes N</li> <li>Vater Table Present? Yes N</li> <li>aturation Present? Yes N</li> <li>neturation Present? Yes N</li> </ul>	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Coxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C Stunted or Stressed Plants (D1) (LRR ) Other (Explain in Remarks) 8)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Saturation Visible on Aerial Imagery (C9)     Sots (C3) Geomorphic Position (D2)     Shallow Aquitard (D3)     Shallow Aquitard (D3)     FAC-Neutral Test (D5) A)     Raised Ant Mounds (D6) (LRR A)     Frost-Heave Hummocks (D7)
High Water Table (A2)     Saturation (A3)     Water Marks (B1)     Sediment Deposits (B2)     Drift Deposits (B3)     Algal Mat or Crust (B4)     Iron Deposits (B5)     Surface Soil Cracks (B6)     Inundation Visible on Aerial Imagery (B7)     Sparsely Vegetated Concave Surface (B     Field Observations:     Surface Water Present? Yes N Vater Table Present? Yes N Vater Table Present? Yes N Saturation Present? Yes	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks) 8) Io X Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Saturation Visible on Aerial Imagery (C9)     Sots (C3) Geomorphic Position (D2)     Shallow Aquitard (D3)     Shallow Aquitard (D3)     FAC-Neutral Test (D5) A)     Raised Ant Mounds (D6) (LRR A)     Frost-Heave Hummocks (D7)
High Water Table (A2)     Saturation (A3)     Water Marks (B1)     Sediment Deposits (B2)     Drift Deposits (B3)     Algal Mat or Crust (B4)     Iron Deposits (B5)     Surface Soil Cracks (B6)     Inundation Visible on Aerial Imagery (B7)     Sparsely Vegetated Concave Surface (B     ield Observations:     Surface Water Present? Yes N     Vater Table Present? Yes N     vater Table Present? Yes N     raturation Present? Yes N     raturation Present? Yes N     ncludes capillary fringe)     vescribe Recorded Data (stream gauge, mon     semarks:	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks) 8) Io X Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Saturation Visible on Aerial Imagery (C9)     Sots (C3) Geomorphic Position (D2)     Shallow Aquitard (D3)     Shallow Aquitard (D3)     FAC-Neutral Test (D5) A)     Raised Ant Mounds (D6) (LRR A)     Frost-Heave Hummocks (D7)
<ul> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Surface Soil Cracks (B6)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Sparsely Vegetated Concave Surface (B</li> <li>ield Observations:</li> <li>urface Water Present? Yes N</li> <li>Vater Table Present? Yes N</li> <li>vater Table Present? Yes N</li> <li>ncludes capillary fringe)</li> <li>escribe Recorded Data (stream gauge, mon</li> </ul>	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks) 8) Io X Depth (inches): Wet	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Saturation Visible on Aerial Imagery (C9)     Sots (C3) Geomorphic Position (D2)     Shallow Aquitard (D3)     Shallow Aquitard (D3)     FAC-Neutral Test (D5) A)     Raised Ant Mounds (D6) (LRR A)     Frost-Heave Hummocks (D7)
<ul> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Surface Soil Cracks (B6)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Sparsely Vegetated Concave Surface (B</li> <li>ield Observations:</li> <li>urface Water Present? Yes N</li> <li>/ater Table Present? Yes N</li> <li>aturation Present? Yes N</li> <li>ncludes capillary fringe)</li> <li>escribe Recorded Data (stream gauge, monocomparison)</li> </ul>	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks) 8) Io X Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Saturation Visible on Aerial Imagery (C9)     Sots (C3) Geomorphic Position (D2)     Shallow Aquitard (D3)     Shallow Aquitard (D3)     FAC-Neutral Test (D5) A)     Raised Ant Mounds (D6) (LRR A)     Frost-Heave Hummocks (D7)

WETLAND DETERMINATION DATA FORM		
WETLAND DETERMINATION DATA FORM	– western Mountains, Valleys, and	Coast Region 106 wet
Project/Site: Humboldt Wind Energy Project	ty/County: <u>Humboldt</u>	Sampling Date: 7/10/18
Applicant/Owner: <u>Humboldt Wind, LLC</u>		Sampling Point: 202
Investigator(s): S. Tona : A. Loveless se	notion Taumahin D	
Landform (hillslope, terrace, etc.): <u>Hillslope</u> Lissubregion (LRR): A: Northwest Forosts and Coast Lissubregion (LRR): A: Northwest Forosts and Coast	ocal relief (concave, convex, none)	X 01
Soil Map Unit Name: Teaked-Ocean Mouse-For Marx Cam of	ALS-301-SLADDS NW/ classifica	tion: ADVA 0
r we similate r hydrologic conditions on the site typical for this time of year'	Yes X No (If no sublain to b	marks.)
Are Vegetation $N_{\rm N}$ , Soil $N_{\rm N}$ , or Hydrology $N_{\rm N}$ significantly dis	sturbed? Are "Normal Circumstances" pre	
Are Vegetation, Soil/, or Hydrology/ naturally proble	ematic? (If needed, explain any answers	in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing s	ampling point locations, transects,	important features etc
Hydrophytic Vegetation Present? Yes X No		
Hydric Soil Present? Yes X No	Is the Sampled Area	

Wetland Hydrology Present?	Yes X No	within a Wetland?	Yes_X No
Remarks: Seasonal wetland	<u>Oct</u>	· · · · · · · · · · · · · · · · · · ·	
Jeasonal Welling	204		
		······································	

Tree Stratum (Plot size:)	Absolute	Dominant Indicat	tor Dominance Test worksheet:
1.	- <u>% Cover</u>	Species? Statu	Number of Dominant Species A)
3		······································	Total Number of Dominant 3 (B)
Sapling/Shrub Stratum (Plot size:)		= Total Cover	Percent of Dominant Species 100 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 =
		= Total Cover	FACU species x 4 =
Herb Stratum (Plot size: M. Vzich US	· · · · · · · · · · · · · · · · · · ·		UPL species x 5 =
1. Juncus effosos	15	Y FACI	
2. Itolcus lanatus	_15	Y FAC	
3. Th Folium repens	8	N FAC	Prevalence Index = B/A =
4. Festuca perennis	30	Y FAC	Hydrophytic Vegetation Indicators:
5. Hypochaeris radicata	5	N FACH	- 1 - Rapid Test for Hydrophytic Vegetation
6. Juncus occidentalis	8	N FACU	-1 $-1$ 2 - Dominance Test is >50%
7. CYPOSURS echinatus	1'	N UPL	
8. Poa annua		N FAC	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
9. Bellis perennis			data in Remarks or on a separate sheet)
10		N UPL	5 - Wetland Non-Vascular Plants <sup>1</sup>
11	<u> </u>		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
501=43 20=17.2	86 =	Total Cover	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)			
1			- Hydrophytic
2		······································	Veretation
<sup>70</sup> Date Ground in Herb Stratum 20		Total Cover	Present? Yes <u>X</u> No
Remarks: Hydrophytic vegetation is p	cosin mt		
Prince vegetation is p	1 SQUI		

S	0	ļ	L
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**106 wet** 

rofile Desc			th needed to decu	ment the indica	tor or confirm t	he absence	of indicators.)
	ription: (Describe 1	to the dep	oth needed to docu	ox Features			
Depth	Matrix Color (moist)	%	Color (moist)	%Typ	be <sup>1</sup> Loc <sup>2</sup>	Texture	Remarks
(inches)		85	161R 4/6	15	C	AT WAM	
0-8	10YR 3/1		151R 5/8	15_		ind- da	Joan
8-12	104R2/1	45_	105/15-10	k		<u>er lee jeze</u>	7
		_					
		-					
			-				
			······································				
						ains <sup>2</sup> Lo	ocation: PL=Pore Lining, M=Matrix.
Type: C=C	oncentration, D=Dep	pletion, RM	M=Reduced Matrix, C	envise noted.)	Soaled Gana Gre	Indicat	ors for Problematic Hydric Soils <sup>3</sup> :
	Indicators: (Applic	cable to a	Sandy Redox	(\$5)		2 d	m Muck (A10)
Histoso	• •		Stripped Matr	rix (S6)		Re	d Parent Material (TF2)
	pipedon (A2)		L oamy Mucky	y Mineral (F1) (e	xcept MLRA 1)	Ve	ry Shallow Dark Surface (TF12)
	listic (A3) en Sulfide (A4)		Loamy Gleye	d Matrix (F2)		Ot	her (Explain in Remarks)
Hydrog	ed Below Dark Surfa	ce (A11)	Depleted Ma	trix (F3)		3	the strength the vegetation and
Deplet Thick [	Dark Surface (A12)	( )	🔀 Redox Dark S	Surface (F6)		Indica	tors of hydrophytic vegetation and land hydrology must be present,
Sandv	Mucky Mineral (S1)			rk Surface (F7)		wet	ess disturbed or problematic.
Sandy	Gleyed Matrix (S4)		Redox Depre	essions (F8)			
	e Layer (if present):						
	NUNC	. <u></u>				Hydric So	oil Present? Yes $\chi$ No
Type:	NUNC					1 -	bil Present? Yes X No
Type:	NUNC			cent cedux	warentist	1 -	
Type:	None		, with promi	next redux	watertrat	1 -	
Type:	NUNC		, with promi	nent redux	wacentrat	1 -	
Type:	NUNC		, with promi	nent redux	· wacentrat	1 -	
Type: Depth (i Remarks:	NONE inches): Redux dark Si		, with promi	nent redux	whicentrat	1 -	
Type: Depth (i Remarks: HYDROL	NUNE inches): Redux dark Si OGY	urface	, with promi	nent redux	wacentrat	ions pre	sent.
Type: Depth (i Remarks: HYDROL Wetland H	NONE inches): Redux dark Si OGY tydrology Indicator	ns face			whicentrat	ions pre	Sont. condary Indicators (2 or more required
Type: Depth (i Remarks: <b>HYDROL</b> Wetland P Primary In	NUNE inches): Redux dark Si OGY Tydrology Indicator dicators (minimum o	ns face	ired; check all that a			ions pre	Sont. <u>condary Indicators (2 or more required</u> Water-Stained Leaves (B9) ( <b>MLRA</b> *
Type: Depth (i Remarks: HYDROL Wetland H Primary In Surfac	NONE inches): Redux dark Si OGY Hydrology Indicator dicators (minimum o ce Water (A1)	ns face	ired; check all that a	apply)	(B9) (except	ions pre	Sont. <u>condary Indicators (2 or more required</u> Water-Stained Leaves (B9) ( <b>MLRA</b> ~ <b>4A</b> , and <b>4B</b> )
Type: Depth (i Remarks: HYDROL Wetland H Primary In Surfac High \	NONE inches): Redux dark Si OGY tydrology Indicator dicators (minimum o ce Water (A1) Water Table (A2)	ns face	ired; check all that a Water- ML	apply) Stained Leaves	(B9) (except	ions pre	Scot 1. <u>condary Indicators (2 or more required</u> Water-Stained Leaves (B9) ( <b>MLRA</b> 2 <b>4A</b> , and <b>4B</b> ) Drainage Patterns (B10)
Type: Depth (i Remarks: HYDROL Wetland H Primary In Surfar High <sup>1</sup> Satur	NONE inches): Redux dark Si OGY tydrology Indicator dicators (minimum o ce Water (A1) Water Table (A2) ation (A3)	ns face	iired; check all that a Water- ML Salt Ci	apply) Stained Leaves RA 1, 2, 4A, and	(B9) (except 1 4B)	ions pre	Sont. <u>condary Indicators (2 or more required</u> Water-Stained Leaves (B9) ( <b>MLRA</b> <b>4A</b> , and <b>4B</b> ) Drainage Patterns (B10) Dry-Season Water Table (C2)
Type: Depth (i Remarks: HYDROL Wetland F Primary In Surfac High \ Satur Wate	NONE inches): Redux dark Si OGY Hydrology Indicator dicators (minimum o ce Water (A1) Water Table (A2) ation (A3) r Marks (B1)	ns face	iired; check all that a Water- ML Salt Ci Aquati Hydroj	apply) Stained Leaves RA 1, 2, 4A, and rust (B11) ic Invertebrates ( gen Sulfide Odol	(B9) ( <b>except</b> <b>i 4B)</b> B13) (C1)	se	Sont. condary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery
Type: Depth (i Remarks: HYDROL Wetland H Primary In Surfar High \ Satur Wate Sedin	NONE inches): Redux dark Si OGY Hydrology Indicator dicators (minimum o ce Water (A1) Water Table (A2) ation (A3) r Marks (B1) nent Deposits (B2)	ns face	iired; check all that a Water- ML Salt Ci Aquati Hydrog _★_ Oxidiz	apply) Stained Leaves <b>RA 1, 2, 4A, and</b> rust (B11) ic Invertebrates ( gen Sulfide Odor red Rhizospheres	(B9) ( <b>except</b> <b>i 4B)</b> B13) · (C1) s along Living Ro	se	Sont. <u>condary Indicators (2 or more required</u> Water-Stained Leaves (B9) ( <b>MLRA</b> <b>4A, and 4B)</b> Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2)
Type: Depth (i Remarks: HYDROL Wetland H Primary In Surfac High V Satur Wate Sedin Drift [	NONE inches): Redux Clark Si OGY Hydrology Indicator dicators (minimum o ce Water (A1) Water Table (A2) ation (A3) r Marks (B1) nent Deposits (B2) Deposits (B3)	ns face	ired; check all that a Water- ML Salt Cr Aquati Hydrog _★ Oxidiz Presei	apply) Stained Leaves <b>RA 1, 2, 4A, and</b> rust (B11) ic Invertebrates ( gen Sulfide Odor red Rhizospheres nce of Reduced	(B9) ( <b>except</b> <b>1 4B)</b> B13) · (C1) s along Living Ro Iron (C4)	Se	Sont. Sont. Condary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3)
Type: Depth (i Remarks: HYDROL Wetland H Primary In Surfac High V Satur Wate Sedin Sedin Drift I Algal	NONE inches): Tedux dark S OGY Hydrology Indicator dicators (minimum o ce Water (A1) Water Table (A2) ation (A3) r Marks (B1) nent Deposits (B2) Deposits (B3) Mat or Crust (B4)	ns face	iired; check all that a Water- ML Salt Cu Aquati Hydrog Oxidiz Preser Recer	apply) Stained Leaves <b>RA 1, 2, 4A, and</b> rust (B11) ic Invertebrates ( gen Sulfide Odor red Rhizospheres nce of Reduced nt Iron Reduction	(B9) (except i 4B) B13) · (C1) s along Living Ro Iron (C4) in Tilled Soils (C	Se	Sont. Sont. Condary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Type: Depth (i Remarks: HYDROL Wetland H Primary In Surfar Surfar Satur Vate Sedin Oriff [ Algal Iron [	NONE inches): Redux dark Si OGY tydrology Indicator dicators (minimum o ce Water (A1) Water Table (A2) ation (A3) r Marks (B1) nent Deposits (B2) Deposits (B3) Mat or Crust (B4) Deposits (B5)	ns face	iired; check all that a Water- ML Salt Cu Aquati Hydrog Oxidiz Preser Recer	apply) Stained Leaves <b>RA 1, 2, 4A, and</b> rust (B11) ic Invertebrates ( gen Sulfide Odor red Rhizospheres nce of Reduced	(B9) (except i 4B) B13) · (C1) s along Living Ro Iron (C4) in Tilled Soils (C	Se	Sont. So
Type: Depth (i Remarks: HYDROL Wetland H Primary In Surfar Surfar Satur Vate Sedin Oriff I Algal Iron I Surfar	NONE NONE	ns face	ired; check all that a Water- Salt Cr Aquati Hydrog Oxidiz Preser Recer Stunte	apply) Stained Leaves RA 1, 2, 4A, and rust (B11) ic Invertebrates ( gen Sulfide Odor red Rhizospheres nce of Reduced nt Iron Reduction ed or Stressed P	(B9) ( <b>except</b> <b>i 4B)</b> B13) (C1) s along Living Ro Iron (C4) in Tilled Soils (C lants (D1) ( <b>LRR</b>	Se	Sont. Sont. Condary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Type: Depth (i Remarks: HYDROL Wetland H Primary In Surfar Surfar Satur Vate Sedin Vate Sedin Orift [ Algal Iron [ Surfar Surfar Surfar Surfar Surfar	NONE inches): Redux dark Si OGY tydrology Indicator dicators (minimum o ce Water (A1) Water Table (A2) ation (A3) r Marks (B1) nent Deposits (B2) Deposits (B3) Mat or Crust (B4) Deposits (B5)	ial Imager	ired; check all that a Water- ML Salt Cr Aquati Hydrog Oxidiz Prese Recer Stunte y (B7) Other	apply) Stained Leaves <b>RA 1, 2, 4A, and</b> rust (B11) ic Invertebrates ( gen Sulfide Odor red Rhizospheres nce of Reduced nt Iron Reduction	(B9) ( <b>except</b> <b>i 4B)</b> B13) (C1) s along Living Ro Iron (C4) in Tilled Soils (C lants (D1) ( <b>LRR</b>	Se	Sont. So

	Voc	No V	Depth (inches):	Constanting and the second		
Surface Water Present?						
Water Table Present?	Yes		Depth (inches): _		Wetland Hydrology Present?	Yes 🖌 No
Saturation Present?	Yes	No <u>X</u>	_ Depth (inches): _		Wettand Hydrology Freedom	
(includes capillary fringe) Describe Recorded Data (stre	am gauge, r	nonitoring	well, aerial photos,	previous inspe	ctions), if available:	
Remarks: Approxima first three	tely ID inches	. Oxic of soil	lized rhizo	spheres	present along living	roots w/in

WETLAND DETERMINATION	DATA FOR	v – Western Mo	untains, Valleys, an	d Coast Region 106 up
Project/Site: Humboldt Wind Energy Project	(	City/County: Humbo	oldt	Sampling Date: 7/10/18
Applicant/Owner: <u>Humboldt Wind</u> , LLC			State: CA	Comptine Dia 203
Investigator(s): S. TODE i. A. LONG LESS		Section, Township, R	ange:	oumping rom. <u>200 a</u>
Landform (hillslope, terrace, etc.):		Local relief (concave	convex none) CONC	X Slope (%): 15/
Subregion (LRR): A: Northwest Forests and Coa	ast Lat: -12	4.187521	Long 40.4516	29 Datum:
Soil Map Unit Name: Praked-O reanhouse-For	baux com	1N 5-301-51.	DRS NWI classific	cation: NOVQ
Are climatic / hydrologic conditions on the site typical for	ا this time of yea r	nr?Yes 🗶 No	(If no. explain in R	Remarks )
Are Vegetation, Soil, or Hydrology _/	significantly o	listurbed? Are	"Normal Circumstances"	present? Yes 🗙 No
Are Vegetation, Soil, or Hydrology	naturally prot		eeded, explain any answe	
SUMMARY OF FINDINGS – Attach site ma	ap showing			
Hydrophytic Vegetation Present? Yes				, important leatures, etc
Hydric Soil Present? Yes X	No_	is the Sample		
Wetland Hydrology Present? Yes	No <u>×</u>	within a Wetla	ind? Yes	No
Remarks: Upland pair point to	#202	WL 204		
VEGETATION – Use scientific names of pl	anto	•		
		Dominant Indicator	Dominance Test	
Tree Stratum (Plot size:)	<u>% Cover</u>	Species? Status	Dominance Test works Number of Dominant Sp	
1			That Are OBL, FACW, o	or FAC: (A)
23	······································	······································	Total Number of Domina	ant 🗠
4	······································		Species Across All Strat	ant <u>2</u> (B)
		= Total Cover	Percent of Dominant Sp That Are OBL, FACW, o	ecies
Sapling/Shrub Stratum (Plot size:)			Prevalence Index work	
1 2			Total % Cover of:	
3	<u></u>		OBL species	x 1 =
4			FACW species	x 2 =
5			FAC species <u>20</u> FACU species <u>5</u> 6	
Herb Stratum (Plot size: 1 m. radius		Total Cover	UPL species 20	
1. Plantago Kinkolaty	35	Y FACU	Column Totals: 90	(A) <u>360</u> (B)
2. <u>Hypochaccis radicata</u>	20	Y FACI	Prevalence Index	
3. Feistuca bromoides 4. Itolcus lanotus		- <u>FAC</u>	Hydrophytic Vegetation	
5. Anthoxanthum occidentale	<u> </u>	FAC	_/V 1 - Rapid Test for Hy	
6. Festuca perephis	<u> </u>	- <u>LIPL</u> - FAC	$\frac{N}{2}$ 2 - Dominance Test	
7. Bellis perennis		- UPL	∧ 3 - Prevalence Index     A	
8			data in Remarks	aptations <sup>1</sup> (Provide supporting or on a separate sheet)
9			✓ 5 - Wetland Non-Vas	cular Plants <sup>1</sup>
10	<u> </u>			ytic Vegetation <sup>1</sup> (Explain)
1150% 45 20% 18	90 =-		<sup>1</sup> Indicators of hydric soil a be present, unless disturb	and wetland hydrology must
Woody Vine Stratum (Plot size:)	<u>_10 _</u> =	Total Cover		
1			Hydrophytic	
2			Vegetation	
% Bare Ground in Herb Stratum15	= 1	Fotal Cover	Present? Yes	No <u>_X</u>

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	cription: (Describe	to the dep	th needed to docum	ent the indi	cator or conf	irm the absence of	maicators.)
Depth	Matrix		Redox	Features			Remarks
(inches)	Color (moist)		Color (moist)		ype <sup>1</sup> Loc <sup>2</sup>		
9-12	104R 311	90	7.5 YR 4/6	10	<u>C_M</u>	<u>Sandy loar</u>	<u> </u>
Type: C=C	Concentration, D=Dep	oletion, RM	=Reduced Matrix, CS	=Covered or	Coated Sand	l Grains. <sup>2</sup> Loca	tion: PL=Pore Lining, M=Matrix.
Hydric Soil Histoso Histic E Black H Hydrog Deplete Thick D	Indicators: (Applic	cable to all	LRRs, unless other Sandy Redox (S Stripped Matrix Loamy Mucky M Loamy Gleyed I Depleted Matrix Redox Dark Sur Depleted Dark S	wise noted. (S6) Mineral (F1) ( Matrix (F2) (F3) rface (F6)	<b>)</b>	A 1) 2 cm Red F Very Other <sup>3</sup> Indicator wetlan	s for Problematic Hydric Soils <sup>3</sup> : Muck (A10) Parent Material (TF2) Shallow Dark Surface (TF12) (Explain in Remarks) s of hydrophytic vegetation and d hydrology must be present, disturbed or problematic.
Restrictive	Gleyed Matrix (S4)		Redox Depress				
Depth (i	NUNC				recert		
Depth (i	nches):	redox	concertratio	ns are	present		Present? Yes X No First 12 inches.
Depth (i Remarks:	nches): Prominent OGY		concortration	ns are	present		
Depth (i Remarks: HYDROLO Wetland H Primary Inc Surfac High V Satura Water Sedim Drift D Algal I In Iron D Surfac Inunda	nches): Prominent OGY ydrology Indicators	s: one require	ed; check all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized Presence Recent In Stunted o B7) Other (Ex	y) ined Leaves <b>1, 2, 4A, an</b> (B11) ivertebrates Sulfide Odo Rhizosphere of Reduced on Reductior ir Stressed P	(B9) (except d 4B) (B13) or (C1) s along Living Iron (C4) or in Tilled Soil Plants (D1) (LF	M in the <u>Secon</u> <u>W</u> <u>Roots (C3)</u> <u>Roots (C3)</u> <u>S</u> <u>S</u> <u>S</u> <u>S</u> <u>S</u> <u>S</u> <u>S</u> <u>S</u>	

(includes capillary fringe)	in the last section of the section o
Describe Recorded Data (stream gauge, monitoring well	l, aerial photos, previous inspections), il avaliable.

No wetland hydrology indicators are present. Remarks:

### WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region 108 up

Project/Site: Humboldt Wind Energy Project	City/County: <u>Humboldt</u>		Sampling Date: 07/10/2018
Applicant/Owner: Humboldt Wind, LLC		State: <u>CA</u>	Sampling Point: 2010
Investigator(s): ALOVELESS, STONA	Section, Township, Range: _		
Landform (hillslope, terrace, etc.):	Local relief (concave, conve	k, none): <u>Covice</u>	Slope (%): 10
Subregion (LRR): A: Northwest Forests and Coast Lat:	-124.185788 Long	<sub>1:</sub> 40.45090	04 Datum:
Soil Map Unit Name: Peaked-Oceanhause-Forhause ()	MDLex 5-3% Slopes	NWI classific	ation: <u>Nove</u>
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes X No	(If no, explain in R	emarks.)
Are Vegetation $\underline{N}$ , Soil $\underline{N}$ , or Hydrology $\underline{N}$ significant	tly disturbed? Are "Norma	al Circumstances" p	eresent? Yes X No
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed,	explain any answe	rs in Remarks.)

# SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes No Yes No Yes No	Is the Sampled Area within a Wetland?	Yes	NoX
Remarks: Suspedarea due Vegetation is prese	to soils and hydrolog	jy and topographic	position.	No hydrophylic

-	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
1	· · · · · · · · · · · · · · · · · · ·	······		That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant 7
3	-			Species Across All Strata: (B)
4				
		= Total Co	ver	Percent of Dominant Species 50 (A/B)
Sapling/Shrub Stratum (Plot size:)		-		
1	<u> </u>			Prevalence Index worksheet:
2				Total % Cover of: Multiply by:
3				OBL species x 1 =
4				FACW species $15$ x 2 = $30$
5		<u></u>		FAC species $2$ x 3 = $27$
·	·			FACU species $53$ x 4 = $212$
Herb Stratum (Plot size: IM radius)		= Total Cov	/er	UPL species x 5 =
1. CYNOSULUS Cristatus	10	N	FACU	Column Totais: <u>77</u> (A) <u>269</u> (B)
2. Aurostis pallens	30	Y	FACY	Prevalence Index = $B/A = 2.5$
3. Parentucellia Viscosa	2	N	FAC	Hydrophytic Vegetation Indicators:
4. Juncus occidentalis	15	Y	FACW	$\underline{N}$ 1 - Rapid Test for Hydrophytic Vegetation
5. anthoxanthum odokatum	1	NI	FACU	$\frac{N}{2}$ 2 - Dominance Test is >50%
6. Leontodon saxatillis	10	N	FACU	$\frac{N}{N}$ 3 - Prevalence Index is $\leq 3.0^{1}$
7. Holay lenatur	7	<u></u>	FAG	
8. Trifolium repens	2	N	FACH	<u>A</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
9				$\stackrel{\frown}{\simeq}$ 5 - Wetland Non-Vascular Plants <sup>1</sup>
10				✓ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
50=38.5 20=15,4	77	= Total Cov		be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)	······			· · · · · · · · · · · · · · · · · · ·
1				Hydrophytic
2		<u>.                                    </u>		Vegetation
		= Total Cov		Present? Yes <u>No X</u>
% Bare Ground in Herb Stratum	·	10101000	<u>.</u>	
Remarks:	Ċ			
Clominant Agrostis pallen	7			

Sampling Point: 206

108 up

		to the dept				nfirm ti	he absence of indic	cators.)	
Depth (inches)	<u>Matrix</u> Color (moist)	%	Color (moist)	x Features	s Type <sup>1</sup> Loc	<u></u>	Texture	Remarks	
	10YR 3/1	80	10YR 5/6	20	matrix		rylam		
<u> </u>	<u>- 1 Sud f l 2 - 2</u>		<b>`</b>		• <u>····</u>	<u></u>	J		
. <u></u>					. <u></u>				
					·				
	incentration D-D-	Jetion PM-	Reduced Matrix, C	S=Covora	d or Costed Son	nd Grain	ns. <sup>2</sup> Location	PL=Pore Lining, N	1=Matrix
Hvdric Soil	ndicators: (Applie	able to all	Reduced Matrix, C: LRRs, unless othe	rwise not	<u>, -, -, -, -, -, -, -, -, -, -, -, -,</u>	<u> (181.</u>	Indicators for F	Problematic Hydr	
Histosol			Sandy Redox (				2 cm Muck		
	oipedon (A2)		Stripped Matrix				Red Parent	t Material (TF2)	
Black Hi	stic (A3)		Loamy Mucky I	Mineral (F	1) (except MLR	₹ <b>A</b> 1)	Very Shallo	w Dark Surface (T	F12)
Hydroge	en Sulfide (A4)		Loamy Gleyed	Matrix (F2			Other (Expl	lain in Remarks)	
	d Below Dark Surfac	ce (A11)	Depleted Matri				<sup>3</sup> Indianter 1	dronhutio una 1 1	on and
	ark Surface (A12) Aucky Mineral (S1)		K Redox Dark Su				•	ydrophytic vegetati rology must be pre	
	Aucky Mineral (S1) Bleyed Matrix (S4)		Depleted Dark Redox Depress				•	rology must be pre rbed or problemation	
	Layer (if present):								
Type:									
	ches):						Hydric Soil Preser	nt? Yes $\underline{\times}$	No
Remarks:			X CONCENTR		~	L			
HYDROLO	GY								
Wetland Hy	drology Indicators	:							
Primary Indi	cators (minimum of	one required	d; check all that app					ndicators (2 or mor	
	Water (A1)		Water-Sta	ained Leav	ves (B9) ( <b>excep</b> t	t		tained Leaves (B9)	) (MLRA 1, 2,
High Wa	ater Table (A2)			1, 2, 4A,	and 4B)			ind 4B)	
Saturati	. ,		Salt Crus		, <b></b> ·			e Patterns (B10)	$\sim 2$
Water N			Aquatic Ir	-				son Water Table ( on Visible on Aeria	A
	nt Deposits (B2)			n Sulfide O Rhizosphe		n Pr í		on Visible on Aeria obic Position (D2)	n magery (C9)
	posits (B3)					y Roots	s (C3) Geomor Shallow		
	at or Crust (B4)		Presence Recent In		ed Iron (C4): tion in Tilled Soil	Is (CE)		Aquitard (D3) utral Test (D5)	
	posits (B5) Soil Cracks (B6)				tion in Tilled Solf d Plants (D1) (LF			utrai Test (D5) Ant Mounds (D6) (I	LRR A)
	Soil Cracks (B6) ion Visible on Aerial	magery (P						eave Hummocks (E	
	ion Visible on Aerial y Vegetated Concav		,	, IV					
Field Obser									
Surface Wa		Yes	No ⊻ Depth (ii	nches):					
Water Table			No <u>V</u> Depth (ii		Surgin.				
Saturation F			No <u>No</u> Depth (ii			Wetlar	nd Hydrology Pres	ent? Yes <u>X</u>	No
(includes ca	pillary fringe)								
Describe Re	ecorded Data (strea	m gauge, mo	onitoring well, aerial	i photos, p	previous inspecti	ions), if	avallable:		
Remarks:	E º / muide	od it.	mal						
	15% oxidiz	sci vniz	suspinance						

### WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region 109 wet Project/Site: Humboldt Wind Energy Project \_\_\_\_\_ City/County: Humboldt \_\_\_\_\_ Sampling Date: \_\_\_\_/Io/IS Applicant/Owner: Humboldt Wind, LLC State: <u>CA</u> Sampling Point: <u>20</u> ' Investigator(s): S.Tona, A.Loveless Section, Township, Range: Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 0 Subregion (LRR): <u>A: Northwest Forests and Coast</u> Lat: -124.185696 40.450535 Lona: Datum: Soil Map Unit Name: Peaked-Oreanbouse-Forhaux complex 5-304.51 mg NWI classification: \_ hono\_ Are climatic / hydrologic conditions on the site typical for this time of year? Yes $\_$ X No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X\_\_ No Are Vegetation $N_{,}$ Soil $N_{,}$ or Hydrology $N_{,}$ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Is the Sampled Area X No\_ Yes Wetland Hydrology Present? within a Wetland? Yes No No Remarks: that meets all three criteria. Seasonal Wetland 207 VEGETATION – Use scientific names of plants. Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: \_\_\_\_\_) <u>% Cover Species?</u> Status Number of Dominant Species 1. That Are OBL, FACW, or FAC: (A) 2 Total Number of Dominant 3. Species Across All Strata: (B) 4. Percent of Dominant Species \_\_\_\_\_ = Total Cover That Are OBL, FACW, or FAC: Sapling/Shrub Stratum (Plot size: (A/B) Prevalence Index worksheet: 1. Total % Cover of: 168 2. Multiply by: 15 OBL species \_\_ x 1 = 3. \_\_\_\_ 70 40 FACW species 80 x 2 = 4. 11:5 FAC species x 3 = FACU species 148 x 4 = = Total Cover

25

25

2

5

5

10

2

1

2

87 = Total Cover

= Total Cover

US Army Corps of Engineers	

Herb Stratum (Plot size: \_

5.

7

11.

1. \_

2.

Remarks:

6

1. Leon-todon Saxatil. S

2. Juneus butonius.

Poa pratonsis

Binza minor

Woody Vine Stratum (Plot size:

9. Junus accidentalis

10. JUNCUS PEFUSUS

% Bare Ground in Herb Stratum

Plantajo lynceolata

50 435 20-17

Chinosudus Cristatus

Parentucellia viscosa

Agostis pallens :

x 5 =

(A)

<u>'43</u>

82

1 - Rapid Test for Hydrophytic Vegetation

\_\_\_\_ 4 - Morphological Adaptations<sup>1</sup> (Provide supporting

data in Remarks or on a separate sheet)

\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must

Yes X No\_\_\_\_

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

2 - Dominance Test is >50%

5 - Wetland Non-Vascular Plants<sup>1</sup>

be present, unless disturbed or problematic.

Y 3 - Prevalence Index is ≤3.0<sup>1</sup>

S-6

(B)

UPL species

Hydrophytic

Vegetation

Present?

FACU

FACW

FACU

FAC

FACU

FACW

FACU

FACIN

FACW

FACW

Column Totals:

S	0	IL

Sampling Point:	$\underline{\mathcal{U}}$
ounipring	-

	cription: (Describe t Matrix		Redo	x Features		➡ 1
epth ches)	Color (moist)	%	Color (moist)		Type <sup>1</sup> Loc <sup>2</sup>	Texture Remarks
- U	75YR3/1	80	7.5YR4/3	20	matrix	Sandyloam
	7.5YR 2.5/	70	7.5 YR 3.5/3	30	matrix	sandy day loam
)-12	4.51K //	-70	4,218 /2			
			· · · · · · · · · · · · · · · · · · ·			
	-					
	-					
	· ·	-				
					<u></u>	
			- <u></u>			rains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
ype: C≓C	Concentration, D=Dep	letion, RM	M=Reduced Matrix, C	S=Covered	or Coated Sand G	Indicators for Problematic Hydric Soils <sup>3</sup> :
dric Soi	I Indicators: (Applic	able to a	ll LRRs, unless othe	rwise note	a.)	2 cm Muck (A10)
_ Histoso			Sandy Redox (			Red Parent Material (TF2)
	Epipedon (A2)	4	Stripped Matrix	( (56) Mineral (E1)	) (except MLRA 1)	
	Histic (A3)		Loamy Mucky			Other (Explain in Remarks)
	gen Sulfide (A4)	A (A 1 1)	Depleted Matri			
	ed Below Dark Surfac Dark Surface (A12)	Je (A 1 1)	Depleted Math			<sup>3</sup> Indicators of hydrophytic vegetation and
	Mucky Mineral (S1)		Depleted Dark		7)	wetland hydrology must be present,
	Gleyed Matrix (S4)		Redox Depres			unless disturbed or problematic.
	e Layer (if present):					
						Hydric Soil Present? Yes 📉 No
emarks:	inches): Distinct redo	X WNG	entrations are	presur	nt w/inth	e first rZinches.
emarks: <b>YDROL</b>	Distinct redu		entrations are	preser	nt w/inth	e first Minches.
emarks: YDROL Vetland F	Distinct redu .OGY Hydrology Indicators	5:			nt w/inth	Secondary Indicators (2 or more required)
emarks: YDROL Vetland H Primary In	Distinct redo OGY Hydrology Indicators	5:	ired; check all that ap	ply)		Secondary Indicators (2 or more required)
emarks: YDROL Vetland H Primary In Surfa	Distinct redo OGY Hydrology Indicators indicators (minimum of ce Water (A1)	5:	i <u>red: check all that ap</u> Water-S	ply) tained Leav	res (B9) ( <b>except</b>	Secondary Indicators (2 or more required)
emarks: <b>/DROL</b> Vetland H Primary In Surfar High V	Distinct redo OGY Hydrology Indicators indicators (minimum of ce Water (A1) Water Table (A2)	5:	ired: check all that ap Water-S MLR.	ply) tained Leav A 1, 2, 4A, a	res (B9) ( <b>except</b>	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2
emarks: /DROL /etland H rimary In Surfa High <sup>1</sup> Satur	Distind redo OGY Hydrology Indicators indicators (minimum of ce Water (A1) Water Table (A2) ration (A3)	5:	ired: check all that ap Water-S MLR. Salt Cru	ply) tained Leav A 1, 2, 4A, a st (B11)	res (B9) (except and 4B)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
emarks: <b>YDROL</b> Vetland H Primary In Surfar High V Satur Wate	Distind redo OGY Hydrology Indicators Indicators (minimum of ce Water (A1) Water Table (A2) Indion (A3) r Marks (B1)	5:	ired: check all that ap Water-S MLR, Salt Cru Aquatic	ply) tained Leav A 1, 2, 4A, a st (B11) Invertebrate	res (B9) ( <b>except</b> and <b>4B)</b> es (B13)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
emarks: /DROL /etland F rimary In Surfar High <sup>1</sup> Satur Wate Sedir	Distinct redo OGY Hydrology Indicators adicators (minimum of ce Water (A1) Water Table (A2) ration (A3) r Marks (B1) ment Deposits (B2)	5:	ired: check all that ap Water-S Salt Cru Salt Cru Aquatic Hydroge	ply) tained Leav A 1, 2, 4A, a st (B11) Invertebrate en Sulfide O	res (B9) ( <b>except</b> and <b>4B)</b> es (B13) edor (C1)	Secondary Indicators (2 or more required)
emarks: <b>/DROL</b> Vetland H Primary In Surfay High V Satur Vate Sedir Drift [	Distinct redo OGY Hydrology Indicators adicators (minimum of ce Water (A1) Water Table (A2) ration (A3) r Marks (B1) ment Deposits (B2) Deposits (B3)	5:	ired: check all that ap Water-S MLR, Salt Cru Aquatic Hydroge X Oxidized	ply) tained Leav A 1, 2, 4A, a st (B11) Invertebrate en Sulfide O d Rhizosphe	res (B9) ( <b>except</b> <b>and 4B)</b> es (B13) edor (C1) eres along Living R	Secondary Indicators (2 or more required)         Water-Stained Leaves (B9) (MLRA 1, 2         4A, and 4B)         Drainage Patterns (B10)         Dry-Season Water Table (C2)         Saturation Visible on Aerial Imagery (C         poots (C3)       Geomorphic Position (D2)         Shallow Aquitard (D3)
emarks: <b>/DROL</b> Vetland H Primary In Surfar High V Satur Wate Sedir Drift I Algal	Distinct redo .OGY Hydrology Indicators indicators (minimum of ce Water (A1) Water Table (A2) ration (A3) r Marks (B1) ment Deposits (B2) Deposits (B3) Mat or Crust (B4)	5:	ired: check all that ap Water-S MLR/ Salt Cru Aquatic Hydroge X Oxidized Presend	ply) tained Leav A 1, 2, 4A, a st (B11) Invertebrate on Sulfide O d Rhizosphe ee of Reduce	res (B9) ( <b>except</b> <b>and 4B)</b> es (B13) edor (C1) eres along Living R ed Iron (C4)	Secondary Indicators (2 or more required)         Water-Stained Leaves (B9) (MLRA 1, 2         4A, and 4B)         Drainage Patterns (B10)         Dry-Season Water Table (C2)         Saturation Visible on Aerial Imagery (C         boots (C3)       Geomorphic Position (D2)         Shallow Aquitard (D3)         C6)       FAC-Neutral Test (D5)
emarks: <b>/DROL</b> Vetland H Primary In Surfar Surfar Surfar Surfar Sedir Sedir Drift [ Algal Iron [	Distinct redo .OGY Hydrology Indicators indicators (minimum of ce Water (A1) Water Table (A2) ration (A3) r Marks (B1) ment Deposits (B2) Deposits (B3) Mat or Crust (B4) Deposits (B5)	5:	ired: check all that ap Water-S MLR, Salt Cru Aquatic Hydroge X Oxidized Presenc Recent	ply) tained Leav A 1, 2, 4A, a st (B11) Invertebrate on Sulfide O d Rhizosphe e of Reduce Iron Reduct	res (B9) ( <b>except</b> <b>and 4B)</b> es (B13) edor (C1) eres along Living R ed Iron (C4) tion in Tilled Soils (1	Secondary Indicators (2 or more required)
emarks: <b>/DROL</b> Vetland H Primary In Surfar Surfar Satur Satur Wate Sedir Drift I Algal Iron I Surfa	Distinct redo OGY Hydrology Indicators indicators (minimum of ce Water (A1) Water Table (A2) ration (A3) r Marks (B1) ment Deposits (B2) Deposits (B3) Mat or Crust (B4) Deposits (B5) ace Soil Cracks (B6)	s: one requ	ired: check all that ap Water-S MLR, Salt Cru Aquatic Hydroge X Oxidized Presend Recent Stunted	ply) tained Leav A 1, 2, 4A, a st (B11) Invertebrate en Sulfide O d Rhizosphe e of Reduce fron Reduct or Stressed	res (B9) ( <b>except</b> <b>and 4B)</b> es (B13) eres along Living R ed Iron (C4) tion in Tilled Soils ( d Plants (D1) ( <b>LRR</b>	Secondary Indicators (2 or more required)
emarks: /DROL /etland H rimary In Surfar High ` Satur Vate Sedir Drift I Algal Iron I Surfa Inunc	Distinct redo OGY Hydrology Indicators adicators (minimum of ce Water (A1) Water Table (A2) ration (A3) r Marks (B1) ment Deposits (B2) Deposits (B3) Mat or Crust (B4) Deposits (B5) ace Soil Cracks (B6) dation Visible on Aeria	s: one requ	ired; check all that ap Water-S MLR/ Salt Cru Aquatic Hydroge X Oxidized Presenc Recent Stunted (B7) Other (B	ply) tained Leav A 1, 2, 4A, a st (B11) Invertebrate en Sulfide O d Rhizosphe e of Reduce fron Reduct or Stressed	res (B9) ( <b>except</b> <b>and 4B)</b> es (B13) eres along Living R ed Iron (C4) tion in Tilled Soils ( d Plants (D1) ( <b>LRR</b>	Secondary Indicators (2 or more required)
emarks: YDROL Vetland H Primary In Surfau High V Satur Vate Sedir Drift I Algal Iron I Surfa Inunc Spars	Distinct redo OGY Hydrology Indicators adicators (minimum of ce Water Table (A2) ration (A3) r Marks (B1) ment Deposits (B2) Deposits (B3) Mat or Crust (B4) Deposits (B5) ace Soil Cracks (B6) dation Visible on Aeria sely Vegetated Conce	s: one requ	ired; check all that ap Water-S MLR/ Salt Cru Aquatic Hydroge X Oxidized Presenc Recent Stunted (B7) Other (B	ply) tained Leav A 1, 2, 4A, a st (B11) Invertebrate en Sulfide O d Rhizosphe e of Reduce fron Reduct or Stressed	res (B9) ( <b>except</b> <b>and 4B)</b> es (B13) eres along Living R ed Iron (C4) tion in Tilled Soils ( d Plants (D1) ( <b>LRR</b>	Secondary Indicators (2 or more required)
emarks: /DROL /etland H /erimary In 	Distinct redo OGY Hydrology Indicators adicators (minimum of ce Water (A1) Water Table (A2) ration (A3) r Marks (B1) ment Deposits (B2) Deposits (B3) Mat or Crust (B4) Deposits (B5) ace Soil Cracks (B6) dation Visible on Aeria sely Vegetated Conca servations:	s: one requ al Imagery ave Surfat	ired: check all that ap Water-S MLR, Salt Cru Aquatic Hydroge X Oxidized Presend Recent Stunted r (B7) Other (B)	ply) tained Leav A 1, 2, 4A, a st (B11) Invertebrate on Sulfide O d Rhizosphe e of Reduct Iron Reduct or Stressec Explain in Re	res (B9) ( <b>except</b> and <b>4B</b> ) es (B13) edor (C1) eres along Living R ed Iron (C4) tion in Tilled Soils ( d Plants (D1) (LRR emarks)	Secondary Indicators (2 or more required)
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emarks: YDROL Vetland H Primary In Surfay Wate Sedir Drift I Algal Iron I Surfa Surfa Surfa Surface V Water Ta Saturatio	Distinct redo OGY Hydrology Indicators indicators (minimum of ce Water (A1) Water Table (A2) ration (A3) r Marks (B1) ment Deposits (B2) Deposits (B3) Mat or Crust (B4) Deposits (B5) ace Soil Cracks (B6) dation Visible on Aeria sely Vegetated Conce servations: Water Present? able Present? in Present?	s: one requ al Imagery ave Surfa Yes Yes Yes	ired: check all that ap — Water-S MLR, — Salt Cru — Aquatic — Hydroge X Oxidized — Presend — Recent — Stunted (B7) — Other (B (B7) — Other (B — No X Depth No X Depth	ply) tained Leav A 1, 2, 4A, a st (B11) Invertebrate on Sulfide O d Rhizosphe e of Reduce fron Reduct or Stressed (inches): (inches):	res (B9) (except and 4B) es (B13) odor (C1) eres along Living R ed Iron (C4) tion in Tilled Soils ( d Plants (D1) (LRR emarks)	Secondary Indicators (2 or more required)
emarks: YDROL Vetland H Primary In Surfar Wate Sedir Drift I Algal Iron I Surfa Surfa Surface V Water Ta Saturatio	Distinct redo OGY Hydrology Indicators indicators (minimum of ce Water (A1) Water Table (A2) ration (A3) r Marks (B1) ment Deposits (B2) Deposits (B3) Mat or Crust (B4) Deposits (B5) ace Soil Cracks (B6) dation Visible on Aeria sely Vegetated Conce servations: Water Present? able Present? in Present?	s: one requ al Imagery ave Surfa Yes Yes Yes	ired: check all that ap Water-S Salt Cru Aquatic Hydroge X Oxidized Presenc Recent Stunted (B7) Other (B ce (B8) No X Depth No X Depth	ply) tained Leav A 1, 2, 4A, a st (B11) Invertebrate on Sulfide O d Rhizosphe e of Reduce fron Reduct or Stressed (inches): (inches):	res (B9) (except and 4B) es (B13) odor (C1) eres along Living R ed Iron (C4) tion in Tilled Soils ( d Plants (D1) (LRR emarks)	Secondary Indicators (2 or more required)
emarks: YDROL Vetland H Primary In Surfay Wate Sedir Drift I Algal Iron I Surfa Surfa Surfa Surface V Water Ta Saturatio	Distinct redo OGY Hydrology Indicators adicators (minimum of ce Water Table (A2) ation (A3) r Marks (B1) ment Deposits (B2) Deposits (B3) Mat or Crust (B4) Deposits (B5) ace Soil Cracks (B6) dation Visible on Aeria sely Vegetated Conce servations: Water Present? able Present? able Present? acepillary fringe) Recorded Data (streent)	al Imagery ave Surfa Yes Yes Yes am gauge	ired; check all that ap Water-S MLR, Salt Cru Aquatic Hydroge X Oxidized Presend Recent (B7) Other (B (B7) Other (B No X Depth No X Depth No X Depth No X Depth	ply) tained Leav A 1, 2, 4A, a st (B11) Invertebrate en Sulfide O d Rhizosphe e of Reduct or Stressec (inches): (inches): (inches): (inches): al photos, p	res (B9) (except and 4B) es (B13) odor (C1) eres along Living R ed Iron (C4) tion in Tilled Soils ( d Plants (D1) (LRR emarks) where the second second second previous inspection	Secondary Indicators (2 or more required)
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### WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region 109 up Project/Site: <u>Humboldt Wind Energy Project</u>City/County: <u>Humboldt</u> \_\_\_\_\_ Sampling Date: 7/10/18 Applicant/Owner: <u>Humboldt Wind, LLC</u> State: CA \_\_\_\_ Sampling Point: \_265 Investigator(s): S. Tona, A. Loveless \_\_\_\_\_ Section, Township, Range: \_ Landform (hillslope, terrace, etc.): \_\_\_\_Hill Slop Local relief (concave, convex, none): Concave Slope (%); D Subregion (LRR): A: Northwest Forests and Coast Lat: -124.185724 Long: 40.450558 Soil Map Unit Name Peaked - acean have - for have complex, 5-38. Slopes NWI classification: none Datum: Are climatic / hydrologic conditions on the site typical for this time of year? Yes $\_X$ No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No 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, etc. Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Is the Sampled Area Yes \_\_\_\_\_ No \_ Wetland Hydrology Present? within a Wetland? Yes No Yes No Remarks: Upland pair point to 204. WL 207 VEGETATION – Use scientific names of plants. Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: \_\_\_\_\_) % Cover Species? Status Number of Dominant Species 1.

4	/ species pecies species pecies n Totals: Prevalence Index = E	////////////////////////////////////
Sapling/Shrub Stratum (Plot size:)       = Total Cover       Preva         1.         Preva         2.             3.              3.	Are OBL, FACW, or F lence Index worksh otal % Cover of: pecies yecies pecies	AC:      (A/E
1.     Preva       2.     T       3.     OBLS       3.     FACU       5.     FACU       5.     FACU       5.     FACU       6.     FACU       1.     Pluntago lanceolatu       2.     FACU       1.     Pluntago lanceolatu       2.     FACU       2.     FACU       3.     Columnation       2.     FACU       3.     Columnation       2.     FACU       3.     Columnation       4.     Columnation       5.     FACU       4.     Columnation       5.     FACU       6.     Columnation       6.     Columnation       7.     FACU       8.     Columnation       9.     FACU       9. <td>otal % Cover of: pecies pecies species pecies pecies pecies n Totals: Prevalence Index = E</td> <td>Multiply by:         x 1 =         x 2 =         x 3 =         x 4 =         x 5 =         (A)</td>	otal % Cover of: pecies pecies species pecies pecies pecies n Totals: Prevalence Index = E	Multiply by:         x 1 =         x 2 =         x 3 =         x 4 =         x 5 =         (A)
2. 3. 4. 5. Herb Stratum (Plot size: IM. Pulius) 1. Pluntago lanceolata 2. A hthox anthum occidentalis 2. A hthox anthum occidentalis 3. Parentucellin visusa 4. Cynosucus cristatus 5. I contodon savatilis 5. Jeontodon savatilis 5. A hthox anthum occidentalis 5. Jeontodon savatilis 5. Jeontodon savatilis 5. A hthome 1. Cynosucus cristatus 5. Jeontodon savatilis 5. A hthome 1. Cynosucus cristatus 5. Jeontodon savatilis 5. A hthome 1. Cynosucus cristatus 5. Jeontodon savatilis 5. A hthome 5. Jeontodon savatilis 5. Jeontodon savatilis 5. A hthome 7. Jeontodon savatilis 5. Jeontod	pecies / species species species n Totals: Prevalence Index = E	x 1 = x 2 = x 3 = x 4 = x 5 = (A) (B)
3.       OBLs         4.       FACW         5.       = Total Cover         5.       = Total Cover         Herb Stratum (Plot size: Im: Padius)       = Total Cover         1.       Plantago lanceolata       25         2.       Anthoxanthum occidentalis       15         3.       Parentucellin visusa       5         4.       Cyhosurus cristatus       15         5.       Leontodon Savatilis       30         5.       Leontodon Savatilis       30         6.       Tofolium repens       10         7.       Linum bicone       2         8.       Tofolium dubius       3         9.       Tofolium dubius       3	/ species pecies species pecies n Totals: Prevalence Index = E	x 2 = x 3 = x 4 = x 5 = (A) (B)
4.	/ species pecies species pecies n Totals: Prevalence Index = E	x 2 = x 3 = x 4 = x 5 = (A) (B)
5	pecies species pecies n Totals: Prevalence Index = E	x 3 = x 4 = x 5 = (A) (B)
Herb Stratum (Plot size: IM: Pidius)       = Total Cover       UPL s         1. Pluntago lanceolata       25       Y       FACU       UPL s         2. Anthoxanthum occidentalis       15       Y       UPL       Column         3. Parentucellin visusa       5       -       FACU       Hydro         4. Cynosucus cristatus       15       Y       EACU       N 1         5. Leontodon Savatilis       30       Y       FACU       N 1         6. Trifolium repens       10       -       FACU       N 2         7. Lionum bicone       2       -       UPL       N 4	species pecies n Totals: Prevalence Index = E	x 4 = x 5 = (A) (B)
Hero Stratum (Plot size: IM. Ja/IW)       UPL size: IM. Ja/IW)       UPL size: IM. Ja/IW)         1. Pluntago lanceolata       25 Y FACU       Column         2. Anthoxanthum occidentalis       15 Y       UPL         3. Parentucellin visusa       5 - FAC       Hydro         4. Cynosurus cristatus       15 Y FACU       N 1         5. Leontodon savatilis       30 Y FACU       N 1         6. Leontodon savatilis       30 Y FACU       N 2         7. Lionum bicome       2 - UPL       N 3         7. Lionum bicome       2 - UPL       N 4	pecies n Totals: Prevalence Index = E	x 5 = (A) (B)
2. <u>Anthoxanthum occidentalis</u> <u>15</u> <u>Y</u> <u>UPL</u> 3. <u>Parentucellin visusa</u> <u>5</u> <u>–</u> <u>FAC</u> Hydro 4. <u>Cynosurus cristatus</u> <u>15</u> <u>Y</u> <u>FACU</u> <u>N</u> <u>1</u> 5. <u>Leontodon savatilis</u> <u>30</u> <u>Y</u> <u>FACU</u> <u>N</u> <u>1</u> 6. <u>Trifolium repens</u> <u>10</u> <u>–</u> <u>FACU</u> <u>N</u> <u>3</u> 7. <u>Linum bicnne</u> <u>2</u> <u>–</u> <u>UPL</u> <u>N</u> <u>4</u> . 8. <u>Trifolium dubius</u> <u>3</u> <u>–</u> <u>FACU</u> <u>N</u> <u>4</u> .	n Totals: Prevalence Index = E	(A) (B)
2. <u>Anthoxanthum occidentalis</u> <u>15</u> <u>y</u> <u>UPL</u> 3. <u>Carentucellin visusa</u> <u>5</u> <u>– FAC</u> 4. <u>Cynosurus cristatus</u> <u>15</u> <u>y</u> <u>FACU</u> <u>N</u> <u>1</u> 5. <u>Leontodon savatilis</u> <u>30</u> <u>y</u> <u>FACU</u> <u>N</u> <u>1</u> 5. <u>Trifolium repens</u> <u>10</u> <u>– FACU</u> <u>N</u> <u>3</u> <u>Linum bicone</u> <u>2</u> <u>– <u>UPL</u> <u>N</u> <u>4</u>. 5. <u>Trifolium dubius</u> <u>3</u> <u>– FACU</u> <u>N</u> <u>4</u>.</u>	Prevalence Index = E	
Cynosurius     Cristatus     15     Y     FACU     N 1       S. Leontodon Saxatilis     30     Y     FACU     N 1       S. Trifolium repens     10     -     FACU     N 2       Linum bicone     2     -     UPL     N 3       Trifolium dubius     3     -     FACU     N 4	rievalence index = E	3/A =
Leontodon Savatilis 30 Y FACU N1 Trifolium repens 10 - FACU N3 Linum bienne 2 - UPL N4 Trifolium dubius 3 - FACU N4		
Trifolium pepens 10 - FACU N 3 Linum bicnne 2 - UPL N 4 Trifolium dubius 3 - FACU	phytic Vegetation Ir	
<u>Linum bicome</u> <u>Linum bicome</u> <u>Trifolum dubius</u> <u>Trifolum dubius</u> <u>Trifolum dubius</u> <u>Trifolum dubius</u> <u>Trifolum dubius</u>	Rapid Test for Hydro	
Trifolum dubius <u>3</u> - FACU <u>N</u> 4.	Dominance Test is >	
Facun dubius 3 - FACU	Prevalence Index is	
	data in Remarks or c	tations <sup>1</sup> (Provide supporting
	Wetland Non-Vascu	
		c Vegetation <sup>1</sup> (Explain)
11Indica		wetland hydrology must
501.5         55         201         22         110         = Total Cover           Voody Vine Stratum         (Plot size:)        )	ent, unless disturbed	or problematic.
6 Bare Ground in Herb Stratum 2 = Total Cover Presen	lian	No X
?emarks:		

301	S	0	į	Ĺ
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Sampling Point:

109 up 705

JIL				nont tho	indicator	or confirm	the absence of indicators.)
Profile Des		o the dept	h needed to docur		mulcator		the absence of indicators.)
Depth	Matrix	%	Color (moist)	<u>x Feature</u> %	τγpe <sup>1</sup>	Loc <sup>2</sup>	Texture Remarks
(inches)	Color (moist) IUNR 34/1	95	104R-416	5	- C	M	Sandy day loam
0-12	1016 21/1	<u> </u>					
						-	
		· · · · · · · · · · · · · · · · · · ·					
	Concentration, D=Dep		=Reduced Matrix, C	S=Cover	ed or Coa	ted Sand Gr	rains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Type: C=	il Indicators: (Applic	able to all	LRRs, unless othe	erwise no	oted.)		
	iol (A1)		Sandy Redox	(S5)			2 cm Muck (A10)
	Epipedon (A2)		Stripped Matri	x (S6)			Red Parent Material (TF2)
	Histic (A3)		Loamy Mucky			pt MLRA 1)	Very Shallow Dark Surface (TF12)
Diack	igen Sulfide (A4)		Loamy Gleyed	d Matrix (F	F2)		Other (Explain in Remarks)
Deple	ted Below Dark Surfa	ce (A11)	Depleted Matr	ix (F3)			<sup>3</sup> Indicators of hydrophytic vegetation and
Thick	Dark Surface (A12)		Redox Dark S	urface (F	6)		wetland hydrology must be present,
Sandy	y Mucky Mineral (S1)		Depleted Dark				unless disturbed or problematic.
Sand	y Gleyed Matrix (S4)		Redox Depres	ssions (F8	8)		
Restrictiv	/e Layer (if present):						
Type:	entrapeda						Hydric Soil Present? Yes No
Depth	(inches):						
Remarks:	No hydric	soili	n dicators pre	scm.			
HYDROI	LOGY Hydrology Indicator	5:					
Drimonul	ndicators (minimum o	r f one reauit	ed; check all that ap	ylqc			Secondary Indicators (2 or more required)
	ace Water (A1)		Water-S	Stained Le	eaves (B9	) (except	Water-Stained Leaves (B9) (MLRA 1
	Water Table (A2)		MLR	RA 1, 2, 4	A, and 4E	3)	4A, and 4B)
	ration (A3)		Salt Cru				Drainage Patterns (B10)
	er Marks (B1)				rates (B13	3)	Dry-Season Water Table (C2)
	iment Deposits (B2)		Hydrog	en Sulfide	e Odor (C	1)	Saturation Visible on Aerial Imagery
			Oxidize	d Rhizos	pheres alo	ong Living Ro	Roots (C3) Geomorphic Position (D2)
	Deposits (B3)		Presen	ce of Rec	duced Iron	(C4)	Shallow Aquitard (U3)
	al Mat or Crust (B4)		Recent	Iron Red	luction in	Tilled Soils (C	C6) FAC-Neutral Test (D5)
	Deposits (B5)		Stunted	d or Stres	sed Plant	s (D1) ( <b>LRR</b>	(LRR A) Raised Ant Mounds (D6)
	face Soil Cracks (B6)	alimeann			n Remarks		Frost-Heave Hummocks (D7)
Inur	ndation Visible on Aeri	ai imagery				•	

Field Observations:         Surface Water Present?       Yes No Depth (inches):         Water Table Present?       Yes No Depth (inches):         Saturation Present?       Yes No Depth (inches):	
No V Depth (inches):	
Victor Table Precent? Yes No V Depth (inches):	
Water Table Present? Tes No No Wetland Hydrology Present? Yes No	V
	1
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: Only 1% oxidized rhizuspheres present.	
and I oxidized microspheris preview.	

### WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region 113 wet Project/Site: <u>Humboldt Wind Energy Project</u> City/County: <u>Humboldt</u> \_\_\_\_Sampling Date: \_\_\_\_ 7/10/18 208 State: CA Sampling Point: \_\_\_\_ Applicant/Owner: Humboldt Wind, LLC Investigator(s): S. TORA : A Lovelers Section, Township, Range: \_\_\_\_ Landform (hillslope, terrace, etc.): \_\_\_\_\_\_\_\_\_\_ Local relief (concave, convex, none): \_\_\_\_\_\_\_ Local relief (concave, convex, none): \_\_\_\_\_\_\_ Local relief (%): \_\_\_\_\_ Subregion (LRR): A: Northwest Forests and Coast Lat: -124.177615 Long: 40.450280 Datum: Soil Map Unit Name: 4408 - Dolason- Forhaux Peaked complex. 5-301. shipes NWI classification: none Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>X</u> No (If no, explain in Remarks.) Are Vegetation \_ N , Soil \_ N \_\_\_, or Hydrology \_ N \_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_ X \_\_\_\_ No \_\_\_\_ Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

# SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X No Yes X No Yes X No	ls the Sampled Area within a Wetland?	Yes <u>X</u>	No
Remarks: Seasonal Swale	sourced by a culver	+ (WL 2102	)	

	Absolute		t Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1	/			That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata:
4		- Tatal C		Percent of Dominant Species 50 (A/B)
Sapling/Shrub Stratum (Plot size:)		= Total Co	over	
	/			Prevalence Index worksheet:
1	- —/—			Total % Cover of: Multiply by:
2	/			OBL species 12 x 1 = 12
3				FACW species $25$ x 2 = $50$
4.				FAC species $35 \times 3 = 105$
5				FAC species $x_3 = \frac{100}{100}$
0		= Total Co		FACU species $25 \times 4 = 100$
Herb Stratum (Plot size: I meter radius			0101	UPL species x 5 =
1. Alopecurus Snecotus	8	_A)	FACW	Column Totals: <u><u>1</u>7 (A) <u>267</u> (B)</u>
2. Mentha Duleaium	10	Ň	OBL	Prevalence Index = $B/A = 2.8$
3. Agrostis pallens	20	Y	FACU	Hydrophytic Vegetation Indicators:
4. Eleocharis Macrostachya	2	/	OBL	
	15	$\frac{N}{N}$		N 1 - Rapid Test for Hydrophytic Vegetation
5. Junais occidentalis		_/V	FACW	N 2 - Dominance Test is >50%
6. Festuca perennis	35	<u> </u>	FAC	<u> </u>
7. Rumex Crispus		<u> </u>	FACW	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8. Loontolon Saxatilis	5	N	FACU	data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants <sup>1</sup>
10				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
11	97	= Total Co		be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)			over	
	1			
1			an an	Hydrophytic Vegetation
2	/			Present? Yes X No
		_= Total Co	over	
% Bare Ground in Herb Stratum				
Remarks:				

113 wet

SOIL Sampling Point: <u>208</u>								
Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth Matrix Redox Features								,
(inches)	Color (moist)		Color (moist)	%	_Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-8	10yr 21.	2 70	7,5YR 34	20	С	$\_$ $\land$	Loam	· · ·
8-12	10YR 2/1	90	7.5 YR 3/3	16		M	gravelly	10 4 m
						<u></u>	<u></u>	<u></u>
	<u></u>							
	······							<u></u>
								· ·
						. <u> </u>		
			····			·		
		Doplation DI					2	
			M=Reduced Matrix, CS II LRRs, unless other			ed Sand Gr		cation: PL=Pore Lining, M=Matrix.
Histosol			Sandy Redox (S					n Muck (A10)
	oipedon (A2)		Stripped Matrix					Parent Material (TF2)
	istic (A3)		Loamy Mucky N		1) (excep	MLRA 1)		/ Shallow Dark Surface (TF12)
	en Sulfide (A4)		Loamy Gleyed N			,		er (Explain in Remarks)
Depleted	d Below Dark Sur	face (A11)	Depleted Matrix					
	ark Surface (A12)		🗡 Redox Dark Sur	,				rs of hydrophytic vegetation and
	Nucky Mineral (S		Depleted Dark S					nd hydrology must be present,
	Bleyed Matrix (S4 Layer (if present		Redox Depressi	ons (F8)			unies	s disturbed or problematic.
		.).						
Type:							Livelain Call	Present? Yes $\chi$ No
	ches):						Hydric Soli	Present? Yes No
Remarks: T	Distinct re	dux cor	contrations a	C pr	escut	,		
				1				
			κ.					
HYDROLO	GY							
Wetland Hy	drology Indicate	ors:						
Primary India	cators (minimum	of one requir	ed; check all that apply	')			Secor	ndary Indicators (2 or more required)
	Water (A1)		Water-Stair		/es (B9) ( <b>e</b>	xcept		/ater-Stained Leaves (B9) (MLRA 1, 2,
High Wa	ater ⊺able (A2)				and 4B)			4A, and 4B)
Saturatio			Salt Crust (				D	rainage Patterns (B10)
Water M	larks (B1)		Aquatic Inv	ertebrate	es (B13)		D	ry-Season Water Table (C2)
Sedimer	nt Deposits (B2)		Hydrogen S	Sulfide O	dor (C1)		S	aturation Visible on Aerial Imagery (C9)
Drift Dep	posits (B3)		📈 Oxidized R	hizosphe	eres along	Living Roo	ts (C3) G	eomorphic Position (D2)
Algal Ma	at or Crust (B4)		Presence of	f Reduce	ed Iron (C4	1)	S	hallow Aquitard (D3)
Iron Dep	oosits (B5)		Recent Iror				·	AC-Neutral Test (D5)
	Soil Cracks (B6)		Stunted or			1) ( <b>LRR A</b> )		aised Ant Mounds (D6) (LRR A)
	on Visible on Aer			lain in Re	emarks)		Fi	rost-Heave Hummocks (D7)
	/ Vegetated Conc	cave Surface	(B8)					
Field Obser								
Surface Wate	er Present?		No 🗶 Depth (inc			_		
Water Table	Present?		No <u>x</u> Depth (inc					×
Saturation Present? Yes <u>No X</u> Depth (inches): <u>Wetiand Hydrology Present? Yes X</u> No								
	(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:							
		33-, 1	9 vona p			, , .		
Remarks:								
, ioniunio.	A DOLOXIM.	dely 30	5%, oxidized 1	-hizo	sphere	s pres	ent.	
	. At. sector		- , /		ş	1		

# WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region 113 up Project/Site: Humboldt Wind Energy Project City/County: Humboldt Sampling Date: 7/10/18 Applicant/Owner: Humboldt Wind, LLC State: CA Sampling Point: 209(Up) Investigator(s): State: A. LoveLess Section, Township, Range: Landform (hillslope, terrace, etc.): HIISbpc Local relief (concave, convex, none): Concave Subregion (LRR): A: Northwest Forests and Coast Lat: -124.177652 Long: 40.450278 Datum: Soil Map Unit Name: 440.8 - Dol ason For haw Peaked complex, 5 - 30'A Slop(S) NWI classification: NONQ Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes No No Are Vegetation N, Soil N, or Hydrology N naturally problematic? Of needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u>×</u> No Yes No <u>×</u> Yes <del>×</del> No	Is the Sampled Area within a Wetland? Yes No
Remarks: the upland	pair point to 2018.	(WL 210a)

	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	<u>Species?</u>	<u>Status</u>	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Total Number of Dominant 3 Species Across All Strata: (B)
4.				
		= Total Co		Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)	·		ivei	That Are OBL, FACW, or FAC: 100 (A/B)
1,	1			Prevalence Index worksheet:
	a second se			Total % Cover of:Multiply by:
2				OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
5				FACU species x 4 =
brack of the C		= Total Co	ver	
Herb Stratum (Plot size: IWETCE rad) US				UPL species x 5 =
1. Juncus occidentalis	20	<u> </u>	FACW	Column Totals: (A) (B)
2. Agnistis pallens	20	<u> </u>	FACY	Prevalence Index = B/A =
3. Festuca nerennis	30	Y	FAC	Hydrophytic Vegetation Indicators:
4. Alopecurus Succetus	8		FACW	N 1 - Rapid Test for Hydrophytic Vegetation
5. Cynosurus cristatus	2		FACU	$\underline{Y}$ 2 - Dominance Test is >50%
6. Mentha pulgeum	-		CBL	
	10		·····	3 - Prevalence Index is ≤3.0 <sup>1</sup>
7. Montodon Saxatilis	-10		FACU	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8			<u></u>	data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants <sup>1</sup>
10				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
50% = 47.5 20% = 19.0	95	= Total Co	ver	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)				
1	Second and the second			Hydrophytic
2				Vegetation
		= Total Co		Present? Yes X No
% Bare Ground in Herb Stratum <u>10</u>		- 10tai 001		
Remarks:				1
• •				

### 001

Sampling Point

13 up 209

	Samping Foint.		
th needed to document the indicator or confirm	the absence of indicators.)		
Redox Features			
<u>Color (moist)</u> <u>%</u> <u>Type<sup>1</sup></u> Loc <sup>2</sup>	Texture Remarks		
1.5NR 213 20 C M	silty day loam		
=Reduced Matrix, CS=Covered or Coated Sand Gr	ains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.		
LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :		
Sandy Redox (S5)	2 cm Muck (A10)		
Stripped Matrix (S6)	Red Parent Material (TF2)		
Loamy Mucky Mineral (F1) (except MLRA 1)	Very Shallow Dark Surface (TF12)		
Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)		
Depleted Matrix (F3)			
	<sup>3</sup> Indicators of hydrophytic vegetation and		
	wetland hydrology must be present,		
Redox Depressions (F8)	unless disturbed or problematic.		
an a			
	Hydric Soil Present? Yes No X		
S ARE Exist and the indication	does not contra		
a - runni una inc marcaror	and not apped.		
d; check all that apply)	Secondary Indicators (2 or more required)		
	Water-Stained Leaves (B9) (MLRA 1, 2		
	4A, and 4B)		
Salt Crust (B11)	Drainage Patterns (B10)		
	Redox Features         Color (moist)       %       Type1       Loc2         7.5 YK2 2+/3       20       C       M		

MLRA 1	, 2,
Call Cause	04

-	 Salt Oldst (DTT)	
	Aquatic Invertebrates (	(B13)

	Water Marks (B1)	Aquatic Invertebrates (B13)	 Dry-Season Water Table (C2)
_	Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	 Saturation Visible on Aerial Im
	Drift Deposits (B3)	$\underline{\times}$ Oxidized Rhizospheres along Living Roots (C3)	 Geomorphic Position (D2)
	Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	 Shallow Aquitard (D3)

- Recent Iron Reduction in Tilled Soils (C6)
- \_\_\_\_ Stunted or Stressed Plants (D1) (LRR A)
- Surface Soil Cracks (B6) \_\_\_\_ Other (Explain in Remarks) \_\_\_\_ Inundation Visible on Aerial Imagery (B7)

Sparsely Vegetated Cor	ncave Surfa	ce (B8)					
Field Observations:							
Surface Water Present?	Yes	No <u></u>	_ Depth (inches): _				
Water Table Present?	Yes	No <u>×</u>	_ Depth (inches): _	and the second of the second o		N 4	
Saturation Present? (includes capillary fringe)	Yes	No <u></u> _	_ Depth (inches): _		Wetland Hydrology Present?	Yes _X	No
Describe Recorded Data (st	ream gauge	e, monitoring	well, aerial photos,	previous inspec	tions), if available:		
Remarks: 15%.	oxidiz	ed rhize	ospheres pr	resent.			

Remarks:

\_ Iron Deposits (B5)

Saturation Visible on Aerial Imagery (C9)

\_\_\_\_ Frost-Heave Hummocks (D7)

Raised Ant Mounds (D6) (LRR A)

FAC-Neutral Test (D5)

# WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region 118 wet

Project/Site: Humboldt Wind Energy Project	City/County: Humbo	ldt	Sampling Date: 07/11/2018
Applicant/Owner: Humboldt Wind, LLC		State: CA	Sampling Point: 210 (w)
Investigator(s): <u>ALOVELESS</u> <u>STANA</u>	Section, Township, Ra		
Landform (hillslope, terrace, etc.): <u>hone</u>	Local relief (concave,	, convex, none): <u>Concc</u>	Ne Slope (%):
Subregion (LRR): A' Northwest Forests and Coast Lat:	-124.172879	Long: <b>40.4499</b>	80 Datum:
Soil Map Unit Name: 4408 - Dolason Forhaux-Peakid. cur	404× 5-301.5	NWI classific	cation: <u>PBM1R</u>
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes <u>X</u> No		Remarks.)
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> significar		"Normal Circumstances"	present? Yes $\underline{X}$ No
Are Vegetation N, Soil N, or Hydrology N naturally		needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showi	ng sampling point	locations, transects	s, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X No Yes X No Yes X No	Is the Sampled Area within a Wetland?	Yes No
Remarks: Seasonal wetlar	nd pt. WL	212	

	Absolute		nt Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size:)	<u>% Cover</u>	Species'	<u>? Status</u>	Number of Dominant Species	<u>_</u>	
1				That Are OBL, FACW, or FAC:	2	(A)
2				Total Number of Dominant		
3.				Species Across All Strata:	2	(B)
4,				Percent of Dominant Species	100	(A/B)
Sapling/Shrub Stratum (Plot size:)		_ = Total C	over			_ (A/B)
				Prevalence Index worksheet:		
1				Total % Cover of:		
2			<del></del>	OBL species × 1		
3				FACW species x 2	=	
4				FAC species x 3		1
5.				FACU species x 4		
		_ = Total C	Cover			1
Herb Stratum (Plot size:)				UPL species x 5		
1: Montha pelegium	10	<u> </u>	<u>081</u>	Column Totals: (A)		— <sup>(B)</sup>
2. Poa pratensis	15	Y	FAC_	Prevalence Index = B/A =		
3. Agrostus pallens	nÓ	N	FACY	Hydrophytic Vegetation Indicato		
4. Leonton Saxatilis	$-\frac{1}{2}$	N	FACIL	1 - Rapid Test for Hydrophytic		
			FACW		, vegetation	
5. alopeannes sacatus				X 2 - Dominance Test is >50%		
6				3 - Prevalence Index is $≤3.0^1$		
7				4 - Morphological Adaptations data in Remarks or on a se	s' (Provide su eparate sheet	pporting )
8				5 - Wetland Non-Vascular Pla		, 
9				Problematic Hydrophytic Vege		ain)
10						
11				<sup>1</sup> Indicators of hydric soil and wetla be present, unless disturbed or pro-	na nyarology oblematic	musi
11 50=24 70=10.4	52	_= Total C	over			
Woody Vine Stratum (Plot size:)						
1				Hydrophytic		
2.			······	Vegetation Present? Yes X	No	
		= Total C	over	Present? Yes _X_	NO	
% Bare Ground in Herb Stratum <u>20</u>						
Remarks:						

Sampling Point: 210

118 wet

Profile Desc	cription: (Describe	to the dept	h needed to docu	ment the	indicator or	confirm	the absence of indicators.)
Depth	Matrix			ox Feature		<u> </u>	
(inches)	Color (moist)		Color (moist)	%		Loc <sup>2</sup>	Texture Remarks
0-110	104R 2+/1	85	10YR 3/4	15	materix e	shcentra	tims silty day loam
							~ V
		_					
	· · · · · · · · · · · · · · · · · · ·						
					<u> </u>		
					<u> </u>		
	·····				<u> </u>		
	oncentration, D=Dep					Sand Grai	ns. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applic	able to all L	RRs, unless othe	erwise not	ed.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol		_	Sandy Redox	(S5)			2 cm Muck (A10)
	pipedon (A2)		Stripped Matrix				Red Parent Material (TF2)
	stic (A3)		Loamy Mucky			LRA 1)	Very Shallow Dark Surface (TF12)
	n Sulfide (A4) Below Dark Surfac		Loamy Gleyed Depleted Matri		)		Other (Explain in Remarks)
	ark Surface (A12)	· · ·	Depleted Matri Redox Dark St				<sup>3</sup> Indicators of hydrophytic vegetation and
	lucky Mineral (S1)	<i>-</i>	Depleted Dark		7)		wetland hydrology must be present,
	leyed Matrix (S4)	_	Redox Depres		• /		unless disturbed or problematic.
Restrictive I	_ayer (if present):						
Туре:	90020g.						
<ul> <li>Depth (ind</li> </ul>	ches):						Hydric Soil Present? Yes <u>X</u> No
Remarks:						I_	• • • • • • • • • • • • • • • • • • •
HYDROLO	GY						
	drology Indicators:						
-	ators (minimum of o	no roquirod:	abook oil that ann				
	Water (A1)	ne required,			- (DO) (		Secondary Indicators (2 or more required)
	ter Table (A2)				es (B9) ( <b>exce</b>	pt	Water-Stained Leaves (B9) (MLRA 1, 2,
Saturatic			Salt Crust	1, 2, 4A, a	na 4B)		4A, and 4B)
Water M	( )		Aquatic In		(R13)		Drainage Patterns (B10)
	t Deposits (B2)			Sulfide Oc			Dry-Season Water Table (C2)
	osits (B3)		Oxidized F			na Roots	<ul> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>(C3) Geomorphic Position (D2)</li> </ul>
	t or Crust (B4)		•		d Iron (C4)	ing i tooto	Shallow Aquitard (D3)
	osits (B5)				n in Tilled Se	oils (C6)	FAC-Neutral Test (D5)
	Soil Cracks (B6)				Plants (D1) (	• •	Raised Ant Mounds (D6) (LRR A)
Inundatio	on Visible on Aerial I	magery (B7)	Other (Ex			,	Frost-Heave Hummocks (D7)
Sparsely	Vegetated Concave	Surface (B8	5)		·		
Field Observ			-				
Surface Wate	er Present? Ye	es No	$ \sum_{i=1}^{n} \sum_{j=1}^{n} D_{i}$ epth (in $ \sum_{j=1}^{n} D_{i}$ epth (in	ches):	er		
Water Table I	Present? Ye	esNo	o <u> </u>	ches):			
Saturation Pre	esent? Ye		Depth (in			Wetlan	d Hydrology Present? Yes 🖄 No
(includes cap	mary tringe)		,				
Describe Red	orded Data (stream	gauge, moni	toring well, aerial	photos, pre	vious inspec	tions), if a	available:
Damarlin							
Remarks:	3% oxidi	20 di daia.	Arnha. A.				
	DI OMINI	Ke Mil	rop" unce				

### WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region 118 up Project/Site: Humboldt Wind Energy Project City/County: Humboldt Sampling Date: 07/11/2018 Applicant/Owner: <u>Humboldt Wind, LLC</u> State: CA Sampling Point: 211 Investigator(s): ALOVELESS, STONA \_\_\_\_\_ Section, Township, Range: \_\_\_ \_\_\_\_ Slope (%): Subregion (LRR): A: Northwest Forests and Coast Lat: -124.172854 40.449981 Datum: Soil Map Unit Name: 4408-Dolason-Forhaux-Peaked Complex, 5-301. Slopes NWI classification: \_\_\_\_ None\_\_ Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>X</u> No (If no, explain in Remarks.) Are Vegetation $N_{\rm eq}$ , Soil $N_{\rm eq}$ , or Hydrology $N_{\rm eq}$ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_ Are Vegetation $\mathcal{N}_{\mathcal{N}}$ , Soil $\mathcal{N}_{\mathcal{N}}$ , or Hydrology $\mathcal{N}_{\mathcal{N}}$ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Yes \_\_\_\_\_ No 🗙 Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? Yes 🔨 No \_\_\_\_\_ within a Wetland? Yes No X Wetland Hydrology Present? Yes 🔀 No 🔤 Remarks: UPLand Pt. veg closes not qualify Weala VEGETATION – Use scientific names of plants. Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: \_\_\_\_\_ <u>% Cover Species? Status</u> Number of Dominant Species 1. \_\_\_ That Are OBL, FACW, or FAC: (A) 2. Total Number of Dominant 3. Species Across All Strata: (B) Percent of Dominant Species 50 \_ = Total Cover (A/B) That Are OBL, FACW, or FAC: Sapling/Shrub Stratum (Plot size Prevalence Index worksheet: 1. 32 48 16

2				Total % Cover of:	Multiply by:
3				OBL species 10	x 1 = <u>10</u>
Δ				FACW speciesO	x 2 =
5				FAC species5	x3= <u>75</u>
······································		= Total C		FACU species 10	x 4 = <u>74</u>
Herb Stratum (Plot size:)	<u></u>				x 5 =
1. agrostus pallens.	15	<u>    Y     </u>	FACU	Column Totals: 5	(A) <u>159</u> (B)
2. Poa pratensis	20	<u> </u>	FAC	Prevalence Index = B/A	= 3.1
3. <u>Menitha pelegium</u>	10	<u>N</u>	OBL	Hydrophytic Vegetation Ind	
4. Holcus Lanatus	5	N	FAC	N 1 - Rapid Test for Hydrop	hytic Vegetation
5. <u>Pumex acetosella</u>		<u>N</u>	FACY	N 2 - Dominance Test is >5	0%
6				<u>N</u> 3 - Prevalence Index is ≤	3.0 <sup>1</sup>
7		. <u></u>		N 4 - Morphological Adapta data in Remarks or on	
9				N 5 - Wetland Non-Vascula	· · · ·
10				Problematic Hydrophytic	Vegetation <sup>1</sup> (Explain)
	<u> </u>			<sup>1</sup> Indicators of hydric soil and v	vetland hydrology must
11. $50=2.5.5$ $20=10.2$	51	= Total Co	over	be present, unless disturbed of	or problematic.
Woody Vine Stratum (Plot size:)					
1				Hydrophytic	
2				Vegetation Present? Yes	No <u>X</u>
% Bare Ground in Herb Stratum		_= Total Co	over	11030111 103 <u></u>	NO
Remarks:				•••••••••••••••••••••••••••••••••••••••	
				a Ali	·

SOIL
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Profile Desc	ription: (Describe	to the dep	oth needed to docu	ment the	indicator	or confirm	the absence of i	ndicators.)
Depth	Matrix			x Feature	S			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-8	104R 2+11	85	104R3/3	15				1. and an and the second se
8-10	104R 21/1	85	104R3/3	14				
			104R 5/4		_			
		-						
· 1 <del>_</del>	D D							n: PL=Pore Lining, M=Matrix.
			l=Reduced Matrix, C I LRRs, unless othe			u Sanu Gi		or Problematic Hydric Soils <sup>3</sup> :
-		able to al						uck (A10)
Histosol	• /		Sandy Redox ( Stripped Matrix					rent Material (TF2)
	pipedon (A2)			. ,	1) (over			allow Dark Surface (TF12)
	stic (A3)		Loamy Mucky				,	Explain in Remarks)
	en Sulfide (A4) d Below Dark Surfac	0 (011)	Depleted Matri		<u> </u>		Other (1	
	ark Surface (A12)	æ (ATT)	Redox Dark Su		)		<sup>3</sup> Indicators o	f hydrophytic vegetation and
	Aucky Mineral (S1)		Depleted Dark					nydrology must be present,
	Bleyed Matrix (S4)		Redox Depress					sturbed or problematic.
	Layer (if present):							•
Type:	• • • •							
	ches):						Hydric Soil Pre	esent? Yes <u>X</u> No
Remarks:	listinct Redo	ox cond	entrations					
-								
HYDROLO	GY							

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; ch	neck all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3)	Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	$\underline{\times}$ Oxidized Rhizospheres along Living	Roots (C3) Geomorphic Position (D2)
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5)	Recent Iron Reduction in Tilled Soil	
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (LF	
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface (B8)		
Field Observations:		
Surface Water Present? Yes No	Depth (inches):	
Water Table Present? Yes No	Lepth (inches):	,
(includes capillary fringe)		Wetland Hydrology Present? Yes 📉 No
Describe Recorded Data (stream gauge, monito	oring well, aerial photos, previous inspection	ons), if available:
Remarks: 2.1. oxidized Miz	tospherez.	

WETLAND DETERMINATION	DATA FORM – Western Mour	ntains, Valleys, and Coast Region 126 wet
Project/Site: Humboldt Wind Energy Project	City/County: Humbold	t Sampling Date: 07/11/18
Applicant/Owner: <u>Humboldt Wind, LLC</u>		State: CA Sampling Point: 10 8 IN
Investigator(s): SUSSAN S CICCEN	Section, Township, Rar	
Landform (hillslope, terrace, etc.): $N(l \leq \partial P)$	Local relief (concave, o	convex, none): (ON COUL Slope (%):
Subregion (LRR): <u>A: Northwest Forests and Coa</u>	ast Lat -124.168008	Long: 40.448356 Datum:
Soil Map Unit Name: 4406 Peaked - Opera Mol		
Are climatic / hydrologic conditions on the site typical for	this time of year? Ves $\times$ No	(If no explain in Remarks.)
		Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology	_ • •	eded, explain any answers in Remarks.)
Are Vegetation, Soil, or Hydrology	<u> </u>	
SUMMARY OF FINDINGS – Attach site ma	ap showing sampling point lo	ocations, transects, important features, etc.
Hydric Soil Present? Yes X Wetland Hydrology Present? Yes X Remarks:	within a Wotlan	X
WL 115		
VEGETATION – Use scientific names of pl	lants.	· ·
	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum         (Plot size:)           1	% Cover Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2		Total Number of Dominant (B)
		Percent of Dominant Species
A	= Total Cover	That Are OBL, FACW, or FAC:(A/B)
Sapling/Shrub Stratum (Plot size:)		Prevalence Index worksheet:
1 2		Total % Cover of:Multiply by:
3		OBL species x 1 =
4.		FACW species x 2 =
5		FAC species x 3 =
·	= Total Cover	FACU species         x 4 =           UPL species         x 5 =
Herb Stratum (Plot size: M.V.)	45 Y FACW	Open species
1 5, patens	$\frac{55}{5} \frac{1}{N} \frac{1}{FA(N)}$	
2. J. bartonins 3 Guellyia declinata	3 N FACW	Prevalence Index = B/A = Hydrophytic Vegetation Indicators:
4. Holdis Tantus	- $        -$	1 - Rapid Test for Hydrophytic Vegetation
4. <u>APRICES AMELS</u> 5. Pro DIATON 2	I N FAC	$\times$ 2 - Dominance Test is >50%
6. Authoxanthin capay	- 3 N FACU	$3$ - Prevalence Index is $\leq 3.0^{1}$
7. Lotuc Colhiculatus 8. Mentra purcedius	TN FAC	4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
9.		5 - Wetland Non-Vascular Plants <sup>1</sup>
10		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11	· · · · · · · · · · · · · · · · · · ·	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	= Total Cover	be present, unless disturbed of problematic.
<u>Woody Vine Stratum</u> (Plot size: $(f)$ )		
1	······································	Hydrophytic Vegetation ~ /
2	= Total Cover	Present? Yes No
% Bare Ground in Herb Stratum <u>\</u>		
Remarks:	s	

Sampling Point: \_\_\_

126 wet

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Profile Description: (Des	cribe to the de	epth needed to docum	ent the indic	ator or confirm	n the absence of indic	ators.)
· · · ·	A GOOM TOURING					
(inches) Color (mo	<u>ist) %</u>	Color (moist)	<u>%</u> Ty	pe <sup>1</sup> Loc <sup>2</sup>	Texture	Remarks
0-4 $10$ K	12 42	<u>STR 1/6</u>		<u></u>	<u>clay lown</u>	
<u>4.12 10 MK</u>	<u>*1 10</u>	7.57R %	<u> </u>	$\sum m$	Clay Joan	
~		5 YR KM	L (	γA	2	
		- <u> </u>	<u> </u>			· · · · · · · · · · · · · · · · · · ·
					· · · · · · · · · · · · · · · · · · ·	New
						<u>_</u>
		-				
<sup>1</sup> Type: C=Concentration, D	=Depletion, RM	/=Reduced Matrix. CS	=Covered or C	Coated Sand Gr	ains <sup>2</sup> location F	PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (A					·····	roblematic Hydric Soils <sup>3</sup> :
Histosol (A1)		Sandy Redox (S	5)		2 cm Muck (	-
Histic Epipedon (A2)		Stripped Matrix (	S6)			Material (TF2)
Black Histic (A3)		Loamy Mucky M		cept MLRA 1)		v Dark Surface (TF12)
Hydrogen Sulfide (A4)		Loamy Gleyed N			Other (Expla	in in Remarks)
Depleted Below Dark S Thick Dark Surface (A1		Depleted Matrix	. ,		3	
Sandy Mucky Mineral (		Kedox Dark Surf Depleted Dark S	. ,			Irophytic vegetation and
Sandy Gleyed Matrix (S		Redox Depression	. ,		=	logy must be present, ed or problematic.
Restrictive Layer (if prese	·					
Туре:						
Depth (inches):					Hydric Soil Present	? Yes 🔀 No
Remarks:						
HYDROLOGY						
Wetland Hydrology Indica					· · · · · · · · · · · · · · · · · · ·	
Primary Indicators (minimur	n of one require	ed; check all that apply)			Secondary Ind	icators (2 or more required)
Surface Water (A1)		Water-Stain	ed Leaves (B	except) (except	Water-Sta	ined Leaves (B9) (MLRA 1, 2,
High Water Table (A2)		MLRA 1	2, 4A, and 4	3)	4A, an	1
Saturation (A3)		Salt Crust (E	311)		🔀 Drainage I	Patterns (B10)
Water Marks (B1)			ertebrates (B1	,	Dry-Seasc	n Water Table (C2)
Sediment Deposits (B2)	)		ulfide Odor (C			Visible on Aerial Imagery (C9)
Drift Deposits (B3)				ong Living Root	ts (C3) 💢 Geomorph	ic Position (D2)
✓ Algal Mat or Crust (B4)			Reduced Iror	. ,	Shallow A	
Iron Deposits (B5)				Tilled Soils (C6)		
Surface Soil Cracks (Be	-			s (D1) ( <b>LRR A</b> )		t Mounds (D6) (LRR A)
Inundation Visible on A			ain in Remarks	5)	Frost-Heav	/e Hummocks (D7)
Sparsely Vegetated Con Field Observations:						
	N		,			
		No Depth (inch			~	
Water Table Present?		No Depth (inch				$\sim$
Saturation Present? (includes capillary fringe)	Yes	No Depth (inch	es):	Wetla	nd Hydrology Presen	t? Yes <u> </u>
Describe Recorded Data (st	ream gauge, m	onitoring well, aerial ph	otos, previous	inspections), if	f available:	
Remarks: Rugging		- An-				
<b>(</b> 095) ( )						
/						
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			ntains, Valleys, and Coast Region 126 up
Project/Site: Humboldt Wind Energy Project	City/C	ounty: <u>Humbolo</u>	<u>dt</u> Sampling Date: <u>○ 7/1( /( </u>
Applicant/Owner: Humboldt Wind, LLC			State: CA Sampling Point: $D^{\gamma}$
Investigator(s): 5. flatson, S. Creer			
Landform (hillslope, terrace, etc.): N° (15000, ter	ta CC Local	relief (concave, o	convex, none): <u>NOME</u> Slope (%): <u>D</u>
Subregion (LRR): <u>A: Northwest Forests and Coast</u>	Lat: -124.16	7965	Long:40.448357 Datum:
Soil Map Unit Name: 4405 Periced - Or Panhouse-F	Srhave Cump	Uax, 5-30'r.	Sloped NWI classification: 1000e
Are climatic / hydrologic conditions on the site typical for thi			
Are Vegetation, Soil, or Hydrology		/	Normal Circumstances" present? Yes 🔀 No
Are Vegetation, Soil, or Hydrology			eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map		ipling point i	ocations, transects, important leatures, etc.
Hydrophytic Vegetation Present?       Yes N         Hydric Soil Present?       Yes N         Wetland Hydrology Present?       Yes N	10	ls the Sampled within a Wetlar	Area nd? Yes No
Remarks: WC 115	<i>/</i>		
WC II D		·	· · ·
VEGETATION – Use scientific names of plar		inont Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	Absolute Don <u>% Cover Spe</u>	ninant Indicator cies? <u>Status</u>	Number of Dominant Species
1			That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3			Species Across All Strata: (B)
4			Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)	́) = To	tal Cover	That Are OBL, FACW, or FAC: (A/B)
1.			Prevalence Index worksheet:
2			Total % Cover of:         Multiply by:           OBL species         x 1 =
3			FACW species         x 2 =
4			FAC species         x 3 =
5			FACU species x 4 =
Herb Stratum (Plot size: 1 M Vachus	= Tc	tal Cover	UPL species x 5 =
1. H. Valicata	75	EACU	Column Totals: (A) (B)
2. P. Jancedata	<u> </u>	I FACU	Prevalence Index = B/A =
3. A. odoritum	5	FACU	Hydrophytic Vegetation Indicators:
4. Parentucellia Viscosa	4-1	FAC	1 - Rapid Test for Hydrophytic Vegetation
5. Cynosorus echinatus	<u> </u>	UPL	2 - Dominance Test is >50%
6. Juncus occidentalis		FACW	3 - Prevalence Index is ≤3.0 <sup>1</sup>
7. Linum bienne	<u> </u>	UPL OBL	4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
8. Mentha pulegium	· · · · · · · · · · · · · · · · · · ·		5 - Wetland Non-Vascular Plants <sup>1</sup>
9			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
	<u>85</u> =To	tal Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)			
1			Hydrophytic Vegetation
2		tal Cover	Present? Yes No
% Bare Ground in Herb Stratum	= То	lai COVEI	
Remarks:			

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alina	Delint		( )	- (

126 up

Profile Desc	cription: (Describe t	the dep			ator or confirm	n the absence of i	ndicators.)	
Depth	Matrix	- 1		dox Features				
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	pe <sup>1</sup> Loc <sup>2</sup>	<u> </u>	Remarks	
0 mm 12	10 4R 2/2	<u> 92</u>	<u>SYR 46</u>			clay loa	. <u>m1</u>	
						Lord .		
						<u></u>		
			· · · · · · · · · · · · · · · · · · ·					
Type: C=Ce	oncentration, D=Depl	etion, RM=	Reduced Matrix,	CS=Covered or C	Coated Sand G	rains. <sup>2</sup> Locatio	n: PL=Pore Lining, M=Ma	atrix.
lydric Soil	Indicators: (Applica	ble to all	LRRs, unless oth	nerwise noted.)			or Problematic Hydric So	
Histosol	(A1)		Sandy Redox	( (S5)		2 cm Mi	uck (A10)	
Histic Ep	bipedon (A2)		Stripped Mat				ent Material (TF2)	
Black Hi	istic (A3)		Loamy Muck	y Mineral (F1) (ex	cept MLRA 1)		allow Dark Surface (TF12)	)
Hydroge	en Sulfide (A4)		Loamy Gleye	d Matrix (F2)		Other (E	Explain in Remarks)	,
Depleted	d Below Dark Surface	e (A11)	Depleted Ma	trix (F3)				
	ark Surface (A12)		🔀 Redox Dark S	Surface (F6)		<sup>3</sup> Indicators o	f hydrophytic vegetation a	nd
	lucky Mineral (S1)		Depleted Date	k Surface (F7)		wetland h	ydrology must be present	,
	Sleyed Matrix (S4)		Redox Depre	ssions (F8)		unless dis	sturbed or problematic.	
Restrictive l	Layer (if present):							
Туре:			<del></del>					
Depth (ind	ches):					Hydric Soil Pre	sent? Yes <u><math>\times No</math></u>	o
Remarks:								
YDROLO	GY							
Vetiand Hvo	drology Indicators:		-					
	cators (minimum of or	ne requirer	t: check all that an	univ.)		Socondan	y Indicators (2 or more req	wired)
	Water (A1)							
				tained Leaves (B			-Stained Leaves (B9) (ML	.RA 1, 2,
	ater Table (A2)			A 1, 2, 4A, and 4	в)		, and 4B)	
Saturatio			Salt Cru	, ,			age Patterns (B10)	
	larks (B1)			Invertebrates (B1			eason Water Table (C2)	
	nt Deposits (B2)			n Sulfide Odor (C	,		ation Visible on Aerial Ima	gery (C9
_ ·	posits (B3)						orphic Position (D2)	
•	at or Crust (B4)			e of Reduced Iror	( )		ow Aquitard (D3)	
Iron Dep	osite (B5)		Poconti	ron Roduction in	Tilled Soile (CG		Voutral Tast (DE)	

<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> </ul>			<ul> <li>Water-Stained Leaves (B9) (excelling states of the state of the states (B1) (excelling states and the states (B1))</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Livi</li> <li>Presence of Reduced Iron (C4)</li> <li>Recent Iron Reduction in Tilled Solution</li> </ul>	4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ng Roots (C3) Shallow Aquitard (D3)
<ul> <li>Surface Soil Cracks (B6)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Sparsely Vegetated Concave Surface (B8)</li> </ul>			Stunted or Stressed Plants (D1) (I Other (Explain in Remarks)	
Field Observations: Surface Water Present?	Vos	No	Depth (inches):	
Water Table Present?			Depth (inches):	
Saturation Present? (includes capillary fringe)			Depth (inches):	Wetland Hydrology Present? Yes No
	eam gauge,	monitoring	well, aerial photos, previous inspec	tions), if available:
Remarks:				

WETLAND DETERMINATION DATA FO	DRM – Western Mountai	ns, Valleys, and	d Coast Region 131 wet
Project/Site: Humboldt Wind Energy Project	City/County: <u>Humboldt</u>		Sampling Date: 7/10/16
Applicant/Owner: Humboldt Wind, LLC	·····	State: <u>CA</u>	Sampling Point: 106 (1)++>
Investigator(s): J. Halson S. Creer	Section, Township, Range: _		
Landform (hillslope, terrace, etc.): <u>ridgeline</u>	Local relief (concave, conve	x, none):	Slope (%):
Subregion (LRR): <u>A: Northwest Forests and Coast</u> Lat:	-124.163092 Lon	g:40.44765	52 Datum:
Soil Map Unit Name: Pearled-Oceanhouse, Full	un complex 5-301.51	NWI classific	ation: None
Are climatic / hydrologic conditions on the site typical for this time o	f year? Yes 🔀 No	(If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology significant	ntly disturbed? Are "Norm	al Circumstances" p	present? Yes X No
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed,	, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site map showi	ng sampling point locat	ions, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes X No			

Hydrophytic Vegetation Present? Hydric Soil Present?	Yes X No Yes X No	Is the Sampled Area		
Wetland Hydrology Present?	Yes No	within a Wetland?	Yes No	
Remarks:				
V	OL III			

	Absolute		Dominance Test worksheet:
Tree Stratum (Plot size:	<u>% Cover</u>	Species? Status	Number of Dominant Species
1			That Are OBL, FACW, or FAC: (A)
2	_		
			Total Number of Dominant (B)
4			
			Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)	·	= Total Cover	That Are OBL, FACW, or FAC: (A/B)
			Prevalence Index worksheet:
1			Total % Cover of: Multiply by:
2			OBL species x 1 =
3	••• ••••••		FACW species x 2 =
4	-		
5			FAC species x 3 =
		= Total Cover	FACU species x 4 =
Herb Stratum (Plot size: 1 Meter ) adi US			UPL species
1. Alopecurus sacatus	<u>}0</u>	Y FACW	Column Totals: (A) (B)
2. Arguistis pallens	10	NUPL	Drevelance Index D/A
3. JUNEUS alcidentalis	£	N FAGN	Prevalence Index = B/A =
	<u> </u>	N OBL	Hydrophytic Vegetation Indicators:
4. Mentra pulgium			1 - Rapid Test for Hydrophytic Vegetation
			2 - Dominance Test is >50%
6			3 - Prevalence Index is ≤3.0 <sup>1</sup>
7	. <u></u>		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8			data in Remarks or on a separate sheet)
9			5 - Wetland Non-Vascular Plants <sup>1</sup>
10			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
	87	= Total Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)	_0_/	= Total Cover	
1			
	·		Hydrophytic Venetation
2			Vegetation Present? Yes No
% Bare Ground in Herb Stratum _ <u>20</u>		= Total Cover	
Remarks:			

131	wet
121	

SOIL							Sampling Point: _/06
Profile Desc	cription: (Describe t	o the depi	th needed to docum	ent the i	ndicator	or confirm	the absence of indicators.)
Depth	Matrix			Feature	S		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture Remarks
0-2	7.STR.31	100	and a second sec				claybam
2-4	INVP 2/2	97	7.SYR Sk	, 3	67	m	
	IND 4/2	20	GUD Y/1	16		m	
4-8_	10412 72	<u>40</u>	51K 16			<u> </u>	
	· · · · · · · · · · · · · · · · · · ·						
	- <u></u>			·			
<sup>1</sup> Type: C=C	Concentration, D=Depl	etion, RM=	Reduced Matrix, CS	=Covere	d or Coate	ed Sand Gr	ains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :
	Indicators: (Applica	able to all			ea.)		
Histoso			Sandy Redox (S				2 cm Muck (A10) Red Parent Material (TF2)
	pipedon (A2)		Stripped Matrix Loamy Mucky N		1) ( <b>oxcon</b>		
	listic (A3)		Loamy Gleyed N				Other (Explain in Remarks)
	en Sulfide (A4) ed Below Dark Surface	o (A11)	S Depleted Matrix		-)		0.1101 (1.1,1101
	ark Surface (A12)	5 (711)	Redox Dark Sur		)		<sup>3</sup> Indicators of hydrophytic vegetation and
	Mucky Mineral (S1)		Depleted Dark S				wetland hydrology must be present,
	Gleyed Matrix (S4)		Kedox Depressi			depress	unless disturbed or problematic.
	Layer (if present):				<u> </u>		
Type:							
	nches):						Hydric Soil Present? Yes 🔀 No
Remarks:							
				A.C			
HYDROLO	DGY						
Wetland Hy	ydrology Indicators:						
Primary Ind	licators (minimum of c	one require					Secondary Indicators (2 or more required)
Surface	e Water (A1)		Water-Stai	ned Leav	ves (B9) (e	except	Water-Stained Leaves (B9) (MLRA 1, 2,
High W	Vater Table (A2)		MLRA	1, 2, 4A,	and 4B)		4A, and 4B)
Saturat	tion (A3)		Salt Crust	(B11)	7		Drainage Patterns (B10)
Water	Marks (B1)		Aquatic In	vertebrat	es (B13)		Dry-Season Water Table (C2)
Sedime	ent Deposits (B2)		Hydrogen	Sulfide C	odor (C1)		Saturation Visible on Aerial Imagery (C9)

<ul> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Surface Soil Cracks (B6)</li> <li>Inundation Visible on Ae</li> <li>Sparsely Vegetated Con</li> </ul>	) erial Imagery	Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) ( (B7) Other (Explain in Remarks)	
			· · · · · · · · · · · · · · · · · · ·
Field Observations:			
Surface Water Present?	Yes	No <u> </u>	
Water Table Present?	Yes	No 🔀 Depth (inches):	$\sim$
Saturation Present? (includes capillary fringe)		No <u></u> Depth (inches):	Wetland Hydrology Present? Yes <u> </u>
Describe Recorded Data (st	ream gauge,	, monitoring well, aerial photos, previous inspec	ctions), if available:
Remarks:			

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region 131 up						
Project/Site: Humboldt Wind Energy	y Project	_ City/County: <u>Humboldt</u>		Sampling Date: 7/10/18		
Applicant/Owner: <u>Humboldt Wind, Ll</u>	LC		State: CA	Sampling Point: 107 (UD)		
Investigator(s): J. Hulson	, S.Creer	_ Section, Township, Range: _				
Landform (hillslope, terrace, etc.):	rapling	Local relief (concave, conve	x, none):	Slope (%):		
Soil Map Unit Name: Plaked-	<u>creannouser?</u>	For hause complex	5-20/ Slup NWI classifk	eation: Non a		
Are climatic / hydrologic conditions on the	site typical for this time of	vear? Yes 🖌 No	(If no, explain in R	emarks.)		
Are Vegetation $\underline{N}$ , Soil $\underline{N}$ , or H	ydrology <u>N</u> significant			present? Yes X No		
Are Vegetation, Soil, or H	ydrology naturally p		explain any answe			
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.						
Hydrophytic Vegetation Present?	Yes No 😪	_				
Hydric Soil Present?	Yes No <u> </u>	Is the Sampled Area		$\sim$		
Wetland Hydrology Present?	Yes No 🐋	within a Wetland?	Yes	No <u></u>		

WL III

Yes \_\_\_\_

\_\_\_\_ No\* 🐋

# VEGETATION – Use scientific names of plants.

Remarks:

	Trop Otrotum (Distant		Dominant Indicator	Dominance Test worksheet:
1		<u>% Cover</u>	Species? Status	Number of Dominant Species
2	1	· · · · · · · · · · · · · · · · · · ·		
3.	2			
4.	3.			
Sapind/Shrub Stratum       (Plot size:)       = Total Cover       Percent of Dominant Species That Are OBL, FACW, or FAC:(NB)         1.				Species Across All Strata: [B]
Sapling/Shrub Stratum       (Plot size:	T			Percent of Dominant Species
1.       Prevalence Index worksheet:         2.       Total % Cover of:       Multiply by:         3.       Second for the formation of the f	Sapling/Shrub Stratum (Plot size:		= Total Cover	That Are OBL, FACW, or FAC: (A/B)
2.       Total % Cover of:       Multiply by:         3.       Total % Cover of:       Multiply by:         3.       Total % Cover of:       Multiply by:         4.       Source       X1 =         5.       FACU species       X2 =         FACU species       X3 =         Participation       FACU species       X3 =         7.       FACU Species       X3 =         9.       FACU Species <td></td> <td></td> <td></td> <td>Prevalence Index worksheet:</td>				Prevalence Index worksheet:
3.				Total % Cover of:Multiply by:
4.       FACW species $x 2 =$ 5.       FACW species $x 3 =$ Herb Stratum (Plot size:       Metery radius)       = Total Cover         1.       Huppechagen's caticatra       PO       Y         2.       Harb Stratum (Plot size:       Metery radius)       FACU         3.       Partents pallons       15       Muple         3.       Partents pallons       15       Muple         4.       Armispon americanus       1       FACU         5.       Plantacque langealation       1       FACU         6.       Briza Mundy       1       FACU         7.       Deade and cance elegam       1       FACU         8.       Damentus       1       FACU         9.       Hold US langetus       1       FACU         10.       10.       TAL       FACU         11.       10.       10.       Total Cover         12.       10.       Total Cover       Hydrophytic vegetation '(Explain)         11.       10.       10.       FACU       Southantus         12.       Incolor       10.       FACU       Yes         14.       Morphological Adaptations' (Provide	3			OBL species x 1 =
5.				FACW species x 2 =
Herb Stratum (Plot size: $Mlfey radius$ = Total Cover         1. $Herb Stratum$ (Plot size: $Mlfey radius$ = Total Cover         1. $Herb Stratum$ (Plot size: $Mlfey radius$ $FACU$ 2. $Herb Stratum$ (Plot size: $Mlfey radius$ $FACU$ 3. $Partenticellas       ISCUSCA FAC         4.       Prevalence Index = B/A = Hydrophytic Vegetation Indicators:         4.       Prevalence Index = B/A = Hydrophytic Vegetation Indicators:         5.       Plantaco       Iangealata FACU         6.       Riza Augo Iangealata Recus       FACU         8.       Dantaro Iangealata FAC FACU         9.       Holr US Ianatus I FAC         9.       Holr US Ianatus I FAC         9.       Holr US Ianatus I FAC         10.       I FAC FAC         11.       I I FAC         12.       I FAC FAC         13.       I FAC I         14.       I I $				FAC species x 3 =
Herb Stratum (Plot size:	· · · ·			FACU species A =
2. Harentis pallons       15       VPL         3. Damentucellos viscoso       5       FAC         4. Armispon americanus       1       FACU         5. Plantagian americanus       1       FACU         6. Briza minus       1       FACU         7. Dindiara elogany       1       FAC         8. Dantagiana       1       FAC         9. Holcus lanatus       1       FAC         9. Holcus lanatus       1       FAC         9. Holcus lanatus       1       FAC         10.       1       FAC         11.       1       FAC         12.       1       FAC         9. Holcus lanatus       1       FAC         10.       1       FAC         11.       10.       FAC         12.       FAC       FAC         13.       FAC       FAC         14.       FAC       FAC         15.       Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)       5. Wetland Non-Vascular Plants'         10.       10.0       = Total Cover       Problematic Hydrophytic Vegetation' (Explain)         1       10.0       = Total Cover       Hydrophytic Vegetation Pro				
2. $farmispin amentuce   barvestime       15       N       UPL         3.       pamentuce   barvestime       15       N       UPL         4.       pamentuce   barvestime       15       N       UPL         5.       pamentuce   barvestime       15       N       UPL         6.       partial accord       15       partial accord       16         6.       partial accord       16       partial accord       16         7.       partial accord       16       partial accord       16         8.       partial accord       16       partial accord       16         9.       partial accord       16       partial accord       16         10.       10.       16       partial accord       16         11.       10.       10.       17       partial accord       16         11.       10.       10.0       = Total Cover       16       present?       present?$	1. Hypochaen's radicator	70	Y FACU	Column Totals: (A) (B)
3. Particular of subscription       5. Plantago langestation       1. Provide supporting of the support of	2. Harostis pallens	15		
4. Promuspon amencanys       1       FACV         5. Plantage langeslata       3       FACV         6. Briza hundy       1       FAC         7. Drodiaca elogam       1       FAC         8. Damtensa       1       FAC         9. Holcus lanatus       1       FAC         10		5		
5.       Flantage lange lange         6.       Briza minut         7.       Drodi aca elagam         8.       Damma a calles raise         9.       Hold us lange         10.       FAC         11.       FAN         10.       FAN         11.       FAN         11.       Image: statum of the st		<u> </u>	FACU	1
6.		<u> </u>	- ACU	
7.       Dradiata and an a separate sheet         8.       Damana calles raira         9.       Holcus lanatus         10.		1	FAC	
8.       Damage Ground in Herb Stratum       Calles raina       3       FAC         9.       Holcus lanatus       FAC       FAC         10.       FAN       5 - Wetland Non-Vascular Plants <sup>1</sup> 10.       Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)         11.       Image: College Ground in Herb Stratum       Image: College Ground in Herb Stratum	7. Dudiaca elogans	1	EACU	
9. Holcus lanatus       1	8. Danthonia Calitornica	3	FAC	data in Remarks or on a separate sheet)
11.	9. Holcus lanatus		V FAN	
11.	10	·		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:	11			
Woody Vine Stratum       (Plot size         1.		100 =	= Total Cover	be present, unless disturbed or problematic.
1.	Woody Vine Stratum (Plot size:)			
2 Hydrophytic Vegetation Present? Yes No	1			the share when the
% Bare Ground in Herb Stratum = Total Cover Present? Yes No				
% Bare Ground in Herb Stratum			Total Cover	
Remarks:	% Bare Ground in Herb Stratum			<b>_</b>
	Remarks:			

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Sampling Point:

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rofile Description: (Describ	e to the dep			urvator G	, connin	
Depth <u>Matrix</u> inches) Color (moist)	%	Color (moist)	Features%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture Remarks
$\frac{\text{inches}}{2} = \frac{2}{10} \frac{\text{Color (moist)}}{10}$	$-\frac{n}{\alpha \alpha}$	7.5YR4/6	<u> </u>	C	m	Sandialiam
<u>) 12 10110 12</u>	<u> </u>	7.515-10		~		Started and
		· · · · · · · · · · · · · · · · · · ·				
						Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Type: C=Concentration, D=D	epletion, RM	=Reduced Matrix, CS	=Covered	or Coate	d Sand C	Indicators for Problematic Hydric Soils <sup>3</sup> :
lydric Soil Indicators: (App	licable to all			u.)		2 cm Muck (A10)
Histosol (A1)		Sandy Redox (S				Red Parent Material (TF2)
Histic Epipedon (A2)		Stripped Matrix Loamy Mucky M		) (except	MLRA 1	
Black Histic (A3)		Loamy Gleyed				Other (Explain in Remarks)
Hydrogen Sulfide (A4) Depleted Below Dark Surf	ace (A11)	Depleted Matrix				
Thick Dark Surface (A12)		Redox Dark Su				<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1	)	Depleted Dark S		7)		wetland hydrology must be present,
Sandy Gleyed Matrix (S4)		Redox Depress	ions (F8)			unless disturbed or problematic.
Restrictive Layer (if present	):					
Туре:						
Depth (inches):						Hydric Soil Present? Yes No 🦯
Remarks:						
YDROLOGY						
IYDROLOGY Wetland Hydrology Indicato						
						Secondary Indicators (2 or more required
Wetland Hydrology Indicato Primary Indicators (minimum Surface Water (A1)		Water-Sta	ined Leave		except	Water-Stained Leaves (B9) (MLRA
Wetland Hydrology Indicato Primary Indicators (minimum Surface Water (A1)		Water-Sta MLRA	ined Leave 1, 2, 4A, a		except	Water-Stained Leaves (B9) (MLRA 4A, and 4B)
Wetland Hydrology Indicato Primary Indicators (minimum Surface Water (A1)		Water-Sta MLRA Salt Crust	ined Leave <b>1, 2, 4A, a</b> (B11)	ind 4B)	except	Water-Stained Leaves (B9) (MLRA 4A, and 4B) Drainage Patterns (B10)
Wetland Hydrology Indicato Primary Indicators (minimum Surface Water (A1) High Water Table (A2)		Water-Sta MLRA Salt Crust Aquatic In	ined Leave <b>1, 2, 4A, a</b> (B11) wertebrates	<b>ind 4B)</b> s (B13)	except	Water-Stained Leaves (B9) ( <b>MLRA</b> <b>4A, and 4B)</b> Drainage Patterns (B10) Dry-Season Water Table (C2)
Wetland Hydrology Indicato Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3)		Water-Sta MLRA Salt Crust Aquatic In Hydrogen	ined Leave 1, 2, 4A, a (B11) ivertebrates Sulfide Oc	<b>and 4B)</b> s (B13) dor (C1)		<ul> <li>Water-Stained Leaves (B9) (MLRA</li> <li>4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery</li> </ul>
Wetland Hydrology Indicato Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)		Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized	ined Leave <b>1, 2, 4A, a</b> (B11) wertebrates Sulfide Oc Rhizospher	ind 4B) s (B13) dor (C1) res along	Living R	Water-Stained Leaves (B9) (MLRA 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Roots (C3) Geomorphic Position (D2)
Wetland Hydrology Indicato Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)		Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized Presence	ined Leave <b>1, 2, 4A, a</b> (B11) wertebrates Sulfide Oc Rhizospher of Reduce	nd 4B) s (B13) dor (C1) res along ed Iron (C	Living R	Water-Stained Leaves (B9) (MLRA 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Coots (C3) Geomorphic Position (D2) Shallow Aquitard (D3)
Wetland Hydrology Indicato Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	of one require	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized Presence Recent Ind	ined Leave <b>1, 2, 4A, a</b> (B11) vertebrates Sulfide Oc Rhizospher of Reduce on Reduction	nd 4B) s (B13) dor (C1) res along ed Iron (C on in Tille	Living R 4) ed Soils (	Water-Stained Leaves (B9) (MLRA 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Coots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Wetland Hydrology Indicato Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	of one require	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized Recent In Stunted o	ined Leave <b>1, 2, 4A, a</b> (B11) vertebrates Sulfide Oc Rhizospher of Reduce on Reduction r Stressed	nd 4B) s (B13) dor (C1) res along ed Iron (C on in Tille Plants (I	Living R 4) ed Soils (	Water-Stained Leaves (B9) (MLRA 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) (C6) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicato Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aei	of one require rial Imagery (	Water-Sta     MLRA     Salt Crust     Aquatic In     Hydrogen     Oxidized     Presence     Recent In     Stunted o     B7) Other (Ex	ined Leave <b>1, 2, 4A, a</b> (B11) vertebrates Sulfide Oc Rhizospher of Reduce on Reduction	nd 4B) s (B13) dor (C1) res along ed Iron (C on in Tille Plants (I	Living R 4) ed Soils (	Water-Stained Leaves (B9) (MLRA 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Coots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
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Wetland Hydrology Indicato Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aet Sparsely Vegetated Con Field Observations:	of one require rial Imagery (	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized Presence Recent In Stunted o B7) Other (Ex	ined Leave <b>1, 2, 4A, a</b> (B11) vertebrates Sulfide Oc Rhizospher of Reduce on Reduction r Stressed plain in Re	nd 4B) s (B13) dor (C1) res along ed Iron (C on in Tille Plants (I emarks)	Living R 4) ed Soils ( D1) (LRR	Water-Stained Leaves (B9) (MLRA 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) (C6) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicato Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ael Sparsely Vegetated Con	of one require rial Imagery ( cave Surface Yes	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized Presence Recent In Stunted o B7) Other (Ex 9 (B8)	ined Leave <b>1, 2, 4A, a</b> (B11) vertebrates Sulfide Oc Rhizospher of Reduce on Reduction r Stressed plain in Re ches):	nd 4B) s (B13) dor (C1) res along ed Iron (C on in Tille Plants (I emarks)	Living R 4) ed Soils ( D1) ( <b>LRR</b>	Water-Stained Leaves (B9) (MLRA 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) (C6) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicato Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aet Sparsely Vegetated Con Field Observations:	of one require rial Imagery ( cave Surface Yes Yes	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized Presence Recent In Stunted o B7) Other (Ex (B8)	ined Leave <b>1, 2, 4A, a</b> (B11) ivertebrates Sulfide Oc Rhizospher of Reducted on Reducted plain in Re nches):	nd 4B) s (B13) dor (C1) res along ed Iron (C on in Tille Plants (I emarks)	I Living R 4) ed Soils ( D1) ( <b>LRR</b>	Water-Stained Leaves (B9) (MLRA 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) (C6) FAC-Neutral Test (D5) (A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hydrology Indicato Primary Indicators (minimum 	of one require rial Imagery ( cave Surface Yes	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized Presence Recent In Stunted o B7) Other (Ex (B8)	ined Leave <b>1, 2, 4A, a</b> (B11) vertebrates Sulfide Oc Rhizospher of Reduce on Reduction r Stressed plain in Re ches):	nd 4B) s (B13) dor (C1) res along ed Iron (C on in Tille Plants (I emarks)	I Living R 4) ed Soils ( D1) ( <b>LRR</b>	Water-Stained Leaves (B9) (MLRA 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) (C6) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicato Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ael Sparsely Vegetated Con Field Observations: Surface Water Present? Water Table Present? Saturation Present?	of one require rial Imagery ( cave Surface Yes Yes Yes	Water-Sta MLRA  Salt Crust Aquatic In Hydrogen Oxidized Presence Recent In Stunted o B7) (B8) No No Depth (in No Depth (in	ined Leave 1, 2, 4A, a (B11) vertebrates Sulfide Oc Rhizospher of Reduce on Reduction r Stressed plain in Re mches): nches):	nd 4B) s (B13) dor (C1) res along ed Iron (C on in Tille Plants (I emarks)	Living R 4) ed Soils ( D1) (LRR	Water-Stained Leaves (B9) (MLRA     4A, and 4B)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Saturation Visible on Aerial Imagery Roots (C3) Geomorphic Position (D2)     Shallow Aquitard (D3)     FAC-Neutral Test (D5)     A) Raised Ant Mounds (D6) (LRR A)     Frost-Heave Hummocks (D7)
Wetland Hydrology Indicato Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aer Sparsely Vegetated Con Field Observations: Surface Water Present? Water Table Present? Saturation Present?	of one require rial Imagery ( cave Surface Yes Yes Yes	Water-Sta MLRA  Salt Crust Aquatic In Hydrogen Oxidized Presence Recent In Stunted o B7) (B8) No No Depth (in No Depth (in	ined Leave 1, 2, 4A, a (B11) vertebrates Sulfide Oc Rhizospher of Reduce on Reduction r Stressed plain in Re mches): nches):	nd 4B) s (B13) dor (C1) res along ed Iron (C on in Tille Plants (I emarks)	Living R 4) ed Soils ( D1) (LRR	Water-Stained Leaves (B9) (MLRA     4A, and 4B)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Saturation Visible on Aerial Imagery Roots (C3) Geomorphic Position (D2)     Shallow Aquitard (D3)     FAC-Neutral Test (D5)     A) Raised Ant Mounds (D6) (LRR A)     Frost-Heave Hummocks (D7)
Wetland Hydrology Indicato Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aei Sparsely Vegetated Con Field Observations: Surface Water Present? Water Table Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (str	of one require rial Imagery ( cave Surface Yes Yes Yes	Water-Sta MLRA  Salt Crust Aquatic In Hydrogen Oxidized Presence Recent In Stunted o B7) (B8) No No Depth (in No Depth (in	ined Leave 1, 2, 4A, a (B11) vertebrates Sulfide Oc Rhizospher of Reduce on Reduction r Stressed plain in Re mches): nches):	nd 4B) s (B13) dor (C1) res along ed Iron (C on in Tille Plants (I emarks)	Living R 4) ed Soils ( D1) (LRR	Water-Stained Leaves (B9) (MLRA     4A, and 4B)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Saturation Visible on Aerial Imagery Roots (C3) Geomorphic Position (D2)     Shallow Aquitard (D3)     FAC-Neutral Test (D5)     A) Raised Ant Mounds (D6) (LRR A)     Frost-Heave Hummocks (D7)
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Wetland Hydrology Indicato Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aei Sparsely Vegetated Con Field Observations: Surface Water Present? Water Table Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (str	of one require rial Imagery ( cave Surface Yes Yes Yes	Water-Sta MLRA  Salt Crust Aquatic In Hydrogen Oxidized Presence Recent In Stunted o B7) (B8) No No Depth (in No Depth (in	ined Leave 1, 2, 4A, a (B11) vertebrates Sulfide Oc Rhizospher of Reduce on Reduction r Stressed plain in Re mches): nches):	nd 4B) s (B13) dor (C1) res along ed Iron (C on in Tille Plants (I emarks)	Living R 4) ed Soils ( D1) (LRR	Water-Stained Leaves (B9) (MLRA     4A, and 4B)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Saturation Visible on Aerial Imagery Roots (C3) Geomorphic Position (D2)     Shallow Aquitard (D3)     FAC-Neutral Test (D5)     A) Raised Ant Mounds (D6) (LRR A)     Frost-Heave Hummocks (D7)
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WETLAND DETERMINATION DA	TA FORM -	Western Mou	intains, Valleys, an	d Coast Region 139 wet
Project/Site: Humboldt Wind Energy Project	City/C	County: Humbol	dt	Sampling Date: 71 NIX
				_ Sampling Point: <u>104</u> W
Investigator(s): <u>S. Creer</u> , <u>J. Hols</u> :				
Landform (hillslope, terrace, etc.): <u>hillslope</u>		l relief (concave	(onvex none): [A]	NP Slope (%): 15
Subregion (LRR): <u>A: Northwest Forests and Coast</u>				<b>30</b> Datum:
Soil Map Unit Name: Peaked Ocean house Fo	Lal. <u></u>	in alay 5	_ Long 10.1100	Datum:
				• •
Are climatic / hydrologic conditions on the site typical for thi				
Are Vegetation, Soil, or Hydrologys				present? Yes / No
Are Vegetation, Soil, or Hydrology r	naturally problema	atic? (If ne	eeded, explain any answ	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing san	pling point l	ocations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Yes X N	0			· · · · · · · · · · · · · · · · · · ·
Hydric Soil Present? Yes 🔀 N		Is the Sampled		9 N
Wetland Hydrology Present? Yes N	o	within a Wetlar	1d? Yes	No
Remarks:		1	. <b>3.1</b>	
		U	NL 106	A . A . Designed and a second
VEGETATION – Use scientific names of plan				
Tree Stratum (Ptot size:)	Absolute Dom <u>% Cover</u> Spe	inant Indicator	Dominance Test work	t 37
1			Number of Dominant S That Are OBL, FACW,	
2			Total Number of Domin	10ñł
3	·		Species Across All Stra	
4			Percent of Dominant S	necies 166
Sapling/Shrub Stratum (Plot size:)	= Tot	al Cover	That Are OBL, FACW,	
1)			Prevalence Index wo	ksheet:
2	· · · · · · · · · · · · · · · · · · ·		Total % Cover of:	
3				x 1 =
4			FACW species	x 2 =
5			FAC species	×3=
Harth Stratum (Distainer ) has di Grantan		al Cover	UPL species	x 4 =
Herb Stratum (Plot size: Mohamuter 1. Funcus effusus	40 Y	FACW	Column Totals:	
2. Hurus Lanatus	$\frac{40}{2}$ $\dot{\gamma}$	$= \frac{1}{FAC}$		•
3. Juncos butonius	5 1/	EACW	Prevalence Index Hydrophytic Vegetation	
4. TRIFOLIUM dub UM	KI N	FACU		Hydrophytic Vegetation
5. Menting pulcarium	<u>'3</u> N	<u>OBL</u>	$\sim$ 2 - Dominance Tes	
6. Anthoxanthung oducation	<u>3</u> _N	_ FACU	3 - Prevalence Ind	· · · · · · · · · · · · · · · · · · ·
7. Equisetum arvense	-2 N	EAC	4 - Morphological A	Adaptations <sup>1</sup> (Provide supporting
8. (sole pis cernua (Scirpus)	S_M	OBL		s or on a separate sheet)
9. Liveronica nonagallistavatica	$\leq N$	<u> OBL</u>	5 - Wetland Non-V	
10				phytic Vegetation <sup>1</sup> (Explain)
11	78 = Tota		Indicators of hydric soi be present, unless distu	I and wetland hydrology must urbed or problematic.
Woody Vine Stratum (Plot size:)	<u></u> = Tota	l Cover		,
1			Hydrophytic	
2			Vegetation	X
	= Tota	l Cover	Present? Ye	s <u>/</u> No
% Bare Ground in Herb Stratum				
inemaine.	•			
ł				

SOIL		Y						Sampling Point: <u>(◯ϤϢ</u> )
	cription: (Describe	to the dep	oth needed to docum	nent the	indicato	or confir	m the absence of i	ndicators.)
Depth	Matrix	,		x Feature				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
Waterson				· · · · · ·				
(1-1)	104R3/1	84	7,51R 4/6	5	<u> </u>	<u></u>	day sam	<u>\</u>
			75 1R 2.5/2	Y.	1		<u> </u>	
			251R 5/10	7				
	- <u></u>		1					
	-							-
							<u> </u>	
						<del></del>		
<sup>1</sup> Type: C=C	Concentration, D=De	pletion, RN	=Reduced Matrix, CS	S=Covere	ed or Coa	ted Sand C	Grains. <sup>2</sup> Locatio	n: PL=Pore Lining, M=Matrix.
Hydric Soi	I Indicators: (Appli	cable to al	LRRs, unless othe		ted.)			or Problematic Hydric Soils <sup>3</sup> :
Histoso			Sandy Redox (					uck (A10)
	Epipedon (A2)		Stripped Matrix		- 1) (			rent Material (TF2) allow Dark Surface (TF12)
	Histic (A3)		Loamy Mucky N Loamy Gleyed					Explain in Remarks)
	jen Sulfide (A4) ed Below Dark Surfa	co (A11)	Depleted Matrix		2)			
, <u> </u>	oark Surface (A12)		X Redox Dark Su		5)		<sup>3</sup> Indicators c	f hydrophytic vegetation and
	Mucky Mineral (S1)		Depleted Dark				wetland I	nydrology must be present,
	Gleyed Matrix (S4)		Redox Depress				unless di	sturbed or problematic.
	Layer (if present):		¥	:				
Type:								
Depth (i	nches):						Hydric Soil Pre	esent? Yes <u> </u>
Remarks:	Shavel	reque	sal@12"	) cd	able			
HYDROL	OGY							
	ydrology Indicators	5:						
1	• • • •		ed; check all that app	ly)			Seconda	ry Indicators (2 or more required)
	e Water (A1)		Water-Sta		ves (B9)	(except	Wate	er-Stained Leaves (B9) (MLRA 1, 2,
	Vater Table (A2)		MLRA	1, 2, 4A	and 4B)			A, and 4B)
	tion (A3)		Salt Crust	(B11)			🔀 Drair	nage Patterns (B10)
	Marks (B1)		Aquatic Ir	vertebra	tes (B13)			Season Water Table (C2)
	ent Deposits (B2)		Hydrogen	Sulfide (	Odor (C1)		Satu	ration Visible on Aerial Imagery (C9)

\_ Oxidized Rhizospheres along Living Roots (C3)  $\searrow$  Geomorphic Position (D2)

	Drift Deposits (B3)
	Algal Mat or Crust (B4)

 Aiya	Inviat	UI	Cius
Iron	Denc	sit	s (B5

 <ul> <li>Iron Deposits (B5)</li> <li>Surface Soil Cracks (B6)</li> <li>Inundation Visible on Aerial Imagery (B7</li> <li>Sparsely Vegetated Concave Surface (B</li> </ul>		)	Recent Iron Reduction in Tilled S Stunted or Stressed Plants (D1) ( Other (Explain in Remarks)					
Field Observations:			S. A.					
Surface Water Present?	Yes N	10	Depth (inches):					
Water Table Present?	Yes N	10 🚬	Depth (inches):			)	/	
Saturation Present?	Yes N	₩~~	Depth (inches):	Wetland H	ydrology Present?	Yes	+	No.

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

\_ Presence of Reduced Iron (C4)

Remarks:

(includes capillary fringe)

Shallow Aquitard (D3)

(D5)

WETLAND DETERMINATION DATA	FORM -	- Western Mou	untains, Valleys, and	d Coast Region 1	39 up
Project/Site: Humboldt Wind Energy Project	Citv	County: Humbo	Idt	Sampling Date: 7/	10/15
				Sampling Date: <u>050</u> Sampling Point: <u>050</u>	
Investigator(s): <u>S. Creuker</u> J. Holson	) Sec	tion Township P			
Landform (hillslope, terrace, etc.):h11510pe		ad relief (concerns	ange		
					in all
Subregion (LRR): <u>A: Northwest Forests and Coast</u> L					
Soil Map Unit Name: <u>Peaked-Ucranhouse-Forhau</u>					
Are climatic / hydrologic conditions on the site typical for this tim					
Are Vegetation, Soil, or Hydrology signi			"Normal Circumstances" p	\	No
Are Vegetation, Soil, or Hydrology nature	rally probler	matic? (If n	eeded, explain any answe	rs in Remarks.)	
SUMMARY OF FINDINGS – Attach site map sho	owing sa	mpling point	ocations, transects	, important featur	res, etc.
Hydrophytic Vegetation Present? Yes <u>No</u>	<u></u>	Is the Sample	Area		
Hydric Soil Present?     Yes No       Wetland Hydrology Present?     Yes No		-	nd? Yes	No 🗡	
			••••••••••••••••••••••••••••••••••••••		
Remarks: Laurge rocks prosent	is m	across	62106		
VEGETATION – Use scientific names of plants.					
		minant Indicator	Dominance Test works	sheet:	
Tree Stratum         (Plot size:)         %           1	Cover Sp	ecies? <u>Status</u>	Number of Dominant Sp That Are OBL, FACW, o		(A)
2		·····	Total Number of Domina Species Across All Strat	· )	(B)
4	 = Τ	otal Cover	Percent of Dominant Sp Thát Are OBL, FACW, o		(A/B)
Sapling/Shrub Stratum (Plot size:)			Prevalence Index work		_ (A/B)
1				Multiply by:	
2			OBL species		
4			FACW species		1
5.			FAC species	x 3 =	
	= T	otal Cover	FACU species	x 4 =	
Herb Stratum (Plot size: Im (agivs plot -				x 5 =	
1. Unum bienne	<u> </u>	<u>UPL</u>	Column Totals:	(A)	(B)
2- Anthixanthym odorative 1	<u></u>	Y FALU	Prevalence Index		
3-Holeus / ghatur E	20 /	- FAC	Hydrophytic Vegetation		
4 Danth Jhia california		FACIN	1 N.	ydrophytic Vegetation	
6 CLAN SILVER Clan Cal	$\frac{c}{6}$	V 11P1	2 - Dominance Test		
7. Plantage lanceviator	5 1	FACU	3 - Prevalence Index		
8. HUNDERAENIS Cadicata	5 1	TACU	4 - Morphological Ac data in Remarks	or on a separate sheet	
9. Ander caryophylles	+ I	M FACU	5 - Wetland Non-Va		
10. Festura my vost	5 /	FACU	Problematic Hydropl	hytic Vegetation <sup>1</sup> (Expla	ain)
11	87 = TC	tal Cover	<sup>1</sup> Indicators of hydric soil be present, unless distur		must
Woody Vine Stratum (Plot size:)	<u> </u>		e.		
1		<u> </u>	Hydrophytic	$\sim$	
2	·		Vegetation Present? Yes	No	
% Bare Ground in Herb Stratum 15	= To	tal Cover	resent: res	IAO	
Remarks:				Mary	

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Sampling Point: 18517

139 up

SUIL										
Profile Descr	iption: (Describe	to the dep	th needed to docum	nent the i	ndicator	or confirn	n the absen	ce of indicate	ors.)	
Depth	Matrix	Redox								
(inches)	Color (moist)	%	Color (moist)		_Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
0-8	121R2/2_	98	75YR 96	2	С	$\mathbb{M}$	clay	laam_		
<u></u>	The second	a c'	y ~	4.3.			J			
Sharel	VEFUSUI	Lev 1								
							Anna da companya da company			
		-								
1 <b>T</b>	noontration D-Dor		=Reduced Matrix, CS	=Covered	1 or Coate	ed Sand G	rains 2	Location: PL=	=Pore Lining, M=Matrix.	
Hydric Soil Ir	dicators: (Applic	able to all	LRRs, unless other	wise not	ed.)				blematic Hydric Soils <sup>3</sup> :	
			Sandy Redox (S		,			cm Muck (A1		
Histosol (								Red Parent Ma	,	
Histic Epipedon (A2)       Stripped Matrix (S6)         Black Histic (A3)       Loamy Mucky Mineral (F1) (except ML)						t MI RA 1		· ·	Dark Surface (TF12)	
			Loamy Gleyed Matrix (F2)				Other (Explain in Remarks)			
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F3)								(	,	
Thick Dark Surface (A12) Redox Dark Surface (F6)							<sup>3</sup> Indic	ators of hydro	ophytic vegetation and	
		Depleted Dark Surface (F7)				-	gy must be present,			
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8)						unless disturbed or problematic.				
	ayer (if present):									
Restrictive L	ayer (ii present).									

Restrictive Layer (if present):		
Туре:		$\vee$
Depth (inches):	Hydric Soil Present? Yes N	<u>•                                    </u>
Remarks: Jow amount of	K, Sharp boundaries = relie	+

### HYDROLOGY

Wetland Hydrology Indicators:								
Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required)								
Surface Water (A1)       Water-Stained Leaves (B9) (except         High Water Table (A2)       MLRA 1, 2, 4A, and 4B)         Saturation (A3)       Salt Crust (B11)         Water Marks (B1)       Aquatic Invertebrates (B13)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)         Drift Deposits (B3)       Oxidized Rhizospheres along Living Roots (C         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)         Iron Deposits (B5)       Recent Iron Reduction in Tilled Soils (C6)         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> <li>Frost-Heave Hummocks (D7)</li> </ul>							
Sparsely Vegetated Concave Surface (B8)								
Field Observations:								
Surface Water Present?       Yes No X Depth (inches):         Water Table Present?       Yes No X Depth (inches):         Saturation Present?       Yes No X Depth (inches):         (includes capillary fringe)       Yes No X Depth (inches):	Hydrology Present? Yes No							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	/ailable:							
Remarks:	· · · · · · · · · · · · · · · · · · ·							

WETLAND DETERMINATION D	ATA FOR	M – Western Mou	ntains, Valleys, an	d Coast Region	40 wet
Project/Site: Humboldt Wind Energy Project			3t	Sampling Date: 7/	9/18
			State: CA		a (w
Investigator(s): S. Over J. Holsov	er en green en	Section Township Rai			
Investigator(s). <u>3. Or a postantorisor</u>	<u> </u>			Slope /%	u. 5 1
Landform (Milslope), terrace, etc.):	17			Slope (7	0). <u></u>
Subregion (LRR): <u>A: Northwest Forests and Coas</u>				B (1997)	
Soil Map Unit Name: Ddassn-Forhaux-Pe		· ·			
Are climatic / hydrologic conditions on the site typical for the					
Are Vegetation, Soil, or Hydrology	significantly	disturbed? Are "	Normal Circumstances"	present? Yes	No
Are Vegetation, Soil, or Hydrology	naturally pro	blematic? (If ne	eded, explain any answ	ers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map	showing	sampling point le	ocations, transect	s, important featu	res, etc.
Hydric Soil Present? Yes	No No No	Is the Sampled within a Wetlar	Area d? Yes	No	
Por WL	102	-			
VEGETATION – Use scientific names of pla	nts.			· · · · · · · · · · · · · · · · · · ·	
	Absolute		Dominance Test wor	}	
Tree Stratum         (Plot size:)           1	<u>% Cover</u>	<u>Species?</u> <u>Status</u>	Number of Dominant S That Are OBL, FACW		_ (A)
2	·····		Total Number of Domi Species Across All Str		(B)
4		_ = Total Cover	Percent of Dominant S That Are OBL, FACW		(A/B)
Sapling/Shrub Stratum (Plot size:)			Prevalence Index wo	orksheet:	
1			Total % Cover of:	Multiply by:	
2			OBL species	x 1 =	
3			FACW species	x 2 =	
4			FAC species	x 3 =	
5.		= Total Cover	FACU species	× 4 =	
Herb Stratum (Plot size: Im radiv plot				x 5 =	
1. Montha n legium	60	Y OBL	Column Totals:	(A)	(B)
2. Aloperurus sacratus	5	N_ FACW	Prevalence Inde	x = B/A =	
3. Juncus accidentalis	- 10	N_ FACW	Hydrophytic Vegetat	ion Indicators:	
4. JUNIUS eterusis		N FACU	1 - Rapid Test for	Hydrophytic Vegetation	
5. Agrostis Pallens	<u> </u>	N UPL	2 - Dominance Te	est is >50%	
6. Testora perennis	<u> </u>	N FAC	3 - Prevalence Ind	Adaptations <sup>1</sup> (Provide s	upporting
8				ks or on a separate shee	et)
9			5 - Wetland Non-		
10		·		ophytic Vegetation <sup>1</sup> (Exp	
11	105	 _= Total Cover	Indicators of hydric so be present, unless dis	bil and wetland hydrolog turbed or problematic.	y must
Woody Vine Stratum (Plot size:)	<u></u>				
1	· · · · · · · · · · · · · · · · · · ·		Hydrophytic		
2			Vegetation Present? Y	es <u>X</u> No	
% Bare Ground in Herb Stratum		_= Total Cover			•

		140 we
SOIL		Sampling Point: 103-(
Profile Description: (Describe to the depth	needed to document the indicator or confirm t	he absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	$\frac{\text{Color (moist)}}{\text{Color (moist)}} \qquad $	Texture Remarks
0-1 10422/2 95 2	FRIK R P C MM	<u>Dam</u>
412 10412 3/1 100		Loavm
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Re	educed Matrix, CS=Covered or Coated Sand Grai	ns. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LR		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	_ Sandy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2)	_ Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3)	_ Loamy Mucky Mineral (F1) (except MLRA 1)	Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	_ Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	_ Depleted Matrix (F3)	
	<ul> <li></li></ul>	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	_ Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	_ Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):		
Туре:		$\mathbf{X}_{\mathbf{x}}$
Depth (inches):	<u> </u>	Hydric Soil Present? Yes // No
Komuno.		
~		
HYDROLOGY		
Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; c	check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3)	Salt Crust (B11)	Z Drainage Patterns (B10)
Water Marks (B1)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	$\overline{X}$ Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Oxidized Rhizospheres along Living Roots	
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5)	Recent Iron Reduction in Tilled Soils (C6)	FAC-Neutral Test (D5)
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (LRR A)	Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Frost-Heave Hummocks (D7)

- \_\_\_\_ Oxidized Rhizospheres along Living Roots (C3) \_\_\_\_ Geomorphic Position (D2)
  - \_\_\_\_ Shallow Aquitard (D3)
  - \_\_\_\_ FAC-Neutral Test (D5)
  - \_\_\_\_ Raised Ant Mounds (D6) (LRR A)
  - \_\_\_\_ Frost-Heave Hummocks (D7)

Sparsely Vegetated Co	ncave Surface (B8)				
Field Observations:	<u> </u>	· · ·			
Surface Water Present?	Yes No	_ Depth (inches):			
Water Table Present?	Yes No 🔀	Depth (inches):		$\bigvee$	
Saturation Present? (includes capillary fringe)	Yes No 🔀	Depth (inches):	Wetland Hydrology Present?	Yes No	
Describe Recorded Data (st	ream gauge, monitoring	well, aerial photos, previou	s inspections), if available:		
Remarks:				······	
	·				

	14.1 	a an		_	
WETLAND DETERMINATION D	ATA FORM	– Western Mou	ntains, Valleys, an	d Coast Region	40 up
Project/Site: Humboldt Wind Energy Project	Ci	ty/County: <u>Humbolo</u>	dt	_ Sampling Date:	9/1K
Applicant/Owner: Humboldt Wind, LLC			State: CA	_ Sampling Point:(	127upl
Investigator(s): S. (pell J. Hol	son se	ection, Township, Rai	nge:		~~~
Landform (hillslop), terrace, etc.):	L	ocal relief (concave, o	convex none);	Slope ('	<u>%): _57</u>
Subregion (LRR): A: Northwest Forests and Coas	t Lat: -124	.152060	Long: 40.4472		
Soil Map Unit Name: $D A D - F A h A A - P$	raled c	omplet, 5-	307 NWI classifi		
Are climatic / hydrologic conditions on the site typical for th					
Are Vegetation, Soil, or Hydrology			Normal Circumstances"		
Are Vegetation, Soil, or Hydrology			eded, explain any answe		
					roc oto
SUMMARY OF FINDINGS – Attach site map					165, 610.
Hydrophytic Vegetation Present? Yes		Is the Sampled	Area	、 、	
Hydric Soil Present? Yes		within a Wetlar		No	
Wetland Hydrology Present? Yes   Remarks:	$\sim$			´-\	
VEGETATION – Use scientific names of pla					
Tree Stratum (Plot size:)		Dominant Indicator Species? Status	Dominance Test wor		
1			Number of Dominant S That Are OBL, FACW,		(A)
2.			Total Number of Domi	nant 0	
3			Species Across All Str		(B)
4		Total Cover	Percent of Dominant S That Are OBL, FACW,	or FAC:	(A/B)
Sapling/Shrub Stratum (Plot size:			Prevalence Index wo	rksheet:	
			Total % Cover of:	Multiply by	<u>.                                    </u>
2			OBL species	x 1 =	
3			FACW species	x 2 =	
4	<u> </u>		FAC species		
LAL L'andre		Total Cover		x 4 =	
Herb Stratum (Plot size: M diameter	m	N EAC		x 5 =	
1 Festila Deceminic	40	Y THC	Column Totals:	(A)	(B)

4.					
.5.				FAC species	x 3 =
				FACU species	x 4 =
Herb Stratum (Plot size: M diameter		_ = Total Cove	r	UPL species	x 5 =
	UA		FAC	1	(A) (B)
1. Festila perennis					
2. Bromus hordeaces	_ 90_		ALU	Prevalence Index :	= B/A =
3. Festuca mypros		_ <u>_ N</u> I	HCU_	Hydrophytic Vegetation	n Indicators:
4. Plantago lanceolata	5_	<u> </u>	ACU	1 - Rapid Test for Hy	ydrophytic Vegetation
5	······			2 - Dominance Test	is >50%
6				3 - Prevalence Index	< is ≤3.0 <sup>1</sup>
7	<u> </u>			4 - Morphological Ac	daptations <sup>1</sup> (Provide supporting
8.				data in Remarks	or on a separate sheet)
9				5 - Wetland Non-Vas	scular Plants <sup>1</sup>
10.				Problematic Hydroph	hytic Vegetation <sup>1</sup> (Explain)
11 ;					and wetland hydrology must
8	- 85	= Total Cover		be present, unless distur	bed or problematic.
Woody Vine Stratum (Plot size:)					
1.		.2		Hydrophytic	A
2.				Vegetation	" X
% Bare Ground in Herb Stratum		_= Total Cover		Present? Yes	No
Remarks:					

				the second of the second	\$.			4.40
				17				140 up
SOIL							Sampling Point:	103 (0)
Profile Desc	ription: (Describe	to the depth	needed to document the i		nfirm the a	bsence of	indicators.)	
Depth	Matrix		Redox Feature		<u> </u>			
(inches)	Color (moist)		Color (moist) %	Type Lo	1	xture	Remarks	
312	107R3/2	100'-	·····		<u> </u>	<u>m_</u>		
	······································		. <u></u>				•	
	·			<u> </u>		·		
·	<u></u>		·	<u> </u>				
			· · ·	. <u> </u>				
<sup>1</sup> Type: C=Co	oncentration, D <b></b> ⊯De	pletion, RM=R	educed Matrix, CS=Covered	or Coated Sar	nd Grains.	<sup>2</sup> Locati	on: PL=Pore Lining, N	1=Matrix.
			Rs, unless otherwise note				for Problematic Hydr	
Histosol	(A1)		_ Sandy Redox (S5)			2 cm M	luck (A10)	
	ipedon (A2)		_ Stripped Matrix (S6)				arent Material (TF2)	
Black His			Loamy Mucky Mineral (F1		RA 1)		hallow Dark Surface (T	F12)
	n Sulfide (A4) I Below Dark Surfac		_ Loamy Gleyed Matrix (F2) _ Depleted Matrix (F3)			Other (	Explain in Remarks)	
	rk Surface (A12)	Le (ATT)	_ Redox Dark Surface (F6)	*		<sup>3</sup> Indicators (	of hydrophytic vegetati	on and
	ucky Mineral (S1)		_ Depleted Dark Surface (F	7)			hydrology must be pre	
Sandy G	leyed Matrix (S4)		_ Redox Depressions (F8)			unless d	isturbed or problemation	2.
Restrictive L	ayer (if present):							
Туре:								F
Depth (inc	:hes):	una atta - atu at			Hyd	ric Soil Pr	esent? Yes	No
Remarks:	• •							4
	ж.							
HYDROLO	ςγ		· · · · · · · · · · · · · · · · · · ·					
	Irology Indicators							
-			check all that apply)			Seconda	ry Indicators (2 or more	e required)
	Water (A1)		Water-Stained Leave	s (BQ) (excent	 t		er-Stained Leaves (B9)	
	ter Table (A2)		Water-Stained Leave MLRA 1, 2, 4A, a		L		A, and 4B)	(WEICA 1, 2,
Saturatio			Salt Crust (B11)	na ,e,			nage Patterns (B10)	
Water M	. ,		Aquatic Invertebrates	s (B13)			Season Water Table (C	22)
	t Deposits (B2)		Hydrogen Sulfide Od				ration Visible on Aerial	
	osits (B3)		Oxidized Rhizospher		g Roots (C3		morphic Position (D2)	
Algal Ma	t or Crust (B4)		Presence of Reduce				low Aquitard (D3)	
Iron Dep	osits (B5)		Recent Iron Reduction	on in Tilled Soil	s (C6)	FAC	-Neutral Test (D5)	
Surface	Soil Cracks (B6)		Stunted or Stressed	Plants (D1) (LF	RR A)	Rais	ed Ant Mounds (D6) (L	.RR A)
Inundatio	on Visible on Aerial	lmagery (B7)	Other (Explain in Rei	marks)		Frost	t-Heave Hummocks (D	17)
Sparsely	Vegetated Concav	e Surface (B8	) .					
Field Observ	ations:	·	× 1					
Surface Wate		res No	= - [ (					`
Water Table	Present?	res No	Depth (inches):					$\times$
Saturation Pr		res No	Depth (inches):	I	Wetland Hy	ydrology P	resent? Yes	No <u>/ </u>
(includes cap		a aurae moni	oring well, aerial photos, pre	vious inspectio	one) if avail	lahle.		
	and Data (stredi	- gaage, mom	achai photos, pre	nous mapeolit	siis), ii avdii			
Remarks:	·							
nomans.								
		CAIL	JULAN	( \				
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L			·					

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WETLAND DETERMINATION DATA FO	RM – Western Mountai	ns Valleys, and	L Coast Region 146 up
	City/County: Humboldt	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Sampling Date: 7/12/18
Project/Site: <u>Humboldt Wind Energy Project</u>			Sampling Point:
Applicant/Owner: Humboldt Wind, LLC			Sampling Point: <u>11 N U</u>
Investigator(s): S. Creen J. Holson	Section, Township, Range:		
Landform (hillslope, terrace, etc.): Livislope terradu	Local relief (concave, conve	ex, none): <u>Q</u>	Slope (%): <u>5</u>
Subregion (LRR): A: Northwest Forests and Coast_ Lat:	124.132373 Lor	ng: 40.43425	51 Datum:
Soil Map Unit Name: 520 Reducesting re-Mailridge-Mour	-baldy complex 15-	<u>≫ ′→</u> NWI classific	ation: <u>Aure</u>
Are climatic / hydrologic conditions on the site typical for this time of	vear? Yes No	_ (If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology significant	ly disturbed? Are "Norr	nal Circumstances" p	present? Yes No
Are Vegetation, Soil, or Hydrology naturally	oroblematic? (If needed	d, explain any answe	rs in Remarks.)
		tiona trancata	important foaturos atc

# SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes No Yes No Yes No	Is the Sampled Area within a Wetland?	Yes No
Remarks:			
,			

# VEGETATION – Use scientific names of plants.

	Absolute	Dominant		Dominance Test worksheet:	
Tree Stratum (Plot size:)	% Cover	Species?	<u>Status</u>	Number of Dominant Species	
1				That Are OBL, FACW, or FAC: (A	۹)
2				Total Number of Dominant	
3					3)
4			1		
1		= Total Co		Percent of Dominant Species ) (A transformed and the species ) (A transformed and the species	A/B)
Sapling/Shrub Stratum (Plot size:)		-		Prevalence Index worksheet:	
1				Total % Cover of: Multiply by:	
2				OBL species         x1 =	
3				1	
4				FACW species x 2 =	
5				FAC species x 3 =	
	-	= Total Co	over	FACU species x 4 =	
Herb Stratum (Plot size: 1 Meter) Padiss		( ,		UPL species x 5 =	
1. Typeus patens	30	· Y	Hew	Column Totals: (A)	(B)
2. Stacking and allen	20	¥	OBL	Prevalence Index = B/A =	
3. Anthoxanthiumic USP	10	<u>N</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators:	
4. JUNNIS PRUNIS	-5	$\mathbb{N}$	FALW	1 - Rapid Test for Hydrophytic Vegetation	
5 Dartions alguaration	.10	N	FACI	∑ 2 - Dominance Test is >50%	
6 Friens latratik	Š	N	FAC	3 - Prevalence Index is ≤3.0 <sup>1</sup>	
7. Achillea mill	2	- N	FACU	4 - Morphological Adaptations <sup>1</sup> (Provide suppo	orting
8. TUMUS ACUCUS	<u> </u>	10	FAC1/	data in Remarks or on a separate sheet)	-
				5 - Wetland Non-Vascular Plants <sup>1</sup>	
				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
10		·		<sup>1</sup> Indicators of hydric soil and wetland hydrology mu	ist
11	85	= Total Co	- <u></u>	be present, unless disturbed or problematic.	
Woody Vine Stratum (Plot size:)	00				
1. RUBIS UCEAUS	20		FACU	Hydrophytic	
Supplet 1				Vegetation	
2	15	= Total Co		Present? Yes No	
🕉 Bare Ground in Herb Stratum		_= 10(a) 00			
Remarks:					
	Χ.,				
US Army Corps of Engineers	11.			Western Mountains, Valleys, and Coast – Version	12.0

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Sampling Point: \_

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Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)					
Depth <u>Matrix</u>	Redox Features				
(inches) Color (moist) %	<u>Color (moist)</u> <u>%</u> <u>Type<sup>1</sup></u> <u>Loc<sup>2</sup></u>	Texture Remarks			
0-10 10423 106		Blay barn			
·					
· · · ·					
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, CS=Covered or Coated Sand G	rains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.			
Hydric Soil Indicators: (Applicable to all I	_RRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :			
	Sandy Redox (S5)	2 cm Muck (A10)			
Histic Epipedon (A2)	Stripped Matrix (S6)	Red Parent Material (TF2)			
Black Histic (A3) Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1) (except MLRA 1)				
Depleted Below Dark Surface (A11)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)			
Thick Dark Surface (A12)	Depleted Matrix (F3) Redox Dark Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and			
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,			
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.			
Restrictive Layer (if present):		· · · · · · · · · · · · · · · · · · ·			
Туре:					
Depth (inches):		Hydric Soil Present? Yes No X			
Remarks:	no redox or	other indicator			
HYDROLOGY Wetland Hydrology Indicators:					
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required;	check all that apply)	Secondary Indicators (2 or more required)			
Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one required;</u> Surface Water (A1)	<u>check all that apply)</u> Water-Stained Leaves (B9) ( <b>except</b>	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2,			
Wetland Hydrology Indicators: Primary Indicators (minimum of one required;					
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2) Saturation (A3)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2,			
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	<ul> <li>Water-Stained Leaves (B9) (except</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> </ul>			
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	<ul> <li>Water-Stained Leaves (B9) (except</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> </ul>			
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	<ul> <li>Water-Stained Leaves (B9) (except</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living Roo</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>ts (C3)</li> <li>Geomorphic Position (D2)</li> </ul>			
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	<ul> <li>Water-Stained Leaves (B9) (except</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living Roo</li> <li>Presence of Reduced Iron (C4)</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>ts (C3)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> </ul>			
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	<ul> <li>Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living Roo</li> <li>Presence of Reduced Iron (C4)</li> <li>Recent Iron Reduction in Tilled Soils (C6)</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>ts (C3)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> </ul>			
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	<ul> <li>Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living Roo</li> <li>Presence of Reduced Iron (C4)</li> <li>Recent Iron Reduction in Tilled Soils (C6</li> <li>Stunted or Stressed Plants (D1) (LRR A)</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>ts (C3)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> </ul>			
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	<ul> <li>Water-Stained Leaves (B9) (except</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living Roo</li> <li>Presence of Reduced Iron (C4)</li> <li>Recent Iron Reduction in Tilled Soils (C6</li> <li>Stunted or Stressed Plants (D1) (LRR A)</li> <li>Other (Explain in Remarks)</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>ts (C3)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> </ul>			
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Wetland Hydrology Indicators: Primary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B4) Field Observations:	<ul> <li>Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living Roo</li> <li>Presence of Reduced Iron (C4)</li> <li>Recent Iron Reduction in Tilled Soils (C6</li> <li>Stunted or Stressed Plants (D1) (LRR A)</li> <li>Other (Explain in Remarks)</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>ts (C3)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> </ul>			
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required;	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roo Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6 Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>ts (C3)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> </ul>			
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required;	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roo Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6 Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks) b) Depth (inches): Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ts (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)			
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required;	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)     Salt Crust (B11)     Aquatic Invertebrates (B13)     Hydrogen Sulfide Odor (C1)     Oxidized Rhizospheres along Living Roo     Presence of Reduced Iron (C4)     Recent Iron Reduction in Tilled Soils (C6     Stunted or Stressed Plants (D1) (LRR A)     Other (Explain in Remarks) 8)      Depth (inches):     Depth (inches):     Wetla	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ts (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) and Hydrology Present? Yes No			
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required;	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roo Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6 Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks) b) Depth (inches): Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ts (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) and Hydrology Present? Yes No			
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required;	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)     Salt Crust (B11)     Aquatic Invertebrates (B13)     Hydrogen Sulfide Odor (C1)     Oxidized Rhizospheres along Living Roo     Presence of Reduced Iron (C4)     Recent Iron Reduction in Tilled Soils (C6     Stunted or Stressed Plants (D1) (LRR A)     Other (Explain in Remarks) 8)      Depth (inches):     Depth (inches):     Wetla	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ts (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) and Hydrology Present? Yes No			
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required;	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)     Salt Crust (B11)     Aquatic Invertebrates (B13)     Hydrogen Sulfide Odor (C1)     Oxidized Rhizospheres along Living Roo     Presence of Reduced Iron (C4)     Recent Iron Reduction in Tilled Soils (C6     Stunted or Stressed Plants (D1) (LRR A)     Other (Explain in Remarks) 8)      Depth (inches):     Depth (inches):     Wetla	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ts (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) and Hydrology Present? Yes No			
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required;	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)     Salt Crust (B11)     Aquatic Invertebrates (B13)     Hydrogen Sulfide Odor (C1)     Oxidized Rhizospheres along Living Roo     Presence of Reduced Iron (C4)     Recent Iron Reduction in Tilled Soils (C6     Stunted or Stressed Plants (D1) (LRR A)     Other (Explain in Remarks) 8)      Depth (inches):     Depth (inches):     Wetla	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ts (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) and Hydrology Present? Yes No			
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Wetland Hydrology Indicators:         Primary Indicators (minimum of one required;	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)     Salt Crust (B11)     Aquatic Invertebrates (B13)     Hydrogen Sulfide Odor (C1)     Oxidized Rhizospheres along Living Roo     Presence of Reduced Iron (C4)     Recent Iron Reduction in Tilled Soils (C6     Stunted or Stressed Plants (D1) (LRR A)     Other (Explain in Remarks) 8)      Depth (inches):     Depth (inches):     Wetla	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ts (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) and Hydrology Present? Yes No			

#### WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region 158 up Project/Site: Humboldt Wind Energy Project City/County: Humboldt Sampling Date: <u>7/11/238</u> \_\_\_\_ State: <u>CA\_\_\_\_</u> Sampling Point: <u>213(Up)</u> Applicant/Owner: Humboldt Wind, LLC Investigator(s): ALOVELESS, STONA Section, Township, Range: \_\_\_\_ Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): <u>Concave</u> Slope (%): <u>10</u> Subregion (LRR): A: Northwest Forests and Coast Lat: -124.107201 40.421935 Datum: Long: Soil Map Unit Name: 4408 Dolason Frichaus Ceneral Cmolex, 5-301. Jug NWI classification: ANCe Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.) Are Vegetation \_ N\_, Soil \_ N\_, or Hydrology \_ N\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_ Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? No X Yes is the Sampled Area Hydric Soil Present? Yes No within a Wetland? Yes Yes X No \_\_\_\_ Wetland Hydrology Present? Remarks: Upland WLZIU VEGETATION – Use scientific names of plants. Dominance Test worksheet: Absolute Dominant Indicator Tree Stratum (Plot size: % Cover Species? Status ) Number of Dominant Species 2 That Are OBL, FACW, or FAC: (A) 1. 2. Total Number of Dominant (B) Species Across All Strata: Percent of Dominant Species 6D = Total Cover (A/B)That Are OBL, FACW, or FAC: Sapling/Shrub Stratum (Plot size: \_\_\_\_\_) Prevalence Index worksheet: 1. Total % Cover of: Multiply by: **OBL** species x 1 = FACW species x 2,= FAC species x 3 = FACU species x 4 = = Total Cover UPL species x 5 = Herb Stratum (Plot size: \_\_\_\_ Column Totals: (A) (B) 2 1. Juncus occidentalis $\sim$ FACW \_\_\_0 2. <u>Plantago lan ceolata</u> FACU Prevalence Index = B/A =\_10 3. Mentha OBL Delegium Hydrophytic Vegetation Indicators: 2 N LIPL Rellis perennis \_\_\_\_ 1 - Rapid Test for Hydrophytic Vegetation 2 N FAC Equisetum avense \_\_\_\_ 2 - Dominance Test is >50% 10 FAC nifolium repens \_\_\_\_ 3 - Prevalence Index is ≤3.0<sup>1</sup> Dallens FACU Plarostus 10 4 - Morphological Adaptations<sup>1</sup> (Provide supporting

8. Festuca perennis	IU Y FAC	data in Remarks or on a separate sheet)
9. Hypocherus radicata	5 N FACU	5 - Wetland Non-Vascular Plants <sup>1</sup>
10.		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
50=28 20=11.2	50 = Total Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)		
1		Hydrophytic
2		Vegetation Present? Yes No
	= Total Cover	Present? Yes No 🙏
% Bare Ground in Herb StratumD		
Remarks:		

Profile Description: (Desc	cribe to the depth	needed to docum	ent the indicator	or confirm	the absence	of indicators.)
Depth <u>Ma</u> (inches) Color (moi		Redox Color (moist)	Features % Type <sup>1</sup>	Loc <sup>2</sup>	Tautum	Demester
			-*		Texture	Remarks
0-6 7.5YR3/1	95	107R 44/6	5 Matrix	CONC. (	gravell	Silty loam
						<u> </u>
			<u> </u>	<u> </u>		
<u> </u>				<u> </u>		
			<u> </u>		2	
Type: C=Concentration, D				ed Sand Gra		cation: PL=Pore Lining, M=Matrix.
lydric Soil Indicators: (A			-			ors for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)		_ Sandy Redox (St				n Muck (A10)
Histic Epipedon (A2)		_ Stripped Matrix (				Parent Material (TF2)
Black Histic (A3)		_ Loamy Mucky Mi		t MLRA 1)		y Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)		_ Loamy Gleyed M			Oth	er (Explain in Remarks)
Depleted Below Dark S Thick Dark Surface (A1		_ Depleted Matrix (			3 to all a a to	
Sandy Mucky Mineral (		C Redox Dark Surf. Depleted Dark Si				ors of hydrophytic vegetation and
Sandy Mucky Mineral ( Sandy Gleyed Matrix (S		_ Redox Depressio				nd hydrology must be present, s disturbed or problematic.
Restrictive Layer (if prese					umea	
Type:N/A	•					
Depth (inches):	-					
Remarks: Prominan	+ redox conce	- entrations			Hydric Soll	Present? Yes X No
Yeominan	t redox conce	- entrations			Hydric Soll	Present? res <u>X</u> No
Yeominan YDROLOGY Vetland Hydrology Indica	tors:					Present? res_X No
Yeominan YDROLOGY Netland Hydrology Indica	tors:					ndary Indicators (2 or more required)
Yeominan YDROLOGY Vetland Hydrology Indica Primary Indicators (minimur	tors:	check all that apply)	ed Leaves (B9) (e	xcept	Seco	
Yeominan YDROLOGY Vetland Hydrology Indica Primary Indicators (minimur Surface Water (A1)	tors:	check all that apply) Water-Stain		xcept	Seco	ndary Indicators (2 or more required)
Yeominan YDROLOGY Vetland Hydrology Indica Primary Indicators (minimur Surface Water (A1)	tors:	check all that apply) Water-Stain	ed Leaves (B9) ( <b>e</b> , <b>2, 4A, an</b> d <b>4B)</b>	xcept	<u>Seco</u> r V	ndary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2
Yeominan YDROLOGY Vetland Hydrology Indica Primary Indicators (minimur Surface Water (A1) High Water Table (A2)	tors:	<u>check all that apply</u> Water-Stain MLRA 1, Salt Crust (E	ed Leaves (B9) ( <b>e</b> , <b>2, 4A, an</b> d <b>4B)</b>	xcept	<u>Seco</u> r V D	ndary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
Yeominan YDROLOGY Vetland Hydrology Indica Primary Indicators (minimur Surface Water (A1) High Water Table (A2) Saturation (A3)	tors: n of one required; o	<u>check all that apply</u> ) Water-Stain MLRA 1, Salt Crust (E Aquatic Inve	ed Leaves (B9) ( <b>e</b> , <b>2, 4A, an</b> d <b>4B)</b> 311)	xcept	<u>Seco</u> r V D D	ndary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2)
Yeominan YDROLOGY Vetland Hydrology Indica Primary Indicators (minimur Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2	tors: n of one required; o	<u>check all that apply)</u> Water-Stain <b>MLRA 1</b> , Salt Crust (E Aquatic Inve Hydrogen S	ed Leaves (B9) ( <b>e</b> , <b>2, 4A, and 4B)</b> 311) ertebrates (B13) ulfide Odor (C1)		<u>Secon</u> V D D D S	ndary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10)
Yeomin a n YDROLOGY Vetland Hydrology Indica Primary Indicators (minimur Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2 Drift Deposits (B3)	tors: n of one required; o	<u>check all that apply</u> ) <u></u> Water-Stain <b>MLRA 1</b> , Salt Crust (E <u></u> Aquatic Inve <u></u> Hydrogen S <u></u> Oxidized Rh	ed Leaves (B9) ( <b>e</b> , <b>2, 4A, and 4B)</b> 311) ertebrates (B13) ulfide Odor (C1) izospheres along	Living Roots	<u>Seco</u> r V D D S ; (C3) G	ndary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C eomorphic Position (D2)
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Yeomin a n YDROLOGY Vetland Hydrology Indica Primary Indicators (minimur Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	tors: n of one required; o	<u>check all that apply</u> Water-Stain <b>MLRA 1</b> , Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S	ed Leaves (B9) (e , <b>2, 4A, and 4B)</b> B11) ertebrates (B13) ulfide Odor (C1) hizospheres along Reduced Iron (C4 Reduction in Tille Stressed Plants (D	Living Roots 4) d Soils (C6)	<u>Secon</u> V D D D S . (C3) G S F R	ndary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Yeomin a n YDROLOGY Vetland Hydrology Indica Primary Indicators (minimur Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6 Inundation Visible on A	tors: n of one required; o ) 6) erial Imagery (B7)	check all that apply) Water-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla	ed Leaves (B9) (e , <b>2, 4A, and 4B)</b> B11) ertebrates (B13) ulfide Odor (C1) hizospheres along Reduced Iron (C4 Reduction in Tille Stressed Plants (D	Living Roots 4) d Soils (C6)	<u>Secon</u> V D D D S . (C3) G S F R	ndary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5)
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#### WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region 158 wet Project/Site: Humboldt Wind Energy Project City/County: Humboldt Sampling Date: 07/11/2018 State: CA Sampling Point: 212 (W Applicant/Owner: Humboldt Wind, LLC Investigator(s): ALOVELESS, STONA \_\_\_\_\_ Section, Township, Range: \_\_\_\_ \_ Local relief (concave, convex, none): <u>CONCALR</u> Slope (%): <u>15</u> Landform (hillslope, terrace, etc.): hillslope Subregion (LRR): A: Northwest Forests and Coast Lat: -124.107212 40.421909 \_\_\_\_ Datum: \_\_\_\_\_ Long: Soil Map Unit Name: 4408 Dolason-Forhaux-Peaked complex, 5-30% SURM NWI classification: none Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.) Are Vegetation <u>N</u>, Soil <u>N</u>, or Hydrology <u>N</u> significantly disturbed? Are "Normal Circumstances" present? Yes X No (If needed, explain any answers in Remarks.)

Are Vegetation <u>N</u>, Soil <u>N</u>, or Hydrology <u>N</u> naturally problematic?

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X No Yes X No Yes X No	Is the Sampled Area within a Wetland?	Yes X No
Remarks: Wetland seep	o/spring W	i 214	

#### **VEGETATION** – Use scientific names of plants.

	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species? Status	Number of Dominant Species 3
1	-		That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3			Species Across All Strata:(B)
4.			Demont of Deminent Creation
· · · · · · · · · · · · · · · · · · ·		= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot size:)		-	Prevalence index worksheet:
			Total % Cover of:Multiply by
2			and the second se
3			OBL species x 1 =
4			FACW species
5.			FAC species x 3 =
5		= Total Cover	FACU species x 4 =
Herb Stratum (Plot size: Meler)			UPL species x 5 =
1. Mentria Delegium	30	Y OBL	Column Totals: (A) (B)
2. Juncus ettusus		Y FACW	
3. Holcus langua	15	Y FAC	Prevalence Index = B/A =
	~	N FACU	Hýdrophytic Vegetation Indicators:
4. <u>Rubus Insinus</u>	~		1 - Rapid Test for Hydrophytic Vegetation
5. Equisetum antense			∠ 2 - Dominance Test is >50%
6			3 - Prevalence Index is ≤3.0 <sup>1</sup>
7			4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
8			5 - Wetland Non-Vascular Plants <sup>1</sup>
9			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
11	1.0		be present, unless disturbed or problematic.
11. $50 = 33.5$ $20 = 6.7$	67	_= Total Cover	
		•	
1		<u></u>	Hydrophytic Vegetation
2	<u> </u>	······································	Present? Yes X No
% Bare Ground in Herb Stratum 5	·	_= Total Cover	
Remarks: Hydrophytic reg 100%	clomi	nant	

Sampling Point: 212

158 wet

Develo							the absence of indicators.)		
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Features %	Type <sup>1</sup>	Loc <sup>2</sup>	Texture Remarks		
0-10	10YR 2/1	95	10 YR 5/8				grifty day loan		
				• • • • • • • • • • • • • • • • • • •	·····	·			
	Concentration, D=De					d Sand Gra			
-	I Indicators: (Applie				d.)		Indicators for Problematic Hydric Soils <sup>3</sup> :		
Histoso	· · ·		Sandy Redox (				2 cm Muck (A10)		
	Epipedon (A2) Histic (A3)		Stripped Matrix Loamy Mucky I		(oxcont		Red Parent Material (TF2) Very Shallow Dark Surface (TF12)		
	gen Sulfide (A4)		Loamy Gleyed		except	WERA I)	Other (Explain in Remarks)		
	ed Below Dark Surfac	ce (A11)	Depleted Matrix						
	Dark Surface (A12)		Bepleted Math				<sup>3</sup> Indicators of hydrophytic vegetation and		
	Mucky Mineral (S1)		Depleted Dark		.)		wetland hydrology must be present,		
	Gleyed Matrix (S4)		Redox Depress		/		unless disturbed or problematic.		
	Layer (if present):								
Туре:	Ekipadow								
	nches):						Hydric Soil Present? Yes <u>X</u> No		
emarks:							•		
	Redux is pr	Romin	<u>た</u> つた						
YDROL									
Vetland H	ydrology Indicators								
/etland H	ydrology Indicators		; check all that appl	y)			Secondary Indicators (2 or more required)		
<b>/etland H</b> rimary Inc Surface	licators (minimum of e			y) ined Leaves	s (B9) ( <b>e</b> )	cept	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2		
<b>/etland H</b> rimary Inc Surface	licators (minimum of		Water-Sta			cept			
<b>/etland H</b> rimary Inc Surface High W	licators (minimum of e		Water-Sta	ined Leaves 1, 2, 4A, ar		cept	Water-Stained Leaves (B9) (MLRA 1, 2		
<b>/etland H</b> rimary Inc Surface High W Satura	licators (minimum of e e Water (A1) /ater Table (A2)		Water-Sta MLRA Salt Crust	ined Leaves 1, 2, 4A, ar	id 4B)	ccept	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)		
Vetland H Primary Inc Surface High W Satura Water	licators (minimum of e e Water (A1) /ater Table (A2) tion (A3)		Uater-Sta MLRA Salt Crust Aquatic In	ined Leaves <b>1, 2, 4A, ar</b> (B11)	<b>d 4B)</b> (B13)	ccept	Water-Stained Leaves (B9) ( <b>MLRA 1, 2</b> 4 <b>A, and 4B)</b> Drainage Patterns (B10)		
Vetland H Primary Inco Surfaco High W Satura Water Sedime	Vater (A1) Water (A1) Vater Table (A2) tion (A3) Marks (B1)		Water-Sta MLRA Salt Crust Aquatic In Hydrogen	ined Leaves <b>1, 2, 4A, ar</b> (B11) vertebrates	<b>id 4B)</b> (B13) or (C1)		<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2</li> <li>4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C</li> </ul>		
Vetland H Primary Inco Surfaco High W Satura Satura Sedimo Drift De	licators (minimum of e e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)		Water-Sta MLRA Salt Crust Aquatic In Hydrogen	ined Leaves 1, 2, 4A, ar (B11) vertebrates Sulfide Odd	<b>id 4B)</b> (B13) or (C1) es along l	-iving Roots	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2</li> <li>4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C</li> </ul>		
Primary Inc Surface High W Satura Water Sedime Drift De Algal M	licators (minimum of e e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)		Water-Sta MLRA Salt Crust Aquatic In Hydrogen X Oxidized F Presence	ined Leaves <b>1, 2, 4A, ar</b> (B11) vertebrates Sulfide Odo Rhizosphere	<b>id 4B)</b> (B13) or (C1) es along l Iron (C4	_iving Roots )	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C s (C3) Geomorphic Position (D2)		

\_\_\_\_ Frost-Heave Hummocks (D7)

Sparsely Vegetated Co	ncave Surface (B8)				
Field Observations:	· · · · · · · · · · · · · · · · · · ·				
Surface Water Present?	Yes No 🔀 Depth (inches):	621000			
Water Table Present?	Yes No 🤀 Depth (inches):	ayuppus			
Saturation Present? (includes capillary fringe)	Yes No $\underline{\times}$ Depth (inches):	639~	Wetland Hydrology Present?	Yes <u>×</u>	No
Describe Recorded Data (st	tream gauge, monitoring well, aerial photos, p	revious inspec	ctions), if available:		
Remarks: 2% OKI	dized rhizospherea				

\_\_\_\_ Other (Explain in Remarks)

Inundation Visible on Aerial Imagery (B7)

				ntains, Valleys, and Coast Region
Project/Site: Humboldt Wind Energy Project	(	City/County:	Humbol	dt Sampling Date:
Applicant/Owner: Humboldt Wind, LLC			·	State: <u>CA</u> Sampling Point: <u>OB (up</u>
Investigator(s): Tay for & Love les				to Galacian
Landform (hillslope, terrace, etc.):				
Subregion (LRR): A: Northwest Forests and Coast	_ Lat: <u>-12</u>	4.099230		Long:40.420666 Datum:
Soil Map Unit Name 409 Formux-Prace DolAson	simple	30-50	7. slo	PES NWI classification:NUNL
Are climatic / hydrologic conditions on the site typical for this	time of yea	ar?Yes 🗡	No	(If no, explain in Remarks.)
Are Vegetation $\underline{N}$ , Soil $\underline{M}$ , or Hydrology $\underline{M}$ si	gnificantly	disturbed?	Are '	Normal Circumstances" present? Yes 💯 No
Are Vegetation $\underline{\mathcal{M}}$ , Soil $\underline{\mathcal{M}}$ , or Hydrology $\underline{\mathcal{M}}$ n	aturally pro	blematic?	(lf ne	eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing	sampling	i point l	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No				· · · · · · · · · · · · · · · · · · ·
			Sampled	
Hydric Soil Present?       Yes No         Wetland Hydrology Present?       Yes No	, <u> </u>	withi	n a Wetlar	nd? Yes <u>No </u>
VEGETATION – Use scientific names of plant	<b>.</b>	400		
		Dominant		Dominance Test worksheet:
Tree Stratum         (Plot size:)           1	<u>% Cover</u>	<u>Species?</u>	Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4		<u></u> .		Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)		_ = Total Cov	er	That Are OBL, FACW, or FAC: (A/B)
1.	NATIONAL CONTRACTOR			Prevalence Index worksheet:
2				Multiply by:
3		<u></u>		OBL species         X 1 =           FACW species         X 2 =
4				FAC species $5 \times 3 = 5$
5		· ·		FACU species $x = 44$
<u>Herb Stratum</u> (Plot size: $15 \times 30^{-1}$ )		= Total Cov	er	UPL species x 5 =
1. Elymus Jaucus	2	N	FACU	Column Totals: (A) (B)
2. Proviaca plocans	t	NF	ACU	Prevalence Index = $B/A = -3.6$
3. Hupochagnis jollaborn		N	Up	Hydrophytic Vegetation Indicators:
4. Booms aliend bus		<u></u>	UP The	1 - Rapid Test for Hydrophytic Vegetation
5. Acortos Dallens		<u></u>	PACU	2 - Dominance Test is >50%
6. Hokay Lanatus 7. Pteridium aguilinum verilub			PACU	3 - Prevalence Index is ≤3.0 <sup>1</sup>
8. Runey a Cettisella		 	FACU	4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
9. Cunocarus echinotus	70	- <u>/</u> -	4D	5 - Wetland Non-Vascular Plants <sup>1</sup>
10. Hesperaling Milpathoum	1	N	UP	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11. Bronny bordraceus	·B	$\mathbf{N}$	FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
6 20%	_30_	= Total Cove	er	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:				
1	<u> </u>			Hydrophytic Vegetation
		= Total Cove	er	Present? Yes No
% Bare Ground in Herb Stratum				х 
Remarks:				

Sampling Point: 400 B (UP

Profile Description: (Describe to the depth needed to document the indicator or confin	rm the absence of indicators.)
Depth <u>Matrix Redox Features</u>	
(inches) Color (moist) % Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	
<u>0-12 7.54R3/2 100</u>	Sanly loam
	/
·	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand (	Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1) Sandy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2) Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA *	
Edany Micky Millera (F1) (except MERA	Other (Explain in Remarks)
Depleted Below Dark Surface (A11) Depleted Matrix (F3)	
Depicted Delow Dark Ourlace (A12) Bepicted Matrix (1 0)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4) Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):	
Type:	
	Hydric Soil Present? Yes No
Depth (inches):	
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1) Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2,
MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3) Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1) Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
	Saturation Visible on Aerial Imagery (C9)
Sediment Deposits (B2) Hydrogen Sulfide Odor (C1)	
Drift Deposits (B3) Oxidized Rhizospheres along Living R	
Algal Mat or Crust (B4) Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C	
Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR	
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface (B8)	
Field Observations:	
Surface Water Present? Yes No X Depth (inches):	
Water Table Present? Yes No 🗴 Depth (inches):	
	tland Hydrology Present? Yes No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections	), if available:
Remarks:	

#### WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region 159 wet \_\_\_\_\_ Sampling Date: \_\_\_\_ Project/Site: Humboldt Wind Energy Project \_\_\_\_\_ City/County: Humboldt State: <u>CA</u> Sampling Point: \_ 400A Applicant/Owner: <u>Humboldt Wind</u>, LLC Investigator(s): Taylor a Loveless Section, Township, Range: \_\_\_ \_ Local relief (concave, convex, none): \_\_\_\_\_ Slope (%): Landform (hillslope, terrace, etc.): <u>hill slupe</u> Subregion (LRR): A: Northwest Forests and Coast Lat: -124.099204 Long: 40.420660 Datum: \_\_\_\_ Soil Map Unit Name For Marx- Praked - Roboson complex, 30-50% Slopes NWI classification: NUML No \_\_\_\_\_ (If no, explain in Remarks.) Are climatic / hydrologic conditions on the site typical for this time of year? Yes $\_$ $\ge$ Are "Normal Circumstances" present? Yes X No ignificantly disturbed? , or Hydrology \_ , Soil Are Vegetation \_\_\_\_ Are Vegetation $\underline{N}$ , Soil $\underline{M}$ , or Hydrology $\underline{N}$ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? No \_\_\_ Yes Is the Sampled Area No \_\_\_\_\_ Yes Hydric Soil Present? \_\_\_No\_\_ within a Wetland? Yes 📐 No Wetland Hydrology Present? Yes Remarks: WL 400 VEGETATION – Use scientific names of plants. Dominance Test worksheet: Absolute Dominant Indicator % Cover Species? Status Tree Stratum (Plot size: \_\_\_\_ Number of Dominant Species (A) That Are OBL, FACW, or FAC: 1 Total Number of Dominant 2. (B) Species Across All Strata: Percent of Dominant Species 100 (A/B) = Total Cover That Are OBL, FACW, or FAC: Sapling/Shrub Stratum (Plot size: $\frac{15\sqrt{30}}{100}$ Prevalence Index worksheet: 1. Ruber Ursinus Total % Cover of: Multiply by: \_\_\_\_ x 1 = \_ 2 OBL species 3. x 2 = \_\_\_ FACW species x 3,≡\_\_ FAC species x 4 = \_\_\_\_\_ FACU species 5 = Total Cover x 5 = UPL species \$30 Herb Stratum (Plot size: Column Totals:/ (A) \_\_\_\_\_(B) NS & SEA Prevalence Index = B/A = \_\_\_ 1 Woll Carl 2 Hydrophytic Vegetation Indicators: З. OBI 1 - Rapid Test for Hydrophytic Vegetation 4 Drz $\lambda$ 2 - Dominance Test is >50% \_\_\_\_ 3 - Prevalence Index is ≤3.0<sup>1</sup> RMMO 6 4 - Morphological Adaptations<sup>1</sup> (Provide supporting U COUNTA 1 data in Remarks or on a separate sheet) A 5 - Wetland Non-Vascular Plants<sup>1</sup> 4 b spenting micraffuen 9. Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 0 10. Mimulus cuttatu <sup>1</sup>Indicators of hydric soil and wetland hydrology must

661

Tetal Cover

= Total Cover

2550

Remarks:

Woody Vine Stratum (Plot size:

% Bare Ground in Herb Stratum \_

masche

2

Yes 🗶 🛛 No 🔄

be present, unless disturbed or problematic.

Hydrophytic Vegetation

Present?

159	wet

Profile Descr Depth	Matrix		니ㅋㅋ							
(inches)	Color (moist)	%	Color (moist)	ox Features %	Type <sup>1</sup>	Loc <sup>2</sup>	Text	uro	r	Domorius
0-6	IDYR 211	100			ype				ł	Remarks
1-17	INVERIA	98	1 CND SH			7		lylam		
	101 proved from		TIS MO/T		<u> </u>		Sand	florm		
								1		
			· · ·			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			
		·		-						
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				-						
ype: C=Con	centration, D=Depl	etion, RM=I	Reduced Matrix, C	S=Covered	or Coate	d Sand Gr	ains.	<sup>2</sup> Location	PL=Pore	Lining, M=Matrix.
ydric Soil In	dicators: (Applica	able to all L	RRs, unless othe	rwise note	d.)			dicators for	Problem	atic Hydric Soils <sup>3</sup> :
_ Histosol (A		-	Sandy Redox (	'				_ 2 cm Muc		
_ Histic Epip		-	Stripped Matrix					Red Pare		(TF2)
_ Black Histi		-	Loamy Mucky I		(except	MLRA 1)	•	Very Shal	low Dark S	Surface (TF12)
	Sulfide (A4)		Loamy Gleyed	. ,				Other (Ex	olain in Re	marks)
	Below Dark Surface Surface (A12)	: (A11) т	Depleted Matrix				2			
	cky Mineral (S1)	/	✓ Redox Dark Su Depleted Dark							c vegetation and
	yed Matrix (S4)		Depleted Dark Redox Depress		)					ist be present,
	yer (if present):						1	unless distu	irbed or pr	oblematic.
Туре:	,									
J							1			
Depth (inch	oc).									V
Depth (inche emarks:	es):	dox Ce	mantration	ns in =	the m.	adrix	Hydric	: Soil Prese	ent? Yes	s <u>X</u> No
emarks:	distinct re	dox Co	ncontration	ns in =	the m,	alrix	Hydric	Soil Prese	ent? Yes	s <u>X</u> No
emarks: DROLOG	iolistinct re	dox Ce	montration	15 10 -	the m	atrix	Hydric	: Soil Prese	nt? Yes	s <u>X</u> No
emarks: DROLOG <sup>*</sup> etland Hydro	Clistinct re Y Plogy Indicators:				the m	alrix				
emarks: (DROLOG) etland Hydro imary Indicate	Clistinct re Y Diogy Indicators: ors (minimum of on		check all that apply	)				Secondary I	ndicators (	2 or more required)
emarks: <b>DROLOG</b> <sup>1</sup> <b>etland Hydro</b> <u>imary Indicat</u> Surface Wa	Distinct re Y Diogy Indicators: Ors (minimum of on ater (A1)		<u>check all that apply</u> Water-Stai	/) ned Leaves	(B9) ( <b>ex</b>			Secondary I	ndicators ( tained Lea	
emarks: <b>′DROLOG</b> etland Hydro imary Indicate Surface Wa High Water	OISTINCT re Y Dogy Indicators: ors (minimum of on ater (A1) Table (A2)		<u>check all that apply</u> Water-Stai MLRA /	/) ned Leaves I, 2, 4A, an	(B9) ( <b>ex</b>			Secondary I Water-S 4A, a	ndicators ( tained Lea ind 4B)	2 or more required) aves (B9) (MLRA 1,
emarks: <b>'DROLOG'</b> <b>'etland Hydro</b> <u>'imary Indicato</u> Surface Wa _ High Water _ Saturation	Clistinct re Y Diogy Indicators: ors (minimum of on ater (A1) Table (A2) (A3)		<u>check all that apply</u> Water-Stai <b>MLRA</b> Salt Crust	/) ned Leaves I, <b>2, 4A, an</b> B11)	(B9) (ex d 4B)			Secondary I Water-S 4A, a Drainag.	<u>ndicators (</u> tained Lea in <b>d 4B)</b> ∋ Patterns	<u>2 or more required)</u> aves (B9) ( <b>MLRA 1</b> , (B10)
emarks: <b>'DROLOG'</b> <b>'etland Hydro</b> <b>'etland Hydro</b> <b>'etland Hydro</b> <b>'etland Hydro</b> <b>'etland Hydro</b> <b>'surface Wa</b> <b>'surface Wa</b> <b>'surface Water</b> <b>'saturation</b> <b>'saturation</b> <b>'Water Mark</b>	Clistinct ready of the second		<u>check all that apply</u> Water-Stai Salt Crust Squatic Inv	/) ned Leaves I, <b>2, 4A, an</b> B11) ertebrates	; (B9) ( <b>ex</b> <b>d 4B)</b> (B13)			Secondary I Water-S 4A, a Drainag. Dry-Sea	ndicators ( tained Lea I <b>nd 4B)</b> e Patterns son Water	2 or more required) aves (B9) ( <b>MLRA 1</b> , (B10) Table (C2)
emarks: <b>DROLOG</b> <b>etland Hydro</b> <b>imary Indicate</b> Surface Wa Surface Wa Saturation Saturation Water Mark Sediment E	V Stinct re- Plogy Indicators: ors (minimum of on ater (A1) Table (A2) (A3) (A3) (S (B1) Deposits (B2)		<u>check all that apply</u> Water-Stai Salt Crust Salt Crust Aquatic Inv Hydrogen S	r) ned Leaves I, <b>2, 4A, an</b> B11) ertebrates Sulfide Odo	(B9) ( <b>ex</b> <b>d 4B)</b> (B13) r (C1)	cept	5	Secondary I Water-S 4A, a Drainag Dry-Sea Saturatio	ndicators ( tained Lea i <b>nd 4B)</b> e Patterns son Water on Visible (	2 or more required) aves (B9) ( <b>MLRA 1</b> , (B10) Table (C2) on Aerial Imagery (C
emarks: <b>'DROLOG'</b> <b>'etland Hydro</b> <b>'etland Hydro</b> <b>'surface Wa</b> High Water Saturation Water Mark Sediment E Drift Depos	V Stinct (e. Y Diogy Indicators: ors (minimum of on ater (A1) Table (A2) (A3) (A3) (A3) (S (B1) Deposits (B2) its (B3)		<u>check all that apply</u> <u>               Water-Stai</u> <u>               MLRA <u> </u></u>	() ned Leaves I, <b>2, 4A, an</b> B11) ertebrates Sulfide Odo hizosphere:	(B9) ( <b>ex</b> <b>d 4B)</b> (B13) r (C1) s along L	cept	5	Secondary I Water-S 4A, a Drainage Dry-Sea Saturatio Geomor	ndicators ( tained Lea i <b>nd 4B)</b> e Patterns son Water on Visible o phic Positi	2 or more required) aves (B9) ( <b>MLRA 1</b> , (B10) Table (C2) on Aerial Imagery (C on (D2)
emarks: <b>DROLOG</b> etland Hydro Surface Wa High Water Saturation Water Mark Sediment D Drift Depos Algal Mat o	V Stinct re- Plogy Indicators: Ors (minimum of on ater (A1) Table (A2) (A3) (		check all that apply Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence c	() ned Leaves I, <b>2, 4A, an</b> B11) ertebrates Gulfide Odo hizosphere: f Reduced	; (B9) ( <b>ex</b> <b>d 4B)</b> (B13) r (C1) s along L Iron (C4)	<b>cept</b> iving Roots	s (C3)	Secondary I Water-S 4A, a Drainag Dry-Sea Saturatio Geomor Shallow	ndicators ( tained Lea ind 4B) e Patterns son Water on Visible o phic Positi Aquitard (I	2 or more required) aves (B9) ( <b>MLRA 1</b> , (B10) Table (C2) on Aerial Imagery (C on (D2) D3)
emarks: <b>'DROLOG'</b> <b>'etland Hydro</b> <b>'etland Hydro</b> <b>'etland Hydro</b> <b>'etland Hydro</b> <b>'surface Wa</b> <b>'surface Marke</b> <b>'surface </b>	V Stinct re- Y Diogy Indicators: ors (minimum of on ater (A1) Table (A2) (A3)		check all that apply Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror	() ned Leaves I, <b>2, 4A, an</b> B11) ertebrates Sulfide Odo hizospheres f Reduced n Reduction	(B9) ( <b>ex</b> <b>d 4B)</b> (B13) r (C1) s along L lron (C4) in Tilled	cept iving Roots Soils (C6)	s (C3)	Secondary I Water-S <b>4A, a</b> Drainag Dry-Sea Saturatio Geomor Shallow FAC-Ne	ndicators ( tained Lea ind 4B) e Patterns son Water on Visible o phic Positi Aquitard (I utral Test (	2 or more required) aves (B9) ( <b>MLRA 1,</b> (B10) Table (C2) on Aerial Imagery (C on (D2) D3) D5)
emarks: <b>DROLOG</b> <b>fetland Hydro</b> <b>fetland Hydro</b> <b>fetland Hydro</b> <b>fetland Hydro</b> <b>fetland Hydro</b> <b>fetland Hydro</b> Surface Wa <b>fetland Hydro</b> <b>fetland </b>	Clistinct re- Y Diogy Indicators: ors (minimum of on ater (A1) Table (A2) (A3) (A3) (A3) (A3) (A3) (A3) (A3) (A3) (A3) (A3) (Case (B4)) its (B5) il Cracks (B6)	e required;	<u>check all that apply</u> <u> </u>	() ned Leaves I, <b>2, 4A, an</b> B11) ertebrates Sulfide Odo hizosphere: f Reduced t Reduced Neduction Stressed Pl	(B9) ( <b>ex</b> <b>d 4B</b> ) (B13) r (C1) s along L lron (C4) in Tilled lants (D1)	cept iving Roots Soils (C6)	s (C3)	Secondary I Water-S 4A, a Drainag Dry-Sea Saturatio Geomor Shallow FAC-Ne Raised A	ndicators ( tained Lea ind 4B) e Patterns son Water on Visible o phic Positi Aquitard (I utral Test ( ant Mounda	2 or more required) aves (B9) ( <b>MLRA 1</b> , (B10) Table (C2) on Aerial Imagery (C on (D2) D3) D5) s (D6) ( <b>LRR A</b> )
emarks: <b>'DROLOG'</b> <b>'etland Hydro</b> <b>'etland Hydro</b> <b>'etland Hydro</b> <b>'etland Hydro</b> <b>'surface Wa</b> <b>Surface Wa</b> <b>Suface Wa</b> <b>Saturation</b> <b>Saturation</b> <b>Saturation</b> <b>Saturation</b> <b>Saturation</b> <b>Saturation</b> <b>Saturation</b> <b>Saturation</b> <b>Surface Soi</b> <b>Inundation</b>	Visible on Aerial Im	e required:	<u>check all that apply</u> Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence co Recent Iror Stunted or Other (Exp	() ned Leaves I, <b>2, 4A, an</b> B11) ertebrates Sulfide Odo hizosphere: f Reduced t Reduced Neduction Stressed Pl	(B9) ( <b>ex</b> <b>d 4B</b> ) (B13) r (C1) s along L lron (C4) in Tilled lants (D1)	cept iving Roots Soils (C6)	s (C3)	Secondary I Water-S 4A, a Drainag Dry-Sea Saturatio Geomor Shallow FAC-Ne Raised A Fost-He	ndicators ( tained Lea ind 4B) e Patterns son Water on Visible o phic Positi Aquitard (I utral Test ( unt Mound ave Humn	2 or more required) aves (B9) ( <b>MLRA 1,</b> (B10) Table (C2) on Aerial Imagery (C on (D2) D3) D5)
emarks: (DROLOG) etland Hydro etland Hydro surface Wa High Water Saturation Water Mark Sediment E Drift Depos Algal Mat o Iron Deposi Surface So Inundation Sparsely Ve	Y Dlogy Indicators: Ors (minimum of on ater (A1) Table (A2) (A3) (A3) (A3) (S (B1) Deposits (B2) its (B3) r Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Im egetated Concave S	e required:	<u>check all that apply</u> Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence co Recent Iror Stunted or Other (Exp	() ned Leaves I, <b>2, 4A, an</b> B11) ertebrates Sulfide Odo hizosphere: f Reduced t Reduced Neduction Stressed Pl	(B9) ( <b>ex</b> <b>d 4B</b> ) (B13) r (C1) s along L lron (C4) in Tilled lants (D1)	cept iving Roots Soils (C6)	s (C3)	Secondary I Water-S 4A, a Drainag Dry-Sea Saturatio Geomor Shallow FAC-Ne Raised A	ndicators ( tained Lea ind 4B) e Patterns son Water on Visible o phic Positi Aquitard (I utral Test ( unt Mound ave Humn	2 or more required) aves (B9) ( <b>MLRA 1</b> , (B10) Table (C2) on Aerial Imagery (C on (D2) D3) D5) s (D6) ( <b>LRR A</b> )
emarks: <b>DROLOG</b> etland Hydro Surface Wa High Water Saturation Water Mark Sediment D Drift Depose Algal Mat o Iron Depose Surface So Inundation Sparsely Ve Eld Observat	Y Plogy Indicators: Ors (minimum of on ater (A1) Table (A2) (A3) (	<u>e required;</u> agery (B7) Surface (B8	<u>check all that apply</u> Water-Stai Salt Crust f Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Stunted or Other (Exp )	() ned Leaves I, <b>2, 4A, an</b> B11) ertebrates Gulfide Odo hizospheres f Reduced n Reduction Stressed Pl ain in Rem	(B9) ( <b>ex</b> <b>d 4B</b> ) (B13) r (C1) s along L Iron (C4) in Tilled lants (D1) arks)	cept iving Roots Soils (C6)	s (C3)	Secondary I Water-S 4A, a Drainag Dry-Sea Saturatio Geomor Shallow FAC-Ne Raised A Fost-He	ndicators ( tained Lea ind 4B) e Patterns son Water on Visible o phic Positi Aquitard (I utral Test ( unt Mound ave Humn	2 or more required) aves (B9) ( <b>MLRA 1</b> , (B10) Table (C2) on Aerial Imagery (C on (D2) D3) D5) s (D6) ( <b>LRR A</b> )
emarks: <b>DROLOG</b> etland Hydro imary Indicate Surface Wa High Water Saturation Water Mark Sediment E Drift Depose Algal Mat o Iron Depose Surface So Inundation Sparsely Ve eld Observat rface Water F	CISTINCT (e. Y Dogy Indicators: ors (minimum of on ater (A1) Table (A2) (A3) (S (B1) Deposits (B2) its (B3) r Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Im egetated Concave S ions: Present? Yes	e required; agery (B7) Surface (B8	<u>check all that apply</u> Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen S X Oxidized R Presence c Recent Iror Stuņted or Other (Exp )	() ned Leaves I, <b>2, 4A, an</b> B11) ertebrates Sulfide Odo hizosphere: f Reduced hi Reduction Stressed Pl ain in Remain hes):	(B9) ( <b>ex</b> <b>d 4B</b> ) (B13) r (C1) s along L lron (C4) in Tilled lants (D1) arks)	cept iving Roots Soils (C6)	s (C3)	Secondary I Water-S 4A, a Drainag Dry-Sea Saturatio Geomor Shallow FAC-Ne Raised A Fost-He	ndicators ( tained Lea ind 4B) e Patterns son Water on Visible o phic Positi Aquitard (I utral Test ( unt Mound ave Humn	2 or more required) aves (B9) ( <b>MLRA 1</b> , (B10) Table (C2) on Aerial Imagery (C on (D2) D3) D5) s (D6) ( <b>LRR A</b> )
emarks: <b>'DROLOG'</b> <b>'etland Hydro</b> <b>'etland Hydro</b> <b>'etland Hydro</b> <b>'etland Hydro</b> <b>'etland Hydro</b> <b>'surface Water</b> <b>Saturation</b> <b>Saturation</b> <b>Saturation</b> <b>Sediment E</b> <b>Drift Depose</b> <b>Algal Mat o</b> <b>Drift Depose</b> <b>Algal Mat o</b> <b>Drift Depose</b> <b>Surface So</b> <b>Iron Depose</b> <b>Surface So</b> <b>Inundation</b> <b>Sparsely Vee</b> <b>Eld Observat</b> <b>Irface Water F</b> <b>ater Table Pre</b>	Y Dlogy Indicators: Ors (minimum of on ater (A1) Table (A2) (A3) (A3) (A3) (A3) (A3) (Case (B4) its (B3) r Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Im egetated Concave (Case (C	e required; agery (B7) Surface (B8 s X No s X No	<u>check all that apply</u> Water-Stai Salt Crust f Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Stunted or Other (Exp ) Depth (inc	() ned Leaves I, <b>2, 4A, an</b> B11) ertebrates ( Sulfide Odo hizosphere: f Reduced n Reduction Stressed Pl ain in Rem: hes):	(B9) ( <b>ex</b> <b>d 4B</b> ) (B13) r (C1) s along L Iron (C4) in Tilled lants (D1) arks)	cept iving Roots Soils (C6) ) (LRR A)	s (C3)	Secondary I Water-S 4A, a Drainag Dry-Sea Saturatio Geomor Shallow FAC-Ne Raised A Frost-He	ndicators ( tained Lea ind 4B) e Patterns son Water on Visible o phic Positi Aquitard (I utral Test ( ant Mound ave Humn	2 or more required) aves (B9) ( <b>MLRA 1</b> , (B10) Table (C2) on Aerial Imagery (C on (D2) D3) D5) s (D6) ( <b>LRR A</b> ) nocks (D7)
Control Contro	Y Plogy Indicators: Ors (minimum of on ater (A1) Table (A2) (A3) (A3) (A3) (A3) (A3) (Case (B4) its (B3) r Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Im agetated Concave S ions: Present? Yes esent? Yes	e required; agery (B7) Surface (B8 s X No s X No	<u>check all that apply</u> Water-Stai Salt Crust f Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Stunted or Other (Exp ) Depth (inc	() ned Leaves I, <b>2, 4A, an</b> B11) ertebrates Sulfide Odo hizosphere: f Reduced hi Reduction Stressed Pl ain in Remain hes):	(B9) ( <b>ex</b> <b>d 4B</b> ) (B13) r (C1) s along L Iron (C4) in Tilled lants (D1) arks)	cept iving Roots Soils (C6) ) (LRR A)	s (C3)	Secondary I Water-S 4A, a Drainag Dry-Sea Saturatio Geomor Shallow FAC-Ne Raised A Fost-He	ndicators ( tained Lea ind 4B) e Patterns son Water on Visible o phic Positi Aquitard (I utral Test ( ant Mound ave Humn	2 or more required) aves (B9) ( <b>MLRA 1</b> , (B10) Table (C2) on Aerial Imagery (C on (D2) D3) D5) s (D6) ( <b>LRR A</b> ) nocks (D7)
Comparison of the second seco	Y Plogy Indicators: Ors (minimum of on ater (A1) Table (A2) (A3) (A3) (A3) (A3) (A3) (Case (B4)) its (B3) r Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Im egetated Concave S ions: Present? Yes ent? Yes ent? Yes	<u>e required;</u> agery (B7) Surface (B8 s X No s X No s No	check all that apply         Water-Stai         MLRA         Salt Crust i         Aquatic Inv         Hydrogen S         Oxidized R         Presence c         Recent Iror         Stuņted or         Other (Exp)         Depth (inc         Depth (inc         Depth (inc	() ned Leaves I, <b>2, 4A, an</b> B11) ertebrates Sulfide Odo hizosphere: f Reduced h Reduction Stressed Pl ain in Remain hes): hes):	(B9) ( <b>ex</b> <b>d 4B</b> ) (B13) r (C1) s along L lron (C4) in Tilled lants (D1) arks)	cept iving Roots Soils (C6) (LRR A)	s (C3)	Secondary II Water-S 4A, a Drainag Dry-Sea Saturatic Geomor Shallow FAC-Ne Raised A Frost-He A Frost-He A Shallow Comparison Compariso	ndicators ( tained Lea ind 4B) e Patterns son Water on Visible o phic Positi Aquitard (I utral Test ( ant Mound ave Humn	2 or more required) aves (B9) ( <b>MLRA 1</b> , (B10) Table (C2) on Aerial Imagery (C on (D2) D3) D5) s (D6) ( <b>LRR A</b> ) nocks (D7)
Comparison of the second secon	Y Plogy Indicators: Ors (minimum of on ater (A1) Table (A2) (A3) (A3) (A3) (A3) (A3) (Case (B4) its (B3) r Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Im agetated Concave S ions: Present? Yes esent? Yes	<u>e required;</u> agery (B7) Surface (B8 s X No s X No s No	check all that apply         Water-Stai         MLRA         Salt Crust i         Aquatic Inv         Hydrogen S         Oxidized R         Presence c         Recent Iror         Stuņted or         Other (Exp)         Depth (inc         Depth (inc         Depth (inc	() ned Leaves I, <b>2, 4A, an</b> B11) ertebrates Sulfide Odo hizosphere: f Reduced h Reduction Stressed Pl ain in Remain hes): hes):	(B9) ( <b>ex</b> <b>d 4B</b> ) (B13) r (C1) s along L lron (C4) in Tilled lants (D1) arks)	cept iving Roots Soils (C6) (LRR A)	s (C3)	Secondary II Water-S 4A, a Drainag Dry-Sea Saturatic Geomor Shallow FAC-Ne Raised A Frost-He A Frost-He A Shallow Comparison Compariso	ndicators ( tained Lea ind 4B) e Patterns son Water on Visible o phic Positi Aquitard (I utral Test ( ant Mound ave Humn	2 or more required) aves (B9) ( <b>MLRA 1</b> , (B10) Table (C2) on Aerial Imagery (C on (D2) D3) D5) s (D6) ( <b>LRR A</b> ) nocks (D7)
Comparison of the second seco	Y Plogy Indicators: Ors (minimum of on ater (A1) Table (A2) (A3) (A3) (A3) (A3) (A3) (Case (B4)) its (B3) r Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Im egetated Concave S ions: Present? Yes ent? Yes ent? Yes	<u>e required;</u> agery (B7) Surface (B8 s X No s X No s No	check all that apply         Water-Stai         MLRA         Salt Crust i         Aquatic Inv         Hydrogen S         Oxidized R         Presence c         Recent Iror         Stuņted or         Other (Exp)         Depth (inc         Depth (inc         Depth (inc	() ned Leaves I, <b>2, 4A, an</b> B11) ertebrates Sulfide Odo hizosphere: f Reduced h Reduction Stressed Pl ain in Remain hes): hes):	(B9) ( <b>ex</b> <b>d 4B</b> ) (B13) r (C1) s along L lron (C4) in Tilled lants (D1) arks)	cept iving Roots Soils (C6) (LRR A)	s (C3)	Secondary II Water-S 4A, a Drainag Dry-Sea Saturatic Geomor Shallow FAC-Ne Raised A Frost-He A Frost-He A Shallow Comparison Compariso	ndicators ( tained Lea ind 4B) e Patterns son Water on Visible o phic Positi Aquitard (I utral Test ( ant Mound ave Humn	2 or more required) aves (B9) ( <b>MLRA 1</b> , (B10) Table (C2) on Aerial Imagery (C on (D2) D3) D5) s (D6) ( <b>LRR A</b> ) nocks (D7)

WETLAND DETERMINATION DAT		(1)].		فعقده
Project/Site: Humboldt Wind Energy Project	City/C	County: <u>Humbolc</u>	it	_ Sampling Date: <u>'+ / 1 7 /2018</u>
				_ Sampling Point: <u>462 A</u>
Investigator(s): Tour Lourelass				
Landform (hillslope, terrace, etc.): hillslope				
Subregion (LRR): A: Northwest Forests and Coast	Lat: -124.07	73141	Long: 40.4174	432 Datum:
Subregion (LRR): A: Northwest Forests and Coast Soil Map Unit Name: SIY Reduce Vager	Mailria	LACOMPLEX S	0-75- Slope	ication: NONC,
Are climatic / hydrologic conditions on the site typical for this				
Are Vegetation N, Soil N, or Hydrology N sig				present? Yes X No
Are Vegetation N, Soil N, or Hydrology N na			eded, explain any answ	
SUMMARY OF FINDINGS – Attach site map s	howing san	npling point lo	ocations, transect	s, important features, etc.
Hydric Soil Present? Yes X No		Is the Sampled within a Wetlan	Area d? Yes	<u>X</u> No
Remarks: see peconing with of hillslep Seep runs ilvon pa colvert belas	s had fe	citonlu Rebus io	onhillslape viiiflavus pol	no sther indicators; in w/telcus/avotus;
VEGETATION – Use scientific names of plant	5	small		Rubus ursinus q
Tree Stratum     (Plot size:)       1	Absolute Don % Cover Spe	ninant Indicator cies? <u>Status</u>	Dominance Test wor Number of Dominant That Are OBL, FACW	Species
2 3			Total Number of Dom Species Across All St	1
4	= To	tal Cover	Percent of Dominant S That Are OBL, FACW	
Sapling/Shrub Stratum (Plot size:)			Prevalence Index wo	, 011710: (7.75)
2			Total % Cover of:	
3.				x 1 =
4	·······			x 2 = x 3 =
5			FAC species	x 3 = x 4 =
$2^{\prime} \times 20^{\prime}$	= To	tal Cover		× 5 =
Herb Stratum (Plot size: <u>d × 50</u> ) 1. Nasturfrum officinale	20	OBL	*****	(A) (B)
2. Holcus lara tus		FAC		
3. Mmulus mightus	<u>_</u>	FACW	Prevalence Inde	ion Indicators:
4. Bronnes Corinetus	<u> </u> .	4P		Hydrophytic Vegetation
5. Tunaus effoses	<u> </u>	PAC'W	2 - Dominance Te	
6. Carex amplifulia	<u> </u>	<u>6BL</u>	3 - Prevalence In	
7. Alastations alle colle			4 - Morphological	Adaptations <sup>1</sup> (Provide supporting
8. Concex bolandori		EAC		ks or on a separate sheet)
9. Equisetum telmateian		- tren	5 - Wetland Non-'	
10. Pua palustris		UBL OBL		ophytic Vegetation <sup>1</sup> (Explain) oil and wetland hydrology must
11. Tentha perlyin, March	20 - Tot	······································		sturbed or problematic.
Woody Vine Stratum (Plot size:)				
1			Hydrophytic	
2			Vegetation	es X No
% Bare Ground in Herb Stratum	= Tot	al Cover	Present? Y	es UND
Remarks:	5			
Diverse injoursphytic veget	RTUN.			

161	wet
42	A

		Sampling Point: <u>4024</u>
Profile Description: (Describe to the o	depth needed to document the indicator or confirn	n the absence of indicators.)
Depth <u>Matrix</u>	Redox Features	<b>_</b> .
(inches) Color (moist) %	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture Remarks
0-2 104R 2/2 106		organic
2-6" IOMR 4/1 90	1 107R516 10 C M	Billy, loom
······		
······································	······································	
	· · · · · · · · · · · · · · · · · · ·	
· · · · ·		
······		
1		2
	RM=Reduced Matrix, CS=Covered or Coated Sand G	rains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :
Hydric Soil Indicators: (Applicable to		
Histosol (A1)	Sandy Redox (S5)	2 cm Muck (A10) Red Parent Material (TE2)
Histic Epipedon (A2) Black Histic (A3)	Stripped Matrix (S6) Loamy Mucky Mineral (F1) ( <b>except MLRA 1</b> )	Red Parent Material (TF2) Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)		
Thick Dark Surface (A12)	Redox Dark Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):		
Type: <u>Rock</u>		
Depth (inches):		Hydric Soil Present? Yes 🔀 No
IYDROLOGY Wetland Hydrology Indicators:		
Primary Indicators (minimum of one requ	uired; check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)
X Saturation (A3)	Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Oxidized Rhizospheres along Living Roo	ots (C3) Geomorphic Position (D2)
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5)	Recent Iron Reduction in Tilled Soils (C6	6) FAC-Neutral Test (D5)
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (LRR A	.) Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Aerial Imagery	(B7) Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface	ce (B8)	
Field Observations:	$\sim$	
Field Observations:	No Depth (inches):	
Field Observations:	No Depth (inches):A	
Field Observations:         Surface Water Present?         Yes         Water Table Present?         Yes         Saturation Present?         Yes	No Depth (inches):A	and Hydrology Present? Yes <u> </u>
Field Observations:         Surface Water Present?         Water Table Present?         Yes         Saturation Present?         (includes capillary fringe)	No Depth (inches):A	
Field Observations:         Surface Water Present?         Water Table Present?         Yes         Saturation Present?         (includes capillary fringe)	No Depth (inches): <u>NA</u> No Depth (inches): <u>NA</u> Wetl	
Field Observations:         Surface Water Present?         Water Table Present?         Yes         Saturation Present?         (includes capillary fringe)	No Depth (inches): <u>NA</u> No Depth (inches): <u>NA</u> Wetl	
Field Observations:         Surface Water Present?       Yes X         Water Table Present?       Yes X         Saturation Present?       Yes X         (includes capillary fringe)       Yes X         Describe Recorded Data (stream gauge,         Remarks:	No Depth (inches): <u>NA</u> No Depth (inches): <u>NA</u> weth monitoring well, aerial photos, previous inspections),	
Field Observations:         Surface Water Present?       Yes X         Water Table Present?       Yes X         Saturation Present?       Yes X         (includes capillary fringe)       Yes X         Describe Recorded Data (stream gauge,         Remarks:	No Depth (inches): <u>NA</u> No Depth (inches): <u>NA</u> weth monitoring well, aerial photos, previous inspections),	
Field Observations:         Surface Water Present?       Yes         Water Table Present?       Yes         Saturation Present?       Yes         (includes capillary fringe)       Describe Recorded Data (stream gauge,	No Depth (inches): <u>NA</u> No Depth (inches): <u>NA</u> weth monitoring well, aerial photos, previous inspections),	

WETLAND DETERMINATION DATA FO	DRM – Western Mountai いしょりみ	· · ·	· · · · · · · · · · · · · · · · · · ·
Project/Site: Humboldt Wind Energy Project	City/County: <u>Humboldt</u>		_ Sampling Date: <u>-7 /17/2018</u>
Applicant/Owner: Humboldt Wind, LLC		_ State: <u>CA</u>	_ Sampling Point:
Investigator(s): Tayla Lovelass	Section, Township, Range:		- میں «۲
Landform (hillslope, terrace, etc.): <u>hillslope</u>	Local relief (concave, conv	ex, none): <u>NONE</u>	<u></u>
	-124.073127 Lo	ng: 40.4174	132 Datum:
Soil Map Unit Name: Rowadhouse Jager rough - Mailad	19 COMPLEX 50-795%.	NWI classific	cation: <u> </u>
Are climatic / hydrologic conditions on the site typical for this time o	f year? Yes 📈 No	_ (If no, explain in F	Remarks.)
Are Vegetation $\underline{N}$ , Soil $\underline{N}$ , or Hydrology $\underline{M}$ significa	ntly disturbed? Are "Norr	nal Circumstances"	present? Yes 📈 No
Are Vegetation $\underline{N}$ , Soil $\underline{N}$ , or Hydrology $\underline{N}$ naturally	problematic? (If needed	d, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ng sampling point loca	tions, transects	s, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes No _X Yes No _X Yes No _X	Is the Sampled Area within a Wetland? Yes	No <u>X</u>
Remarks:			

## **VEGETATION – Use scientific names of plants.**

400

			t Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
1           2	and the state of the			That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Demonstrat Demoissent Organization
Sapling/Shrub Stratum (Plot size: 5/×30)		_ = Total Co	over	Percent of Dominant Species That Are OBL, FACW, or FAC:
1. Rubus vestows	2 Charles	N	PACU	Prevalence index worksheet:
		Į.	I ICVI	Total % Cover of:Multiply by:
2			-	OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
5				FACU species x 4 =
and a Cart		= Total Co	over	
Herb Stratum (Plot size: 5 ×30) 1. Hora tw	2	$\vee$	FAC.	UPL species         x 5 =           Column Totals:         (A)
2. Hypuchasril Glabra			4.D	Prevalence Index = B/A =
3 Borney hardlanceus			FALCY	Hydrophytic Vegetation Indicators:
4. Cynologues Echinetins	1		FACU	1 - Rapid Test for Hydrophytic Vegetation
5. Digitalis Durphrea			FACU	2 - Dominance Test is >50%
6. Aspostas pallons	2	V	()P	$3$ - Prevalence Index is $\leq 3.0^{1}$
7. Stalchys rigida you rigida			DATN	
8			<u> 100-0</u>	<ul> <li>4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)</li> </ul>
9				5 - Wetland Non-Vascular Plants <sup>1</sup>
10				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11	10			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
20/022		= Total Co		be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)			VEI	
				Undre shutie
1				Hydrophytic Vegetation
		= Total Co		Present? Yes No
% Bare Ground in Herb Stratum1 5		- Total Co	vei	
Remarks:				

Sampling Point: 4026

	ription: (Descri	be to the de	pth need				onfirm t	the abser	nce of indicate	ors.)	
Depth (incluse)	Matrix Color (moist)	<u>%</u>		Redox r (moist)	Features %	Type <sup>1</sup> Lo	oc <sup>2</sup>	Texture	A	Remarks	
(inches)	10YR 3/3					0		Texture	· · · · · · · · · · · · · · · · · · ·	Remarks	
0-6	101N -10	00	-			ROCKY Li	UATT -		<u>u = t u a se </u>		
	<b>.</b>										
		······									
	oncentration, D=D						and Grai		<sup>2</sup> Location: PL=		
Hydric Soil I	ndicators: (App	licable to a	ll LRRs, ı	unless otherv	vise note	ed.)			ators for Prol	-	Iric Soils':
Histosol	. ,			nd <b>y</b> Redox (S					2 cm Muck (A1		
	pipedon (A2)			ipped Matrix (					Red Parent Ma		(7.5.4.0)
Black Hi						) (except MLI	RA 1)		Very Shallow D Other (Explain		(TF12)
	n Sulfide (A4) 3 Below Dark Sur	faco (111)	-	amy Gleyed M pleted Matrix (		)		`	other (Explain	in Remarks)	
·	ark Surface (A12)	• •		dox Dark Surf				<sup>3</sup> Indi	cators of hydro	nhvtic vegeta	tion and
	lucky Mineral (S1			pleted Dark S		7)			etland hydrolog		
	leyed Matrix (S4			dox Depressio	-				nless disturbed		
· · · ·	ayer (if present										
Туре:	<u>Rocky</u>										
Depth (ind	ches):							Hydric \$	Soil Present?	Yes	No <u>_X</u> _
HYDROLO	GY	-									
	drology Indicato	rc '				*****					
1	cators (minimum		ed: check	all that apply	)			Se	econdary Indica	ators (2 or mo	ore required)
	Water (A1)	or one requi				es (B9) ( <b>exce</b> p	nt				9) (MLRA 1, 2,
	iter Table (A2)				, 2, 4A, a		, pr		4A, and		o, ( <b></b> , <u>.</u> , <u>.</u> ,
Saturatio				_ Salt Crust (					_ Drainage Pa		
Water M	. ,		_	_ Aquatic Inv		s (B13)			_ Dry-Season		(C2)
	nt Deposits (B2)			Hydrogen S							al Imagery (C9)
}	posits (B3)						ng Roots	s (C3)	Geomorphic	Position (D2	)
	at or Crust (B4)			Presence o					_ Shallow Aqu		
	oosits (B5)			_ Recent Iron	Reductio	on in Tilled So	ils (C6)		FAC-Neutra	l Test (D5)	
Surface	Soil Cracks (B6)			_ Stunted or :	Stressed	Plants (D1) (L	RR A)		_ Raised Ant I		
Inundati	on Visible on Aer	ial Imagery (	B7)	_ Other (Expl	ain in Re	marks)			_ Frost-Heave	Hummocks	(D7)
Sparsely	Vegetated Cond	ave Surface	e (B8)								
Field Obser	vations:										
Surface Wat	er Present?			Depth (inc							
Water Table	Present?	Yes	_ No	Depth (inc	hes):						·,
Saturation P (includes cap	oillary fringe)			Depth (inc						? Yes	No <u></u>
Describe Re	corded Data (stre	am gauge, i	nonitoring	j well, aerial p	hotos, pre	evious inspect	tions), if	r available	2;		
Remarks:	JPLAND P	T									
	MLHAU I	1,									

#### WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region 165 up \_\_\_\_\_ Sampling Date: 07/18/2=\8 Project/Site: <u>Humboldt Wind Energy Project</u> City/County: <u>Humboldt</u> State: CA Sampling Point: 4056 Applicant/Owner: <u>Humboldt Wind, LLC</u> Investigator(s): KHENRY, ALOVELESS Section, Township, Range: Landform (hillslope, terrace, etc.): HIUSLOPE Local relief (concave, convex, none): CONLAVE Slope (%): 40 Subregion (LRR): <u>A: Northwest Forests and Coast</u> Lat: <u>-124.064725</u> Long: <u>40.407801</u> \_ Datum: \_\_\_\_ Soil Map Unit Name: \_\_\_ NWI classification: 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? Are "Normal Circumstances" present? Yes X No 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, etc. Hydrophytic Vegetation Present? Yes No 😽 Is the Sampled Area Yes \_\_\_\_\_ No \_\_\_\_ Hydric Soil Present? within a Wetland? Yes\_\_\_\_\_ No 🗶 Wetland Hydrology Present? Yes No 🗙 Remarks: LIPLAND PT. VEGETATION – Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: IMETER)	% Cover	Species?		Number of Dominant Species
1. Sequoia semberuirens	2	Y	LPL	That Are OBL, FACW, or FAC: (A)
2. Quercus chrysolepis	5	Y	UPL	
	~		0 11	Total Number of Dominant Species Across All Strata: 3 (B)
3		<del></del>		Species Across All Strata: (B)
4				Percent of Dominant Species
<u>Sapling/Shrub Stratum</u> (Plot size:)	+	_ = Total Co	ver	That Are OBL, FACW, or FAC: (A/B)
				Prevalence Index worksheet:
1		<u></u>		Total % Cover of:Multiply by:
2				OBL species x 1 =
3		i	<b>.</b>	FACW species x 2 =
4				FAC species x 3 =
5				FACU species $x 4 = -$
		_ = Total Co	ver	
Herb Stratum (Plot size: METER)		$\checkmark$		
1. IRIS douglasiana	2	1	LIPL	Column Totals: (A) (B)
2				Prevalence Index = B/A =
3				Hydrophytic Vegetation Indicators:
4				<ul> <li>1 - Rapid Test for Hydrophytic Vegetation</li> </ul>
5				<ul> <li>2 - Dominance Test is &gt;50%</li> </ul>
6				3 - Prevalence Index is ≤3.0 <sup>1</sup>
7 8				4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
				5 - Wetland Non-Vascular Plants <sup>1</sup>
9				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10		·		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
11 50 = 1 $W = 0.4$				be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: )		= Total Cov	er	
<u>vvoody vine Stratum</u> (Plot size)				
1				Hydrophytic
2		<u> </u>		Vegetation Present? Yes <u>No X</u>
95	<u></u>	= Total Cov	rer	
% Bare Ground in Herb Stratum				· .
Remarks:	- par & survice	انتعارض	> por	
NO HYDRIC VEG PRE	SLNI-	UPLAN	U PI,	

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SOL	S	0	l	L
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Sampling Point: 405b

Depth	Matrix	•		x Feature			irm the absence of indicators.)	
(inches)	Color (moist)		Color (moist)			Loc <sup>2</sup>	Texture Remarks	
0-6	10YR 4/3+	100		*0.600#			Sandy sikty loam	
					-		· · ·	
	Concentration, D=Dep					d Sand (		
Histosc Histic E Black H Hydrog Deplete	I Indicators: (Applica ol (A1) Epipedon (A2) Histic (A3) Ien Sulfide (A4) ed Below Dark Surface Dark Surface (A12)	-	Sandy Redox ( Stripped Matrix Loamy Mucky f Loamy Gleyed Depleted Matrix Redox Dark Su	S5) (S6) Øineral (F Matrix (F2 < (F3)	1) (except 2)	MLRA 1	Indicators for Problematic Hydric So 2 cm Muck (A10) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) <sup>3</sup> Indicators of hydrophytic vegetation a	)
Sandy	Mucky Mineral (S1)	-	Depleted Dark	Surface (F			wetland hydrology must be present	
	Gleyed Matrix (S4)		Redox Depress	sions (F8)			unless disturbed or problematic.	
Туре:	nches):U	OD ROO	IS /DECAY			24	Hydric Soil Present? Yes No	o <u>X</u>
Remarks: L	UPLAND PT. N	10N-HY	ORIC SOILS					
IYDROLO	DGY							
Wetland Hy	vdrology Indicators:							
Primary Ind	icators (minimum of o	ne required	check all that appl	y)			Secondary Indicators (2 or more rec	quired

Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)					
Surface Water (A1) Water-Stained Leaves (B9) (exce	pt Water-Stained Leaves (B9) (MLRA 1, 2,					
High Water Table (A2) MLRA 1, 2, 4A, and 4B)	4A, and 4B)					
Saturation (A3) Salt Crust (B11)	Drainage Patterns (B10)					
Water Marks (B1) Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)					
Sediment Deposits (B2) Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)					
Drift Deposits (B3) Oxidized Rhizospheres along Livi	ng Roots (C3) Geomorphic Position (D2)					
Algal Mat or Crust (B4) Presence of Reduced Iron (C4)	Shallow Aquitard (D3)					
Iron Deposits (B5)Recent Iron Reduction in Tilled So	pils (C6) FAC-Neutral Test (D5)					
Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (	LRR A) Raised Ant Mounds (D6) (LRR A)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Frost-Heave Hummocks (D7)					
Sparsely Vegetated Concave Surface (B8)						
Field Observations:						
Surface Water Present? Yes No X Depth (inches):						
Water Table Present? Yes No 🗶 Depth (inches):	· .					
Saturation Present? Yes <u>No X</u> Depth (inches):	Wetland Hydrology Present? Yes No $\underline{X}$					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:						
Remarks: NO HYDROLOGY INDICATORS - UPLAND PT.						

# WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region 166 up

Project/Site: Humboldt Wind Energy Project	City/County: Humboldt Sampling Date: 07/18/2018
Applicant/Owner: Humboldt Wind, LLC	State: <u>CA</u> Sampling Point: <u>405</u> &
Investigator(s): Kilenny, A LOVELESS	Section, Township, Range:
Landform (hillslope, terrace, etc.): Hillslope	Local relief (concave, convex, none): <u>COVICAV</u> Slope (%): <u>25</u>
Subregion (LRR): <u>A: Northwest Forests and Coast</u> Lat: <u>-1</u>	24.064654 Long:40.407822 Datum:
Soil Map Unit Name:	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 📝 No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology naturally pro	oblematic? (If needed, explain any answers in Remarks.)

# SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes No _X Yes No _X Yes _X No	Is the Sampled Area within a Wetland?	Yes	No <u>X</u>	
Remarks: WETLAND TEST P	Τ.				

## VEGETATION – Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: IMETER )	,	Species?		
	10	. Y	FACY	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
1. <u>Pseudosuga monsezii</u>	<u>_N</u> 5			
2. Seguora Sempavivens		<u> </u>	LPL	Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
50=7,5 20= 3	15	= Total Co	ver	That Are OBL, FACW, or FAC: 40 (A/B)
Sapling/Shrub Stratum (Plot size: METER )		-		Prevalence Index worksheet:
1. Rubarb Sp.	I	N	CBL	
2. Segunia Sempervirens	10	~	FACW	Total % Cover of:Multiply by:
		<u>.</u>		OBL species x 1 =
3				FACW species x 2 =22
4	_			FAC species $\frac{m}{2}$ x 3 = $\frac{90}{2}$
5				FACU species $\frac{10}{20}$ x 4 = $\frac{50}{20}$
0		= Total Co	ver	UPL species $5 \times 5 = 25$
Herb Stratum (Plot size: METER)				Column Totals: $07$ (A) $218$ (B)
1. CAVER SP.				
2. Oxalis oregana		<u> </u>	FACU	Prevalence Index = $B/A = 3.25$
3. Egnisetum telmateia		<u>N</u>	FACW	Hydrophytic Vegetation Indicators:
4. Athyrium filix-Rencing	30	<u> </u>	FAC	1 - Rapid Test for Hydrophytic Vegetation
5				2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0 <sup>1</sup>
7.				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
				5 - Wetland Non-Vascular Plants <sup>1</sup>
9		- <u></u>		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
11				be present, unless disturbed or problematic.
50= 70.5 20= 8.2	41	_= Total Cov	ver	
Woody Vine Stratum (Plot size:)				
1				Hydrophytic
2			<u> </u>	Vegetation Present? Yes <u>No X</u>
		= Total Co	ver	
% Bare Ground in Herb Stratum				
Remarks: VEGETATION NUT AN INDI	SMTAL	- UPLAN	ND	
VEGELATION NOT AM THE	, and a to drack again	· · · · · · · · · · · · · · · · · · ·		
4				-

Sampling Point	: 405a

	ption: (Describe	to the dep				or comm	the absence of indicators.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	ox Feature %	s _Type <sup>1</sup>	Loc <sup>2</sup>	Texture Remarks
0-6 I	DYR 4/4	100		- <u>/0</u>			
							sandy silty loarn
6-12 1	07R3/3	80	7.5YR 5/8	20	_ <u>C_</u>	<u> </u>	<u>clayloarn</u>
		-					
			=Reduced Matrix, C: LRRs, unless othe			d Sand Gra	
					5u.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
_ Histosol (A			Sandy Redox (				2 cm Muck (A10)
_ Histic Epip Black Histic			Stripped Matrix Loamy Mucky I		1) (avaan)		Red Parent Material (TF2)
	Sulfide (A4)		Loamy Gleyed			WILKA I)	Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
	Below Dark Surfac	e (A11)	Depleted Matrix		)		
	Surface (A12)		Redox Dark Su				<sup>3</sup> Indicators of hydrophytic vegetation and
	cky Mineral (S1)		Depleted Dark		7)		wetland hydrology must be present,
	yed Matrix (S4)		Redox Depress		.,		unless disturbed or problematic.
	yer (if present):						
Туре:							
Depth (inche	es):						Hydric Soil Present? Yes No 📉
emarks: ∖∖∖	DICATOR FO	DR HYD	RIC SOILS - N	IOT ME	Ŧ		
	Y plogy Indicators:						
etland Hydro	ology Indicators:		d; check all that appl	y)			Secondary Indicators (2 or more required
etland Hydro imary Indicate	ology Indicators: ors (minimum of o				es (B9) (e	xcept	Secondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 2
etland Hydro imary Indicate _ Surface Wa	ology Indicators: ors (minimum of o ater (A1)		Water-Sta	ined Leave		xcept	Water-Stained Leaves (B9) (MLRA *
etland Hydro imary Indicate _ Surface Wa	ology Indicators: ors (minimum of o ater (A1) r Table (A2)		Water-Sta MLRA	ined Leave 1, 2, 4A, a		xcept	Water-Stained Leaves (B9) (MLRA 4 4A, and 4B)
etland Hydro imary Indicato _ Surface Wa _ High Water _ Saturation	ology Indicators: ors (minimum of o ater (A1) r Table (A2) (A3)		Water-Sta MLRA Salt Crust	ined Leave <b>1, 2, 4A, a</b> (B11)	ind 4B)	xcept	Water-Stained Leaves (B9) (MLRA 4A, and 4B) Drainage Patterns (B10)
etland Hydro -imary Indicate _ Surface Wa _ High Water _ Saturation _ Water Mark	ology Indicators: ors (minimum of o ater (A1) r Table (A2) (A3) ks (B1)		Water-Sta MLRA Salt Crust Aquatic In	ined Leave <b>1, 2, 4A, a</b> (B11) vertebrates	a <b>nd 4B)</b> s (B13)	xcept	<ul> <li>Water-Stained Leaves (B9) (MLRA <sup>2</sup></li> <li>4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> </ul>
etland Hydro -imary Indicate _ Surface Wa _ High Water _ Saturation _ Water Mark	blogy Indicators: ors (minimum of o ater (A1) r Table (A2) (A3) (A3) ks (B1) Deposits (B2)		Water-Sta MLRA Salt Crust Aquatic In Hydrogen	ined Leave <b>1, 2, 4A, a</b> (B11) vertebrate: Sulfide Oc	n <b>d 4B)</b> s (B13) dor (C1)		<ul> <li>Water-Stained Leaves (B9) (MLRA 44, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery</li> </ul>
etland Hydro imary Indicate Surface Wa High Water Saturation Water Mark Sediment D Drift Depos	ology Indicators: ors (minimum of o ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3)		Water-Sta Salt Crust Aquatic In Hydrogen ∑_ Oxidized F	ined Leave <b>1, 2, 4A, a</b> (B11) vertebrate Sulfide Oc Rhizospher	n <b>d 4B)</b> s (B13) dor (C1) res along	Living Root	Water-Stained Leaves (B9) (MLRA 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery s (C3) Geomorphic Position (D2)
rimary Indicate Surface Wa High Water Saturation Water Mark Sediment D Drift Depos	ology Indicators: ors (minimum of o ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4)		Water-Sta Salt Crust Aquatic In Hydrogen ∑_ Oxidized F Presence	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizospher of Reduce	nd 4B) s (B13) dor (C1) res along d Iron (C4	Living Root	<ul> <li>Water-Stained Leaves (B9) (MLRA ' 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery</li> <li>s (C3)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> </ul>

rial Imagery (B7) Other	(Explain in Remarks)	Frost-Heave H	łummocks (D7)
cave Surface (B8)			
Yes No 🗡 Depth	n (inches):		2
Yes No 🔀 Depth	n (inches):		
Yes No 🔀 Depth	(inches):	Wetland Hydrology Present?	Yes <u>X</u> No
eam gauge, monitoring well, ae	rial photos, previous inspect	ions), if available:	
OR FOR AYDROLOG	Y IS OKIDIZED F	PHIZOSPHERES.	
	cave Surface (B8) Yes No <u>X</u> Depth Yes No <u>X</u> Depth Yes No <u>X</u> Depth Yes No <u>X</u> Depth	Yes No X Depth (inches): Yes No X Depth (inches): Yes No X Depth (inches): eam gauge, monitoring well, aerial photos, previous inspect	cave Surface (B8)         Yes No        Y         Yes No        Y         Yes No        Y         Depth (inches):

WETLAND DETERMINATION DATA FORM – Western Mou	ntains, Valleys, and Coast Region 170 wet
	3/1/10
Project/Site: Humboldt Wind Energy Project City/County: Humbol	
Applicant/Owner: Humboldt Wind, LLC	State: CA Sampling Point: $\underline{SOL(\omega)}$
Investigator(s) S-CNEW, A.Sorci Section, Township, Ra	inge:
Landform (hillslope, terrace, etc.): randovt on hillslope Local relief (concave,	convex, (6ne):) Slope (%):
Subregion (LRR): <u>A: Northwest Forests and Coast</u> Lat: -124.052251	_ Long: 40.399009 Datum:
Soil Map Unit Name: Can DECreets provisin Reducially Complex	- 50-75', NWI classification: 10002-
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No	
Are Vegetation, Soil, or Hydrology significantly disturbed? Are *	"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic? (If ne	eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point I	ocations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes No         Hydric Soil Present?       Yes No         Wetland Hydrology Present?       Yes No	X
Remarks: WL pools due to road cut + gravel	fill. Must erkely
would not pond without the road	
VEGETATION – Use scientific names of plants.	
Tree Stratum         (Plot size:)         Absolute         Dominant         Indicator           1.	Dominance Test worksheet:         Number of Dominant Species         That Are OBL, FACW, or FAC:
3	Species Across All Strata: (B)
4 = Total Cover Sapling/Shrub Stratum (Plot size:)	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)

3		Species Across All Strata: / (B)
	= Total Cover	Percent of Dominant Species 100 (A/B)
Sapling/Shrub Stratum (Plot size:)		Prevalence Index worksheet:
		Total % Cover of: Multiply by:
2		OBL species x 1 =
3		FACW species x 2 =
4		FAC species x 3 =
5		FACU species x 4 =
Herb Stratum (Plot size: CUNTING FORTURE	= Total Cover	UPL species x 5 =
1. JUYCOS CRUSUS TO	Y FACW	Column Totals: (A) (B)
2. Darmera pettata 10	) N OBL	Prevalence Index = B/A =
3. <u>Moss</u>		Hydrophytic Vegetation Indicators:
4		1 - Rapid Test for Hydrophytic Vegetation
5		∠∠2 - Dominance Test is >50%
6	······	3 - Prevalence Index is ≤3.0 <sup>1</sup>
7		4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
9		$\chi$ 5 - Wetland Non-Vascular Plants <sup>1</sup>
10		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: )	= Total Cover	
1		Hydrophytic
2.		Vegetation V
% Bare Ground in Herb Stratum	= Total Cover	Present? Yes <u>No</u> No
Remarks:		

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	/

Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Secondary Indicators (2 or more required)	SOIL							Sampling Point: <u></u> )
Incluses       Color (mole)       %       Type       Loc2       Texture       Remarks         C-3       Y.S.V.P. 74       %       Y.S.V.P. 74       %       Y.S.V.P. 74       %       Scuth Advance         Yes       N       Scuth Advance       Yes       N       Scuth Advance       Yes         Yes       N       Scuth Advance       Yes       N       Scuth Advance       Yes         Yes       N       Scuth Advance       Yes       N       Scuth Advance       Yes         Yes       No       Scuth Advance       Yes       No       Scuth Advance       Yes       No         Yes       No       Scuth Advance       Scuth Advance       Yes       No       Scuth Advance         Yes       Yes       No       Scuth Advance       Scuth Advance       Yes       No         Halsool (1)       Scuth Advance       Scuth Advance       Yes       Ye	Profile Desc	ription: (Describe	to the dep	th needed to docur	nent the i	ndicator	or confirm	and the second
A - 3       2 + 10       11       9 - 5       12       0       14       5       C       MA       Sample Jone         2 + 10       11       9 - 5       14       5       C       MA       Sample Jone         2 + 10       11       9 - 5       14       5       C       MA       Sample Jone       Jone         2 + 10       11       9 - 5       14       5       C       MA       Sample Jone	Depth Matrix Redox Features							
Ype:       C=Concentration.D=Depletion.RM=Reduced Matrix, CS=Covered or Coared Sand Grains. <sup>1</sup> Location.PL=Pore Lining, M=Matrix.          Hydric Soll Indicators:       Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Solls':          Histos (1/1)       Sandy Redox (S5)		******				Type <sup>1</sup>	_Loc <sup>2</sup>	
<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coaled Sand Grains. <sup>1</sup> Location: PL=Pore Lining, M=Matrix, Midra Soft Indicators: (Applicable to all LRRs, unless otherwise noted.) <ul> <li>Indicators for Problematic Hydric Solls?</li> <li>Histo Epipeion (A2)</li> <li>Strupped Matrix (S6)</li> <li>Loamy Mucky Mineral (F1) (except MLRA 1)</li> <li>Very Shallow Dark Surface (T=12)</li> <li>Depleted Below Dark Surface (T=12)</li> <li>Depleted Below Dark Surface (T1)</li> <li>Depleted Dark Surface (F2)</li> <li>Structure (X3)</li> <li>Depleted Dark Surface (F3)</li> <li>Produces of hydrophylic vegetation and set under (F3)</li> <li>Depleted Matrix (S4)</li> <li>Depleted Dark Surface (F3)</li> <li>Productors of hydrophylic vegetation and set under or problematic.</li> </ul> <li>Restrictive Larger (If present):</li> <li>Marka (K3)</li> <li>Marka (K3)</li> <li>Marka (K4)</li> <li>Marka (K4)&lt;</li>	0-3	<u>+54K 74</u>	<u> </u>	7.5 YR 518	15		$\underline{M}$	Sandylam
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>2</sup> :         Histic Spiped Matx (Sd)       Striped Matx (Sd)       Performatic Hydric Soils <sup>2</sup> :         Histic (A3)       Learny Mucky Mineral (F1) (except MLRA 1)       Very Shallow Dark Surface (TF12)         Hydroge Sulfae (A4)       Learny Glyed Matrix (F2)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F7)       Performarks         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       Performarks         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       wetland Hydrology must be present.         Type:      (ALAPEL_(Model	3-10	( )	<u> 15</u>	()	<u> </u>	C	m	Sandy Jam
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>2</sup> :         Histic Spiped Matx (Sd)       Striped Matx (Sd)       Performatic Hydric Soils <sup>2</sup> :         Histic (A3)       Learny Mucky Mineral (F1) (except MLRA 1)       Very Shallow Dark Surface (TF12)         Hydroge Sulfae (A4)       Learny Glyed Matrix (F2)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F7)       Performarks         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       Performarks         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       wetland Hydrology must be present.         Type:      (ALAPEL_(Model								0
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>2</sup> :         Histic Spiped Matx (Sd)       Striped Matx (Sd)       Performatic Hydric Soils <sup>2</sup> :         Histic (A3)       Learny Mucky Mineral (F1) (except MLRA 1)       Very Shallow Dark Surface (TF12)         Hydroge Sulfae (A4)       Learny Glyed Matrix (F2)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F7)       Performarks         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       Performarks         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       wetland Hydrology must be present.         Type:      (ALAPEL_(Model			• ••••••••••••••••••••••••••••••••••••					
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>2</sup> :         Histic Spiped Matx (Sd)       Striped Matx (Sd)       Performatic Hydric Soils <sup>2</sup> :         Histic (A3)       Learny Mucky Mineral (F1) (except MLRA 1)       Very Shallow Dark Surface (TF12)         Hydroge Sulfae (A4)       Learny Glyed Matrix (F2)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F7)       Performarks         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       Performarks         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       wetland Hydrology must be present.         Type:      (ALAPEL_(Model			-					
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>2</sup> :         Histic Epideon (A2)       Sarby Redox (S5)       2 cm Muck (A10)         Biack Histic (A3)       Leamy Mucky Mineral (F1) (except MLRA 1)       Very Shallow Dark Surface (TF12)         Hydrice Below Dark Surface (A11)       Depleted Matrix (F2)       Other (Explain in Remarks)         Sandy Mucky Mineral (S1)       Depleted Matrix (F3) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present.         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       wetland hydrology must be present.         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       wetland hydrology must be present.         Depth (inches)       ID <sup>1</sup> Redox Depressions (F8)       unless disturbed or problematic.         Wetland Hydrology Indicators:       Primary Indicators (innimum of one required; check all that apply)       Secondary Indicators (2 or more required)         Saturation (A3)       Salt Crust (S11)       Dranage Patterns (S10)       Dranage Patterns (S10)         Wetland Hydrology Indicators:       Muck A1, 2, 4A, and 4B)       Aa, and 4B)       Aa, and 4B)         Saturation (A3)       Salt Crust (S11)       Dranage Patterns (S10)       Dranage Patterns (S10)         Wetland Hydrology Indicators (B5)       Recent Iron Reduction in C(1)       Saturation Pr			·					
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>2</sup> :         Histic Epideon (A2)       Sarby Redox (S5)       2 cm Muck (A10)         Biack Histic (A3)       Leamy Mucky Mineral (F1) (except MLRA 1)       Very Shallow Dark Surface (TF12)         Hydrice Below Dark Surface (A11)       Depleted Matrix (F2)       Other (Explain in Remarks)         Sandy Mucky Mineral (S1)       Depleted Matrix (F3) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present.         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       wetland hydrology must be present.         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       wetland hydrology must be present.         Depth (inches)       ID <sup>1</sup> Redox Depressions (F8)       unless disturbed or problematic.         Wetland Hydrology Indicators:       Primary Indicators (innimum of one required; check all that apply)       Secondary Indicators (2 or more required)         Saturation (A3)       Salt Crust (S11)       Dranage Patterns (S10)       Dranage Patterns (S10)         Wetland Hydrology Indicators:       Muck A1, 2, 4A, and 4B)       Aa, and 4B)       Aa, and 4B)         Saturation (A3)       Salt Crust (S11)       Dranage Patterns (S10)       Dranage Patterns (S10)         Wetland Hydrology Indicators (B5)       Recent Iron Reduction in C(1)       Saturation Pr								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>2</sup> :         Histic Epideon (A2)       Sarby Redox (S5)       2 cm Muck (A10)         Biack Histic (A3)       Leamy Mucky Mineral (F1) (except MLRA 1)       Very Shallow Dark Surface (TF12)         Hydrice Below Dark Surface (A11)       Depleted Matrix (F2)       Other (Explain in Remarks)         Sandy Mucky Mineral (S1)       Depleted Matrix (F3) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present.         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       wetland hydrology must be present.         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       wetland hydrology must be present.         Depth (inches)       ID <sup>1</sup> Redox Depressions (F8)       unless disturbed or problematic.         Wetland Hydrology Indicators:       Primary Indicators (innimum of one required; check all that apply)       Secondary Indicators (2 or more required)         Saturation (A3)       Salt Crust (S11)       Dranage Patterns (S10)       Dranage Patterns (S10)         Wetland Hydrology Indicators:       Muck A1, 2, 4A, and 4B)       Aa, and 4B)       Aa, and 4B)         Saturation (A3)       Salt Crust (S11)       Dranage Patterns (S10)       Dranage Patterns (S10)         Wetland Hydrology Indicators (B5)       Recent Iron Reduction in C(1)       Saturation Pr			·		·		<u></u>	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>2</sup> :         Histic Epideon (A2)       Sarby Redox (S5)       2 cm Muck (A10)         Biack Histic (A3)       Leamy Mucky Mineral (F1) (except MLRA 1)       Very Shallow Dark Surface (TF12)         Hydrice Below Dark Surface (A11)       Depleted Matrix (F2)       Other (Explain in Remarks)         Sandy Mucky Mineral (S1)       Depleted Matrix (F3) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present.         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       wetland hydrology must be present.         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       wetland hydrology must be present.         Depth (inches)       ID <sup>1</sup> Redox Depressions (F8)       unless disturbed or problematic.         Wetland Hydrology Indicators:       Primary Indicators (innimum of one required; check all that apply)       Secondary Indicators (2 or more required)         Saturation (A3)       Salt Crust (S11)       Dranage Patterns (S10)       Dranage Patterns (S10)         Wetland Hydrology Indicators:       Muck A1, 2, 4A, and 4B)       Aa, and 4B)       Aa, and 4B)         Saturation (A3)       Salt Crust (S11)       Dranage Patterns (S10)       Dranage Patterns (S10)         Wetland Hydrology Indicators (B5)       Recent Iron Reduction in C(1)       Saturation Pr	<u> </u>						·`	
Histosol (A1)							ed Sand Gr	
	-		able to all			ed.)		· · · · · ·
Back Histic (A3)       Loamy Mucky Mineral (F1) (except MLRA 1)       Very Shallow Dark Surface (TF12)         Hydrogen Surface (A12)       Depleted Below Dark Surface (A13)       Other (Explain in Remarks)         Back Histic (A3)       Depleted Matrix (F2)       Other (Explain in Remarks)         Sandy Mucky Mineral (S1)       Depleted Matrix (F2)       Proceed Matrix (F3)         Sandy Mucky Mineral (S1)       Depleted Matrix (F2)       Proceed Matrix (F3)         Sandy Mucky Mineral (S1)       Depleted Matrix (F3)       Proceed Matrix (F3)         Type:								
						) (excen		
Depleted Below Dark Surface (A11)       Depleted Matrix (F3)         Thick Dark Surface (A12)       Redox Dark Surface (F5)         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)         wetland hydrology must be present.       unless disturbed or problematic.         Restrictive Layer (if present):       Type:								
Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if present):       Type:       Interstand       No         Type:       Image: Signal Control (S1)       Hydric Soil Present?       Yes       No         Remarks:       Image: Signal Control (S2)       Image: Signal Control (S2)       No       Image: Signal Control (S2)       No         YDROLOGY       Image: Signal Control (S2)       Image: Signal Control (S2)       No       Image: Signal Control (S2)			e (A11)			, ,		/
Sandy Gleyed Matrix (S4)       Redox Depressions (F8)       unless disturbed or problematic.         Restrictive Layer (if present):       Type:       Yes       No         Depth (inches)       10       Hydric Soil Present?       Yes       No         Remarks:       Hydric Soil Present?       Yes       No		, ,		Kedox Dark Su	rface (F6)			
Restrictive Layer (if present):       Type:		•				7)		
Type:				Redox Depress	ions (F8)			unless disturbed or problematic.
Depth (inches):       IV         Remarks:         Remarks:         Remarks:         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Surface Water (A1)			Maga J	Cin				
Remarks:         Remarks:         Primary Indicators:         Primary Indicators (minimum of one required; check all that apply)         Secondary Indicators:         Primary Indicators (minimum of one required; check all that apply)       Secondary Indicators (2 or more required)         Saturation (A3)	-		MORIC					
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)       Secondary Indicators (2 or more required)         ✓ Surface Water (A1)       Water-Stained Leaves (B9) (except       Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         ✓ Surface Water Table (A2)       MLRA 1, 2, 4A, and 4B)       4A, and 4B)         ✓ Saturation (A3)       Salt Crust (B11)       Drainage Patterns (B10)         Water Marks (B1)       Aquatic Invertebrates (B13)       Dry-Season Water Table (C2)         Staturation (K3)       Saturation Visible on Aerial Imagery (C9)         Prift Deposits (B3)       Oxidized Rhizospheres along Living Roots (C3)       Geomorphic Position (D2)         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)       Shallow Aquitard (D3)         Iton Deposits (B5)       Recent Iron Reduction in Tilled Soils (C6)       FAC-Neutral Test (D5)         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)       Raised Ant Mounds (D6) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       Frost-Heave Hummocks (D7)         Saturation Present?       Yes       No       Depth (inches):       IV         Water Table Present?       Yes       No       Depth (inches):       Vetland Hydrology Present?       Yes       No	······································	cnes): <u>10</u>						Hydric Soli Present? Yes No
Wetland Hydrology Indicators:       Primary Indicators (minimum of one required; check all that apply)       Secondary Indicators (2 or more required)         Surface Water (A1)       Water-Stained Leaves (B9) (except       Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         High Water Table (A2)       MLRA 1, 2, 4A, and 4B)       4A, and 4B)         Saturation (A3)       Salt Crust (B11)       Drainage Patterns (B10)         Water Marks (B1)       Aquatic Invertebrates (B13)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)       Saturation Visible on Aerial Imagery (C9         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)       Shallow Aquitard (D3)         Tron Deposits (B5)       Recent Iron Reduction in Tilled Soils (C6)       FAC-Neutral Test (D5)         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)       Raised Ant Mounds (D6) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       Frost-Heave Hummocks (D7)         Sparsely Vegetated Concave Surface (B8)       Mettand Hydrology Present?       Yes       No         Field Observations:       Io       Io       Depth (inches):       Io         Saturation Present?       Yes       No       Depth (inches):       No       Metand Hydrology Present?       Yes       No								
Wetland Hydrology Indicators:       Primary Indicators (minimum of one required; check all that apply)       Secondary Indicators (2 or more required)         Surface Water (A1)       Water-Stained Leaves (B9) (except       Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         High Water Table (A2)       MLRA 1, 2, 4A, and 4B)       4A, and 4B)         Saturation (A3)       Salt Crust (B11)       Drainage Patterns (B10)         Water Marks (B1)       Aquatic Invertebrates (B13)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)       Saturation Visible on Aerial Imagery (C9         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)       Shallow Aquitard (D3)         Tron Deposits (B5)       Recent Iron Reduction in Tilled Soils (C6)       FAC-Neutral Test (D5)         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)       Raised Ant Mounds (D6) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       Frost-Heave Hummocks (D7)         Sparsely Vegetated Concave Surface (B8)       Mettand Hydrology Present?       Yes       No         Field Observations:       Io       Io       Depth (inches):       Io         Saturation Present?       Yes       No       Depth (inches):       No       Metand Hydrology Present?       Yes       No								
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)       Secondary Indicators (2 or more required)         Surface Water (A1)       Water-Stained Leaves (B9) (except       Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         High Water Table (A2)       MLRA 1, 2, 4A, and 4B)       4A, and 4B)         Saturation (A3)       Salt Crust (B11)       Drainage Patterns (B10)         Water Marks (B1)       Aquatic Invertebrates (B13)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)       Saturation Visible on Aerial Imagery (C9         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)       Shallow Aquitard (D3)         Torn Deposits (B5)       Recent Iron Reduction in Tilled Soils (C6)       FAC-Neutral Test (D5)         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)       Raised Ant Mounds (D6) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       Frost-Heave Hummocks (D7)         Sparsely Vegetated Concave Surface (B8)       Mettand Hydrology Present?       Yes       No         Field Observations:       IO       Depth (inches):       IO       No       Depth (inches):       No         Saturation Present?       Yes       No       Depth (inches):       IO       Wetland Hydrology Prese								
Primary Indicators (minimum of one required; check all that apply)       Secondary Indicators (2 or more required)         Surface Water (A1)       Water-Stained Leaves (B9) (except       Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         High Water Table (A2)       MLRA 1, 2, 4A, and 4B)       4A, and 4B)         Saturation (A3)       Salt Crust (B11)       Drainage Patterns (B10)         Water Marks (B1)       Aquatic Invertebrates (B13)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)       Saturation Visible on Aerial Imagery (C9)         Orift Deposits (B3)       Oxidized Rhizospheres along Living Roots (C3)       Geomorphic Position (D2)         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)       Shallow Aquitard (D3)         Toron Deposits (B5)       Recent Iron Reduction in Tilled Soils (C6)       FAC-Neutral Test (D5)         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)       Raised Ant Mounds (D6) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       Frost-Heave Hummocks (D7)         Surface Water Present?       Yes       No       Depth (inches):       IV         Water Table Present?       Yes       No       Depth (inches):       V         Surface Water Present?       Yes       No       Depth (inches):       IV<								
Surface Water (A1)	-							
High Water Table (A2)       MLRA 1, 2, 4A, and 4B)       4A, and 4B)         Saturation (A3)       Salt Crust (B11)       Drainage Patterns (B10)         Water Marks (B1)       Aquatic Invertebrates (B13)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Oxidized Rhizospheres along Living Roots (C3)       Geomorphic Position (D2)         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)       Shallow Aquitard (D3)         Iron Deposits (B5)       Recent Iron Reduction in Tilled Soils (C6)       FAC-Neutral Test (D5)         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)       Raised Ant Mounds (D6) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       Frost-Heave Hummocks (D7)         Sparsely Vegetated.Concave Surface (B8)       Depth (inches):       11         Field Observations:       11       Vater Table Present?       Yes       No         Saturation Present?       Yes       No       Depth (inches):       11         Water Table Present?       Yes       No       Depth (inches):       10         Water Table Present?       Yes       No       Depth (inches):       10         Wetland Hydrology Present? </td <td></td> <td></td> <td>ne require</td> <td></td> <td></td> <td></td> <td></td> <td></td>			ne require					
Saturation (A3)							except	
Water Marks (B1)						na 4B)		
	,					- (B13)		
<ul> <li>Drift Deposits (B3)</li> <li>Oxidized Rhizospheres along Living Roots (C3)</li> <li>Geomorphic Position (D2)</li> <li>Algal Mat or Crust (B4)</li> <li>Presence of Reduced Iron (C4)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Surface Soil Cracks (B6)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Other (Explain in Remarks)</li> <li>Frost-Heave Hummocks (D7)</li> <li>Sparsely Vegetated Concave Surface (B8)</li> <li>Field Observations:</li> <li>Surface Water Present?</li> <li>Yes</li> <li>No</li> <li>Depth (inches):</li> <li>Depth (inches):</li> <li>Difficued expiring fringe)</li> <li>Wetland Hydrology Present?</li> <li>Yes</li> <li>No</li> <li>Depth (inches):</li> <li>Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:</li> </ul>								
Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)       Shallow Aquitard (D3)         Iron Deposits (B5)       Recent Iron Reduction in Tilled Soils (C6)       FAC-Neutral Test (D5)         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)       Raised Ant Mounds (D6) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       Frost-Heave Hummocks (D7)         Sparsely Vegetated Concave Surface (B8)       Depth (inches):       1         Field Observations:       1       1         Surface Water Present?       Yes       No       Depth (inches):         Saturation Present?       Yes       No       Depth (inches):       1         Water Table Present?       Yes       No       Depth (inches):       10 <sup>11</sup> Wetland Hydrology Present?       Yes       No       Depth (inches):       10 <sup>11</sup> Uncludes capillary fringe)       Depth (inches):       10 <sup>11</sup> Wetland Hydrology Present?       Yes       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Statilable:							Living Roc	
Iron Deposits (B5)       Recent Iron Reduction in Tilled Soils (C6)       FAC-Neutral Test (D5)         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)       Raised Ant Mounds (D6) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       Frost-Heave Hummocks (D7)         Sparsely Vegetated Concave Surface (B8)       Prost-Heave Rummocks (D7)       Sturface Water Present?       Yes         Vater Table Present?       Yes       No       Depth (inches):       V         Saturation Present?       Yes       No       Depth (inches):       No         (includes capillary fringe)       Depth (inches):       V       No       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       No       No		. ,				-	-	
						-	•	
		. ,						
Field Observations:         Surface Water Present?       Yes X       No Depth (inches):			magery (B					
Surface Water Present?       Yes       No       Depth (inches):       IV         Water Table Present?       Yes       No       Depth (inches):       Wetland Hydrology Present?         Saturation Present?       Yes       No       Depth (inches):       Wetland Hydrology Present?       Yes       X       No         (includes capillary fringe)       Depth (aerial photos, previous inspections), if available:       Ves       X       No	Sparsely	Vegetated Concave	e Surface (	B8)				
Surface Water Present?       Yes No Depth (inches):         Water Table Present?       Yes No Depth (inches):         Saturation Present?       Yes No Depth (inches):         (includes capillary fringe)       Wetland Hydrology Present? Yes No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Field Obser	vations:	~ *			11		
Saturation Present? Yes <u>No</u> Depth (inches): <u>Yes</u> Wetland Hydrology Present? Yes <u>No</u> (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Surface Wat	er Present? Y	es <u>×</u>	No Depth (in	ches):	· 、		
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Water Table	Present? Y	es	No Depth (in	ches):			$\sim$
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			es 🔀	No Depth (in	ches):	0/1	Wetl	and Hydrology Present? Yes <u>X</u> No
				onitoring well periol	nhotos pr	-vioue in	spections)	if available:
Remarks:	Describe I/e	Conded Data (Stredill	gauye, III	ormorning wen, aeriar j	prioros, pre		specifons),	n avanasio.
	Remarks							
	. tomamo.							

WETLAND DETERMINATION DATA FOR	M – Western Mountains, Valleys, and Coast Region 170 up
Project/Site: Humboldt Wind Energy Project	City/County: <u>Humboldt</u> Sampling Date: <u>HIH/18</u>
Applicant/Owner: HUMDOIDT VVIND, LLC	State: CA Sampling Point: SOI Up
Investigator(s): S. Creer A Sacci	Section Township Range
Landform (hillslope, terrace, etc.): Millslope youd ( A	Local relief (concave, convex, none) Slope (%):
Subregion (LRR): <u>A: Northwest Forests and Coast</u> Lat: -12	24.052213 Long: 40.399036 Datum:
Soil Map Unit Name: 575 Canvecreet-Sproulish	Reduction Complex 50.7 NWI Slassification: None
Are climatic / hydrologic conditions on the site typical for this time of ye	
	disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally pro	1
	sampling point locations, transects, important features, etc.
	sampling point locations, transects, important leatures, etc.
Hydrophytic Vegetation Present?       Yes No         Hydric Soil Present?       Yes No	Is the Sampled Area
Wetland Hydrology Present? Yes No 🗡	within a Wetland? Yes <u>No</u>
Remarks: Sel communits on wette	ind point=roadsid
Y	i and i and i and i and i
VEGETATION – Use scientific names of plants.	
Absolute	Dominant Indicator Dominance Test worksheet:

Tree Chestury (Dist)	Absolute		nt Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size	<u>% Cover</u>	Species	<u>? Status</u>	Number of Dominant Species	
		******		That Are OBL, FACW, or FAC:	(A)
2		•		Total Number of Dominant	
3				Species Across All Strata;	(B)
4.					_ (=)
		= Total C		Percent of Dominant Species	
Sapling/Shrub Stratum (Plot size;)		10tai C	over	That Are OBL, FACW, or FAC:	(A/B)
1				Prevalence Index worksheet:	
2				Total % Cover of: Multiply by:	
				OBL species x 1 =	
3		·		FACW species x 2 =	
4				FAC species x 3 =	
5				FACU species x 4 =	1
Herb Stratum (Plot size: M. diameter	·	= Total C	over	UPL species x 5 =	
1 Aabostis pallons	25	$\mathcal{A}$	()P)	Column Totals: (A)	1
2. Hipochaeria radicata	<u> </u>	<u> </u>	FACI		
	7		- 1.100	Prevalence Index = B/A =	
3	<u> </u>		<u>i</u>	Hydrophytic Vegetation Indicators:	
4				1 - Rapid Test for Hydrophytic Vegetation	
5				2 - Dominance Test is >50%	
6				3 - Prevalence Index is ≤3.0 <sup>1</sup>	
7				4 - Morphological Adaptations <sup>1</sup> (Provide sur	oporting
8				data in Remarks or on a separate sheet	
9				5 - Wetland Non-Vascular Plants <sup>1</sup>	
10				Problematic Hydrophytic Vegetation <sup>1</sup> (Expla	uin)
11				<sup>1</sup> Indicators of hydric soil and wetland hydrology	· ·
			·	be present, unless disturbed or problematic.	
Woody Vine Stratum (Plot size:)	30	= Total Co	ver		
1. RUDUS UCSIMUS	(0)	$\checkmark$	FACIL		
			$-\frac{1}{2}$	Hydrophytic Vegetation	Ì
۷			·	Present? Yes No	
% Bare Ground in Herb Stratum $20$		= Total Co	ver		
Remarks:					

Sampling Point:

170 up

Ŋ

Profile Des	cription: (Describe	e to the depth	needed to document	the indicator or co	onfirm the abs	sence of indicators.)
Depth	Matrix		Redox Fe	atures		Deverte
(inches)	Color (moist)	%	Color (moist)	<u>% Type<sup>1</sup> Lc</u>	<u>cc<sup>2</sup> Textu</u>	
0-10	104R 5/3	199		12/00/00/00/00/00/00/00/00/00/00/00/00/00	<u> </u>	
<u></u>						
					4.	
	· · · · · · · · · · · · · · · · · · ·					
				<u> </u>		
						<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
<sup>1</sup> Type: C=C	Concentration, D=De	pletion, RM=F	Reduced Matrix, CS=Co	overed or Coated Sa	ano Grains. In	dicators for Problematic Hydric Soils <sup>3</sup> :
			RRs, unless otherwis	e noteu.)		2 cm Muck (A10)
Histoso		_	Sandy Redox (S5)	1		Red Parent Material (TF2)
	ipipedon (A2) listic (A3)		Stripped Matrix (S6 Loamy Mucky Mine			Very Shallow Dark Surface (TF12)
	en Sulfide (A4)	· _	Loamy Gleyed Mati			Other (Explain in Remarks)
	ed Below Dark Surfa		Depleted Matrix (F3			
	ark Surface (A12)		Redox Dark Surface		<sup>3</sup> lr	ndicators of hydrophytic vegetation and
	Mucky Mineral (S1)		Depleted Dark Surf			wetland hydrology must be present,
	Gleyed Matrix (S4)		Redox Depressions	(F8)		unless disturbed or problematic.
Restrictive	Layer (if present):	. 5				
Туре:	grav	<u>ez</u>				· · · · · · · · · · · · · · · · · · ·
Depth (ii	nches): ( <u>a</u> _(				Hydri	ic Soil Present? Yes No
Remarks:				4		
	no ev.	Euro	of My	dric sai	1 <	
		( Inter	, 0- 1-0	- · · · · ·	1.)	
		·				
HYDROLO	DGY					
Wetland H	ydrology Indicator	s:				··· ·
Primary Inc	licators (minimum o	f one required:	check all that apply)			Secondary Indicators (2 or more required)
Surface	e Water (A1)		Water-Stained	Leaves (B9) ( <b>exc</b> e	pt	Water-Stained Leaves (B9) (MLRA 1, 2,
·	Vater Table (A2)		MLRA 1, 2	, 4A, and 4B)		4A, and 4B)
	tion (A3)		Salt Crust (B1	1)		Drainage Patterns (B10)
1	Marks (B1)		Aquatic Invert	ebrates (B13)		Dry-Season Water Table (C2)
	ent Deposits (B2)		Hydrogen Sul	fide Odor (C1)		Saturation Visible on Aerial Imagery (C9)
	eposits (B3)		Oxidized Rhiz	ospheres along Livi	ng Roots (C3)	Geomorphic Position (D2)
	/lat or Crust (B4)		Presence of F	educed Iron (C4)		Shallow Aquitard (D3)
	eposits (B5)		Recent Iron R	eduction in Tilled So	oils (C6)	FAC-Neutral Test (D5)
	e Soil Cracks (B6)		Stunted or Str	essed Plants (D1) (I	LRR A)	Raised Ant Mounds (D6) (LRR A)
	tion Visible on Aeria	al Imagery (B7	) Other (Explain	n in Remarks)		Frost-Heave Hummocks (D7)
	ely Vegetated Conca					
Field Obse	ervations:				[	
Surface Wa	ater Present?	YesN	lo Depth (inche	s):		
ê.	le Present?		lo Depth (inche			$\backslash$
Saturation			lo Depth (inche		Wetland Hy	drology Present? Yes No
(includes c	apillary fringe)					
Describe R	Recorded Data (strea	am gauge, mo	nitoring well, aerial pho	tos, previous inspec	ctions), if availa	able:
Remarks:		r*1				
	Noe	VI Len	L NP 1.	, Alamila,	a	
			ie of h	Merria	14	
				$\cup$	1	

WETLAND DETERMINATION DATA FOR	M – Western Mountair	ns, Valleys, and	d Coast Region	174a up
Project/Site: Humboldt Wind Energy Project	City/County: <u>Humboldt</u>	· • • •	Sampling Date:	7/18
Applicant/Owner: Humboldt Wind, LLC		State: CA	_ Sampling Point:	
Investigator(s): <u>S.CYLON</u> R. SOCC	Section, Township, Range: _	~~		<u> </u>
Landform (hillslope, terrace, etc.):	Local relief (concave, conve	(, none):)	Slope (	%): 1-2
Subregion (LRR): <u>A: Northwest Forests and Coast</u> Lat: -12	4.029817 Lon	g: 40.43840	0 Datum: _	
Soil Map Unit Name: 151-Grizzlyreek-Chaddcreet wmf	lex, 2-9% slopes	NWI classifie	cation: <u>None</u>	
Are climatic / hydrologic conditions on the site typical for this time of ye	ar? Yes No	(If no, explain in F	Remarks.)	$\mathbf{N}$
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norm	al Circumstances"	present? Yes	NoX
Are Vegetation, Soil, or Hydrology naturally pro		, explain any answe	ers in Remarks.)	1
SUMMARY OF FINDINGS – Attach site map showing	sampling point locat	ions, transects	s, important featu	ires, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes No Yes No Yes No	Is the Sampled Area within a Wetland?	Yes No
Remarks: Heavily c	2 isturbed; scrape	ed, graded,	berns created

# VEGETATION – Use scientific names of plants.

	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species? Status	Number of Dominant Species $3^{\circ}$
1			That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3.			Species Across All Strata: (B)
4			Percent of Dominant Species
		= Total Cover	Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)			Prevalence Index worksheet:
1			Total % Cover of: Multiply by:
2			OBL species x 1 =
3.			FACW species x 2 =
4	<u> </u>		FAC species x 2
5	_		FACU species x 4 =
1. 11 toni		= Total Cover	UPL species x 5 =
Herb Stratum (Plot size: Im diameter	25	Y FACW	Column Totals:
1. Junius orcidental	22		
2. Menther DUTCONIA	<u> 20</u>	V OBL	Prevalence Index = B/A =
3. Festoca annainaden	5	N FAC	Hydrophytic Vegetation Indicators:
4. Phalavis aquatica	<u> </u>	N FACU	1 - Rapid Test for Hydrophytic Vegetation
5. Denis arrensis	10	N UPL	X 2 - Dominance Test is >50%
6. HULLUS KINGTUS	30	J_FAC	3 - Prevalence Index is ≤3.0 <sup>1</sup>
7			<ul> <li>4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)</li> </ul>
8			5 - Wetland Non-Vascular Plants <sup>1</sup>
9			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
11	100	= Total Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)	105	_= Total Cover	
1			Hydrophytic
2		-	Vegetation
۲		= Total Cover	Present? Yes No
% Bare Ground in Herb Stratum			
Demerke	γΛ Λ		•
Remarks. Hyrosphurtic Veg prose			
Ť		2	
		? 	
LIC Army Corps of Engineers			Western Mountains, Valleys, and Coast - Version 2.0

Sampling Point: 330 v

Profile Description: (Describe to the depth needed to document the indicator or confir	in the absence of indicators.
Depth Matrix Redox Features	_
(inches) Color (moist) % Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	
0-12 104K 1/2 100	Sandy Jan
	J
· · ·	
Tuno: C=Concentration D=Depletion DM=Deduced Metric OC Occurred and a locate Locate	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand C Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Brains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :
	-
Histosol (A1)     Sandy Redox (S5)       Histic Epipedon (A2)     Stripped Matrix (S6)	2 cm Muck (A10) Red Baront Material (TE2)
Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1	Red Parent Material (TF2) ) Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11) Depleted Matrix (F3)	
Thick Dark Surface (A12) Redox Dark Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4) Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):	
Туре:	X
Depth (inches):	Hydric Soil Present? Yes No /
Remarks:	
No redox or other evide	me of he la
	nce of hydric
1 $50 $ $NS$	
HYDROLOGY	
Wetland Hydrology Indicators:	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Surface Water (A1)       Water-Stained Leaves (B9) (except	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Surface Water (A1)       Water-Stained Leaves (B9) (except         High Water Table (A2)       MLRA 1, 2, 4A, and 4B)	
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> </ul>
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) oots (C3) Geomorphic Position (D2)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> </ul>
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> </ul>
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) otots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) 60 FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) 60 FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

WETLAND DETERMINATION D	ATA FORM -	- Western Mo	ountains, Valleys, and	Coast Region	wet
Project/Site: Humboldt Wind Energy Project				1 1	$d^{-}$
Applicant/Owner: <u>Humboldt Wind, LLC</u>	Oity	roounty: <u>marris</u>	State: CA	Sampling Date: 1/2/1	1
Investigator(s): <u>S. Creey</u> , leticia	Maris so	tion Township f		Sampling Point: <u>7094</u>	$\bigvee$
Landform (hillslope, terrace, etc.):		al a l'institution de la company	kange:	100 m	~
Subregion (LRR): A: Northwest Forests and Coast			e, convex( none):)	Slope (%):(	<u>)                                    </u>
Subregion (LRR): <u>A: Northwest Forests and Coast</u>	Lat: <u>-124.0</u>	<u>JS0097</u>	Long:40.45796	Datum:	
Soil Map Unit Name Sy izzly creek-Chard	Cell Com	pub a sel /	NWI classifica	ition: <u>NORC</u>	
Are climatic / hydrologic conditions on the site typical for the	is time of year?	Yes No	(If no, explain in Re	marks.)	
Are Vegetation, Soil, or Hydrology	significantly dist				
Are Vegetation, Soil, or Hydrology			needed, explain any answers	in Remarks.)	
SUMMARY OF FINDINGS – Attach site map	showing sa	mpling point	locations, transects,	important features	etc
Hydrophytic Vegetation Present? Yes X					
Hydric Soil Present? Yes X N		Is the Sample	And a second sec		
Wetland Hydrology Present? Yes N Remarks:	o	within a Wetla	and? Yes	<u> </u>	
Remarks:		······································			
VEGETATION – Use scientific names of plan	ts.				
Tree Stratum (Blat aire)		minant Indicator	Dominance Test works	neet:	
		ecies? Status	Number of Dominant Spe	cies $\uparrow$	
1 2	· •		That Are OBL, FACW, or	FAC: (A)	•)
3.			Total Number of Dominar		
4			Species Across All Strata	: (B)	.)
Sapling/Shrub Stratum (Plot size:)	= To	otal Cover	Percent of Dominant Spe That Are OBL, FACW, or	FAC: (A/	./B)
1.			Prevalence Index works		
2/			Total % Cover of:		
3			OBL species		
4	<u> </u>		FACW species		
0			FAC species		
Herb Stratum (Plot size:)	= To	tal Cover		x 4 = x 5 =	
1. Favisetuminitelimateri	55 >	1 FACW		(A)(B	3)
2. TOKUS LAMATUS	20 V	+AC			-) 
3. K Phalaristaquatica	12 N	PAYU	Prevalence Index = Hydrophytic Vegetation		
4. Cirsium anjense	5 N	FACIT	) 1 - Rapid Test for Hyd		
5. teucanthemin whate	t A	I FACU	2 - Dominance Test is	-	
6. Dipsacus fullonum	<u> </u>	1 FAC	3 - Prevalence Index is		
7. Juncus patens	<u>_/6 _^</u>	J FACW	4 - Morphological Ada		na
9.	<u> </u>		data in Remarks or	on a separate sheet)	''y
			5 - Wetland Non-Vasc		
10			Problematic Hydrophy		
	$\overline{7}$		<sup>1</sup> Indicators of hydric soil an be present, unless disturbe	d wetland hydrology must	
Woody Vine Stratum (Plot size:)	<u>/                                    </u>	al Cover			
2.			Hydrophytic		
1/0	· · · · ·		Vegetation Present? Yes	< No	
% Bare Ground in Herb Stratum()	= +ota	l Cover		<u> </u>	
Remarks:					

S	0	I	L
---	---	---	---

174 wet

SOIL	· · · · · · · · · · · · · · · · · · ·	a abaanaa of indicators )
Profile Description: (Describe to the dep	th needed to document the indicator or confirm t	ne absence of mulcators.)
Depth <u>Matrix</u> (inches) <u>Color (moist) %</u>	<u>Redox Features</u> <u>Color (moist)</u> <u>%</u> <u>Type<sup>1</sup></u> Loc <sup>2</sup>	Texture Remarks
0-10 107R 3/2 93	757R 5/85 C M 5	silty clay loan
		ins. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
<sup>1</sup> Type: C=Concentration, D=Depletion, RV	=Reduced Matrix, CS=Covered or Coated Sand Gra	Indicators for Problematic Hydric Soils <sup>3</sup> :
Hydric Soil Indicators: (Applicable to al Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11)	<ul> <li>Sandy Redox (S5)</li> <li>Stripped Matrix (S6)</li> <li>Loamy Mucky Mineral (F1) (except MLRA 1)</li> <li>Loamy Gleyed Matrix (F2)</li> <li>Depleted Matrix (F3)</li> <li>Redox Dark Surface (F6)</li> </ul>	<ul> <li>2 cm Muck (A10)</li> <li>Red Parent Material (TF2)</li> <li>Very Shallow Dark Surface (TF12)</li> <li>Other (Explain in Remarks)</li> <li><sup>3</sup>Indicators of hydrophytic vegetation and</li> </ul>
<ul> <li>Thick Dark Surface (A12)</li> <li>Sandy Mucky Mineral (S1)</li> <li>Sandy Gleyed Matrix (S4)</li> </ul>	Depleted Dark Surface (F7) Redox Depressions (F8)	wetland hydrology must be present, unless disturbed or problematic.
Restrictive Layer (if present): Type:		Hydric Soil Present? Yes 🗶 No
Remarks: MM2VIC SOILF, F	resent	

## HYDROLOGY

Wetland Hydrology Indicators:	e la la la disetere (2 er more required)
Primary Indicators (minimum of one required; check all that apply)	Shallow Aquitard (D3) FAC-Neutral Test (D5)
Field Observations:         Surface Water Present?       Yes No Depth (inches):         Water Table Present?       Yes Depth (inches):	*

WETLAND DETERMINATION DATA FOR	RM – 1	Western Mou	untains, Valleys, an	d Coast Regior	174 up
Project/Site: Humboldt Wind Energy Project	City/C	County: Humbo	ldt	Sompling Data:	8/2/14
			State: <u>CA</u>		/ / /
Investigator(s): S. Creer. L. Morris	Secti	on Township Br			
Landform (hillslope, terrace, etc.): <u>terrace</u>	Jech	un, rownsnip, Ra	ange.		
Subragian (IIIBD): A: Northwoot Ecropta and Const. ( )		relief (concave,	convex, none):	Slope	e (%):
Subregion (LRR): <u>A: Northwest Forests and Coast</u> Lat: <u></u>	124.0	2 1 6 72 14	Long:40.4380	08 Datum	1:
Soil Map Unit Name: Grizzlycreet Chaddoreek a					
Are climatic / hydrologic conditions on the site typical for this time of y					
Are Vegetation, Soil or Hydrology significantly	/ distur	bed? Are	"Normal Circumstances" p	present? Yes	No
Are Vegetation, Soil, or Hydrology naturally p	oblema	atic? (If n	eeded, explain any answe	rs in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing	g san	pling point	ocations, transects	, important fea	tures, etc.
Hydrophytic Vegetation Present? Yes No X					
Hydric Soil Present? Yes No X		Is the Sampleo within a Wetla		$\sim$	
Wetland Hydrology Present? Yes No _X Remarks:					
remars.					
				Annan	
VEGETATION – Use scientific names of plants.					
		inant Indicator cies? Status	Dominance Test work		
1	Spec	Jes Status	Number of Dominant Sp That Are OBL, FACW, o		(4)
2				~	(A)
3			Total Number of Domin Species Across All Stra		
4			opecies Across Air Stra	ia	(B)
	= Tot	al Cover	Percent of Dominant Sp That Are OBL, FACW, o		
Sapling/Shrub Stratum (Plot size:)			Prevalence Index work		(A/B)
1			Total % Cover of:		
2			OBL species		
3	· ·····		FACW species		
4			FAC species		1
J	·		FACU species		
Herb Stratum (Plot size: I'M robits	_ = 100	al Cover		x 5 =	
1. Leticanthemum wi30	$\gamma$	FACU	Column Totals:	(A)	(B)
2. Phalans aquatica 25	Y	FACU	Prevalence Index	= B/A =	
3. Holevs langtes 12		PAC	Hydrophytic Vegetatio		
4. ROBUS UNDIALUS 2	·	FACU	1 - Rapid Test for H		on
5. Equisetun tilma f		FAC	2 - Dominance Test		
6			3 - Prevalence Inde	x is ≤3.0 <sup>1</sup>	
7			4 - Morphological A	daptations <sup>1</sup> (Provide	supporting
8				or on a separate sh	leet)
9			5 - Wetland Non-Va		
10			Problematic Hydrop		
11			<sup>1</sup> Indicators of hydric soil be present, unless distu	and wetland hydrolo	ogy must
Woody Vine Stratum (Plot size:)	_= Tota	l Cover	be present, unless distu		
1			Hydrophytic Vegetation	),	
		I Cover		No 🖄	
% Bare Ground in Herb Stratum 36	- 10la	Cover			N

Remarks:

Sampling Point: 7040

Depth (inches)       Matrix Color (moist)       Redox Features Color (moist)       Texture       Remarks         0-10       10
(inches)       Color (moist)       %       Type'       Loc"       Texture       Remarks         0-10       10       10       10       10       100 <td< td=""></td<>
Image:
Hype:       C=Concentration, D=Depletion, AW released on the wise noted.)       Indicators for Problematic Hydric Soils <sup>3</sup> :         Hydric Soil Indicators:       (Applicable to all LRRs, unless otherwise noted.)
Hype:       C=Concentration, D=Depletion, NW Notice         Hydric Soil Indicators:       (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Sandy Redox (S5)       2 cm Muck (A10)         Histic Epipedon (A2)       Stripped Matrix (S6)       Red Parent Material (TF2)         Black Histic (A3)       Loamy Mucky Mineral (F1) (except MLRA 1)       Very Shallow Dark Surface (TF12)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Depleted Matrix (F3)       3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       unless disturbed or problematic.         Restrictive Layer (if present):       Redox Depressions (F8)       unless disturbed or problematic.
Hype:       C=Concentration, D=Depletion, NW Notice         Hydric Soil Indicators:       (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Sandy Redox (S5)       2 cm Muck (A10)         Histic Epipedon (A2)       Stripped Matrix (S6)       Red Parent Material (TF2)         Black Histic (A3)       Loamy Mucky Mineral (F1) (except MLRA 1)       Very Shallow Dark Surface (TF12)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Depleted Matrix (F3)       3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       unless disturbed or problematic.         Restrictive Layer (if present):       Redox Depressions (F8)       unless disturbed or problematic.
Hype:       C=Concentration, D=Depletion, NW Notice         Hydric Soil Indicators:       (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Sandy Redox (S5)       2 cm Muck (A10)         Histic Epipedon (A2)       Stripped Matrix (S6)       Red Parent Material (TF2)         Black Histic (A3)       Loamy Mucky Mineral (F1) (except MLRA 1)       Very Shallow Dark Surface (TF12)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Depleted Matrix (F3)       3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       unless disturbed or problematic.         Restrictive Layer (if present):       Redox Depressions (F8)       unless disturbed or problematic.
Hype:       C=Concentration, D=Depletion, AW released on the wise noted.)       Indicators for Problematic Hydric Soils <sup>3</sup> :         Hydric Soil Indicators:       (Applicable to all LRRs, unless otherwise noted.)
Hype:       C=Concentration, D=Depletion, NW Notice         Hydric Soil Indicators:       (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Sandy Redox (S5)       2 cm Muck (A10)         Histic Epipedon (A2)       Stripped Matrix (S6)       Red Parent Material (TF2)         Black Histic (A3)       Loamy Mucky Mineral (F1) (except MLRA 1)       Very Shallow Dark Surface (TF12)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Depleted Matrix (F3)       3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       unless disturbed or problematic.         Restrictive Layer (if present):       Redox Depressions (F8)       unless disturbed or problematic.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils*:
Institution (A1)       County Products (esc)       Red Parent Material (TF2)         Histic Epipedon (A2)       Stripped Matrix (S6)       Very Shallow Dark Surface (TF12)         Black Histic (A3)       Loamy Mucky Mineral (F1) (except MLRA 1)       Very Shallow Dark Surface (TF12)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Depleted Matrix (F3)       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       unless disturbed or problematic.         Restrictive Layer (if present):       Redox Depressions (F8)       unless disturbed or problematic.
Restrictive Layer (if present):
Type: Depth (inches): Hydric Soil Present? Yes No
Bopti (indice):
Remarks:
HYDROLOGY
Wetland Hydrology Indicators: Secondary Indicators (2 or more required)

Primary Indicators (minimum	<u>of one required; (</u>	check all that apply)	Secondary indicators (2 or more required)
Surface Water (A1)     High Water Table (A2)     Saturation (A3)     Water Marks (B1)     Sediment Deposits (B2)     Drift Deposits (B3)		<ul> <li>Water-Stained Leaves (B9) (e: MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> </ul>	
Algal Mat or Crust (B4) <ul> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Surface Soil Cracks (B6)</li> <li>Inundation Visible on Ae</li> <li>Sparsely Vegetated Cor</li> </ul>	rial Imagery (B7)		d Soils (C6) FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Water Table Present? Saturation Present?	Yes No	Depth (inches):           Depth (inches):           Depth (inches):           Depth (inches):	_
(includes capillary fringe) Describe Recorded Data (st Remarks:	eam gauge, mon	itoring well, aerial photos, previous ins	spections), if available:

oject/Site: Humboldt Wind Energy Proje	<u>ct</u>	City/County: <u>Humbo</u>	ldt	_ Sampling Date: <u> </u>
plicant/Owner: <u>Humboldt Wind, LLC</u>		•	State: <u>CA</u>	_ Sampling Point: 703W
estigator(s): <u>S. Creer</u> L. Morr				
dform (hillslope, errace, etc.):				
region (LRR): <u>A: Northwest Forests and</u>			-	
Map Unit Name: Orizzlycree4-Ch				
climatic / hydrologic conditions on the site typi		£ \$		
Vegetation, Soil, or Hydrology				
Vegetation $\underline{N}$ , Soil $\underline{N}$ , or Hydrology				
MMARY OF FINDINGS – Attach sit				
		sampling point	locations, transect	s, important features, et
	No No	Is the Sample	d Area	
	No	within a Wetla	nd? Yes	No
marks: Riparian wetlan	Jalona c	Accessister	na with any	inimal havelaardu
marks: Riparian wetlan Nyer; abrupt a in veg	from adj	acent up	and; topo -	- drainage patte
GETATION – Use scientific names			- 8	V F
	Absolute		Dominance Test wor	ksheet:
<u>e Stratum</u> (Plot size:) A	2 Cover	<u>Species?</u> <u>Status</u>	Number of Dominant That Are OBL, FACW	
Acer magrophyller	~ <u>15</u>	Y FACU		
Impellularia taliforn		N FAC	Total Number of Domi Species Across All Str	and the second s
	<u>40</u>	_ = Total Cov <b>er</b>	Percent of Dominant S That Are OBL, FACW	
<u>pling/Shrub Stratum</u> (Plot size: Salix sitchousis		Y EACUT	Prevalence Index wo	rksheet:
Barcharis Dillaris		Y DDL	Total % Cover of:	Multiply by:
	)			x 1 =
				x 2 =
				x 3 =
in in the indi	15 75	_ = Total Cover		x 4 = x 5 =
<u>rb Stratum</u> (Plot size: 1 M rg. 21 Urtica divica	<u> </u>	V FAC		(A) (B)
Polysticum munit	140	FACU	,	
			Prevalence Inde Hydrophytic Vegetat	x = B/A =
				Hydrophytic Vegetation
· · · · · · · · · · · · · · · · · · ·			2 - Dominance Te	
			3 - Prevalence Inc	
			4 - Morphological	Adaptations <sup>1</sup> (Provide supporting (s or on a separate sheet)
· · · · · · · · · · · · · · · · · · ·			5 - Wetland Non-\	· . · ·
				phytic Vegetation <sup>1</sup> (Explain)
			<sup>1</sup> Indicators of hydric so be present, unless dist	il and wetland hydrology must urbed or problematic.
ody Vine Stratum (Plot size:	)	_= Total Cover		·
Toxicodendron divers	lobum 40	Y FAC	Hydrophytic Vegetation	
Para Ground in U to Ground	40	_= Total Cover	Present? Ye	es No
Bare Ground in Herb Stratum O			. ant thra	

Sampling Point: \_\_\_\_\_\_3(

180 wet

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Depth Matrix	Red	ox Features			
nches) Color (moist)	% Color (moist)	%Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
				·····	
				ains <sup>2</sup> l coation: P	_=Pore Lining, M=Matrix.
ype: C=Concentration, D=Deple dric Soil Indicators: (Applicat			eu Sanu Gr		oblematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox			2 cm Muck (#	×10)
Histic Epipedon (A2)	Stripped Matri			Red Parent N	
Black Histic (A3)		Mineral (F1) (exce	ot MLRA 1)		Dark Surface (TF12)
Hydrogen Sulfide (A4)	Loamy Gleyed			Other (Expla	n in Remarks)
_ Depleted Below Dark Surface				<sup>3</sup> Indiantara of hud	rophytic vegetation and
_ Thick Dark Surface (A12)	Redox Dark S			•	logy must be present,
_ Sandy Mucky Mineral (S1) _ Sandy Gleyed Matrix (S4)	Depleted Dark				ed or problematic.
estrictive Layer (if present):					
Туре:		·			
Depth (inches):	i			Hydric Soil Present	? Yes No
emarks: No pit 2	ugj feature.	naccessid	2 206	to dense	? Yes <u>No</u> No <u>No</u> Poissn Oak

Drimony Indicators (minimum of one required: check	(all that apply)	Secondary Indicators (2 or more required)
Primary Indicators (minimum of one required; check		· · · · · · · · · · · · · · · · · · ·
	_ Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3)	_ Salt Crust (B11)	🔀 Drainage Patterns (B10)
Water Marks (B1)	_ Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	_ Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	_ Oxidized Rhizospheres along Living Roots (C	3) Geomorphic Position (D2)
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5)	_ Recent Iron Reduction in Tilled Soils (C6)	FAC-Neutral Test (D5)
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (LRR A)	Raised Ant Mounds (D6) (LRR A)
	_ Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface (B8)		
Field Observations:		
Surface Water Present? Yes No	′ Depth (inches):	
Water Table Present? Yes No _>	C Depth (inches):	
Saturation Present? Yes No	Control Depth (inches): Wetland H	Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring	g well, aerial photos, previous inspections), if ava	ailable:
Remarks: focested rizanian	aneu situated on toe c	of slope from drainage
1 100		

WETLAND DETERMINATION DA		M – West	tern Mou	ntains, Valleys, ar	nd Coast Region	180 up
Project/Site: Humboldt Wind Energy Project		City/County	. Humboli	dt	Sampling Date:	12/18
Applicant/Owner: Humboldt Wind, LLC		onyrodunty		State: <u>CA</u>	_ Camping Date:	2/12/00
Investigator(s): <u>S. Creer</u> L. Morris						rustor.
Landform (hillslope, ferrace, etc.):			a share of the second			10() J
Subregion (LRR): <u>A: Northwest Forests and Coast</u>						
Soil Map Unit Name: <u>Grizzlycreet-Chadder</u>		100				
Are climatic / hydrologic conditions on the site typical for this	s time of ye	ar? Yes	No	(If no, explain in	Remarks.)	
Are Vegetation, Soil, or Hydrology s	ignificantly	disturbed?	Are "	Normal Circumstances"	present? Yes	No
Are Vegetation, Soil, or Hydrology n	aturally pro	blematic?	(If ne	eded, explain any answ	ers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map	\ .#	samplin	g point l	ocations, transect	s, important fea	tures, etc.
Hydrophytic Vegetation Present?     Yes N       Hydric Soil Present?     Yes N	o_ <u>×</u> _	1	ie Sampled in a Wetlar	Area Id? Yes	No <u>×</u>	
Wetland Hydrology Present? Yes N					100	
Remarks: UPland Sample are VEGETATION – Use scientific names of plan						
	Absolute	Dominant	Indicator	Dominance Test wor	ksheet:	]
Tree Stratum (Plot size:)		Species?		Number of Dominant S		
1		·		That Are OBL, FACW		(A),
2				Total Number of Domi	inant 4	
3	-			Species Across All Str	rat <b>a</b> :	(B)
4	· ·····	= Total Co	ver	Percent of Dominant S That Are OBL, FACW		(A/B)
Sapling/Shrub Stratum (Plot size: Motor Padi 1. Rubus Ursinus	JS,	×7	FACU	Prevalence Index wo		(/ ב)
		.7	1700		Multiply k	ov:
2			······	OBL species		
3				FACW species		
4		·		FAC species		
5		= Total Co		FACU species	x 4 =	
Herb Stratum (Plot size: I Meter) radius			vei	UPL species	x 5 =	
1. Briza maxima	40	<u> </u>	UPL	Column Totals:	(A)	(B)
2. Navarretia squarvosa	15_	<u> </u>	FACU	Prevalence Inde	x = B/A =	
3. Zeltnera muchlenbergii		_N	FACW	Hydrophytic Vegetat		
4. Junais putonis		$\mathcal{N}$	FACW	1 - Rapid Test for	Hydrophytic Vegetati	on
5				2 - Dominance Te	st is >50%	
6				3 - Prevalence Inc	lex is ≤3.0 <sup>1</sup>	
7				4 - Morphological dat <b>a</b> in Remark	Adaptations <sup>1</sup> (Provide <s a="" on="" or="" separate="" sh<="" td=""><td>e supporting neet)</td></s>	e supporting neet)
9				5 - Wetland Non-\		
10				Problematic Hydro	ophytic Vegetation <sup>1</sup> (E	Explain)
11	1.7			<sup>1</sup> Indicators of hydric so be present, unless dist		
Woody Vine Stratum (Plot size: 1 Meter Main	<u> </u>	= Total Cov		,,		
1. Toxicodendron diversiblem	/O	N	FAC	Hudrophytic		
2				Hydrophytic Vegetation	X	*
	10	= Total Cov	rer	Present? Ye	esNo	-
<u>% Bare Ground in Herb Stratum</u>						

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amplina		A	12/	ŧ
ampling	Point	10	hall	۲

		to the depth	needed to document the indicator or confirm	ause	inter of materiality
Depth	Matrix Color (moist)	%	Redox Features           Color (moist)         %         Type <sup>1</sup> Loc <sup>2</sup>	Texture	e Remarks
·····	199			Texture	<u> </u>
56 10	542 5/6	100 -			Noredox
			· · · · · · · · · · · · · · · · · · ·		
					· · · · · · · · · · · · · · · · · · ·
ype: C=Conce	entration, D=Depl	letion, RM=R	educed Matrix, CS=Covered or Coated Sand G	rains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
			RRs, unless otherwise noted.)		cators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1	)		_ Sandy Redox (S5)		2 cm Muck (A10)
_ Histic Epipe	don (A2)		_ Stripped Matrix (S6)		Red Parent Material (TF2)
_ Black Histic		_	Loamy Mucky Mineral (F1) (except MLRA 1)		Very Shallow Dark Surface (TF12)
Hydrogen S			_ Loamy Gleyed Matrix (F2)		Other (Explain in Remarks)
	low Dark Surface	e (A11)	_ Depleted Matrix (F3)	31	instant of hudson hutin venetation and
	Surface (A12)		_ Redox Dark Surface (F6) _ Depleted Dark Surface (F7)		icators of hydrophytic vegetation and vetland hydrology must be present,
	ky Mineral (S1) ed Matrix (S4)	·····	_ Redox Depressions (F8)		inless disturbed or problematic.
	er (if present):				
Type:	1. 100	ravel			
	<u> </u>	1			
Depth (inches	s): <u>() n</u>	M.C.S.	- II, rocky	Hydric	Soil Present? Yes No
Depth (inches Remarks: W	s): <u>(int</u> ngineer	M.C.S.	- Il, rocky	Hydric	Soil Present? Yes No
Depth (inches Remarks: W YDROLOGY	s): <u>(ant</u> ngineer	M.C.S.	ll, rocky	Hydric :	Soil Present? Yes No X
Depth (inches Remarks: W YDROLOGY Vetland Hydrol	s): <u>(1.176</u> nginler logy Indicators:	ed Pi			
Depth (inches Remarks: W YDROLOGY Vetland Hydrol Primary Indicato	s): <u>(and</u> nginler logy Indicators: rs (minimum of o	ed Pi	check all that apply)	<u>s</u>	econdary Indicators (2 or more required)
Depth (inches temarks: C C C C C C C C C C C C C C C C C C C	s):(1.17 A ginler logy Indicators: rs (minimum of o ter (A1)	ed Pi	<u>check all that apply)</u> Water-Stained Leaves (B9) ( <b>except</b>	<u>s</u>	econdary Indicators (2 or more required) Water-Stained Leaves (B9) ( <b>MLRA 1, 2</b> ,
Depth (inches emarks: W /DROLOGY /etland Hydrol rimary Indicato _ Surface Wa' _ High Water	s):(1.100 A Ginler logy Indicators: rs (minimum of o ter (A1) Table (A2)	ed Pi	<u>check all that apply)</u> Water-Stained Leaves (B9) ( <b>except</b> MLRA 1, 2, 4A, and 4B)	<u>s</u>	econdary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Depth (inches emarks: W /DROLOGY /etland Hydrol rimary Indicato _ Surface Waa _ High Water _ Saturation ( <i>i</i>	s):(I	ed Pi	<u>check all that apply)</u> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11)	<u>s</u>	econdary Indicators (2 or more required) Water-Stained Leaves (B9) ( <b>MLRA 1, 2,</b> <b>4A, and 4B)</b> Drainage Patterns (B10)
Depth (inches emarks: W <b>'DROLOGY</b> <b>'etland Hydrol</b> rimary Indicato _ Surface Wa' _ High Water _ Saturation (, _ Water Marks)	s):(1.10 A Ginler logy Indicators: rs (minimum of o ter (A1) Table (A2) A3) s (B1)	ed Pi	<u>check all that apply)</u> <u>Water-Stained Leaves (B9) (except</u> <u>MLRA 1, 2, 4A, and 4B)</u> <u>Salt Crust (B11)</u> <u>Aquatic Invertebrates (B13)</u>	<u>S</u>	econdary Indicators (2 or more required) Water-Stained Leaves (B9) ( <b>MLRA 1, 2,</b> 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Depth (inches emarks: W /DROLOGY /etland Hydrol rimary Indicato Surface Water Saturation (, Water Marks Sediment D	s): A ginler logy Indicators: rs (minimum of o ter (A1) Table (A2) A3) s (B1) eposits (B2)	ed Pi	<u>check all that apply)</u> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	<u>S</u>	econdary Indicators (2 or more required) _ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) _ Drainage Patterns (B10) _ Dry-Season Water Table (C2) _ Saturation Visible on Aerial Imagery (C9
Depth (inches emarks: W /DROLOGY /etland Hydrol rimary Indicato Surface Wa' High Water Saturation (, Water Marks Sediment D Drift Deposi	s):(I = 10 A Ginler logy Indicators: rs (minimum of o ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3)	ed Pi	<u>check all that apply)</u> <u>Water-Stained Leaves (B9) (except</u> <u>MLRA 1, 2, 4A, and 4B)</u> <u>Salt Crust (B11)</u> <u>Aquatic Invertebrates (B13)</u> <u>Hydrogen Sulfide Odor (C1)</u> <u>Oxidized Rhizospheres along Living Ro</u>	<u>S</u>  	econdary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2)
Depth (inches emarks: W /DROLOGY /etland Hydrol rimary Indicato 	s): $(a + b)$ A Ginler logy Indicators: rs (minimum of o ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) Crust (B4)	ed Pi	<u>check all that apply)</u> <u>Water-Stained Leaves (B9) (except</u> <u>MLRA 1, 2, 4A, and 4B)</u> <u>Salt Crust (B11)</u> <u>Aquatic Invertebrates (B13)</u> <u>Hydrogen Sulfide Odor (C1)</u> <u>Oxidized Rhizospheres along Living Ro-</u> <u>Presence of Reduced Iron (C4)</u>	<u>S</u>  	econdary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3)
Depth (inches emarks: W /DROLOGY /etland Hydrol rimary Indicato Surface Wa' Surface W	s): $(a + b)$ A = (a + b) A =	ed Pi	<u>check all that apply)</u> <u>Water-Stained Leaves (B9) (except</u> <u>MLRA 1, 2, 4A, and 4B)</u> <u>Salt Crust (B11)</u> <u>Aquatic Invertebrates (B13)</u> <u>Hydrogen Sulfide Odor (C1)</u> <u>Oxidized Rhizospheres along Living Ro</u> <u>Presence of Reduced Iron (C4)</u> <u>Recent Iron Reduction in Tilled Soils (C</u>	S 	econdary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (inches emarks: W /DROLOGY /etland Hydrol rimary Indicato 	s):(1.100 A G i Alex Iogy Indicators: rs (minimum of o ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) Crust (B4) ts (B5) I Cracks (B6)	ne required;	<u>check all that apply)</u> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C Stunted or Stressed Plants (D1) (LRR 4	S 	econdary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Depth (inches emarks: W /DROLOGY /etland Hydrol rimary Indicato Surface Wat High Water Saturation (, Water Marks Sediment D Drift Deposit Algal Mat or Iron Deposit Surface Soi Inundation \	s): TGINEAT TGINEAT Togy Indicators: rs (minimum of o ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) TCrust (B4) ts (B5) I Cracks (B6) Visible on Aerial I	ne required;	<u>check all that apply)</u> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C Stunted or Stressed Plants (D1) (LRR A Other (Explain in Remarks)	S 	econdary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (inches emarks: //DROLOGY //DROLOGY //etland Hydrol rimary Indicato 	s): TGINEAT TGINEAT Togy Indicators: rs (minimum of o ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) Crust (B4) ts (B5) I Cracks (B6) /isible on Aerial I egetated Concave	ne required;	<u>check all that apply)</u> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C Stunted or Stressed Plants (D1) (LRR A Other (Explain in Remarks)	S 	econdary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Depth (inches temarks: <b>YDROLOGY</b> <b>Yetland Hydrol</b> <b>Primary Indicato</b> Surface Wa' High Water Saturation (A Water Marks Sediment D Drift Deposit Algal Mat or Iron Deposit Surface Soi Inundation N Sparsely Vetic ield Observati	s):(IA) A Ginler A G	magery (B7)	check all that apply)	S 	econdary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Depth (inches Remarks: YDROLOGY YDROLOGY Vetland Hydrol Primary Indicato Surface Water Saturation (A Water Marks Sediment Do Drift Deposit Algal Mat or Iron Deposit Surface Soit Inundation N Sparsely Ve Field Observati Burface Water P	s): Gynlei Gynlei Gynlei Gynlei Solution So	magery (B7) es No	check all that apply)	S 	econdary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Depth (inches Remarks: W YDROLOGY YDROLOGY Vetland Hydrol Primary Indicato Surface Water Saturation ( Water Marks Sediment D Drift Deposi Algal Mat or Iron Deposit Surface Soi Inundation N Sparsely Ve Field Observati Surface Water Pre	s): Gynleine Gynleine Gynleine Gynleine Solution Solu	magery (B7) e Surface (B8 es No es No	check all that apply)	ots (C3)	econdary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Depth (inches Remarks: YDROLOGY YDROLOGY Yetland Hydrol Primary Indicato Carimary Indicato Surface Water Saturation (A Sediment D Sediment D Drift Deposit Algal Mat or Iron Deposit Surface Soi Inundation N Sparsely Ve Field Observati Surface Water Present Saturation Present Present Pre	s): Gynlei Aginler Aginler (a) Aginler (b) (c) (c) (c) (c) (c) (c) (c) (c	magery (B7) e Surface (B8 es No es No es No	check all that apply)	S  ots (C3) 6) N) land Hydro	econdary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) blogy Present? Yes No
Depth (inches Remarks: CV YDROLOGY Yetland Hydrol Primary Indicato Surface Wa' High Water Saturation (A Sediment D Saturation (A Sediment D Drift Deposi Algal Mat or Iron Deposit Surface Soi Inundation V Sparsely Ve Field Observati Surface Water Present Saturation Present Satura	s): Gynlei Aginler Aginler (a) Aginler (b) (c) (c) (c) (c) (c) (c) (c) (c	magery (B7) e Surface (B8 es No es No es No	check all that apply)	S  ots (C3) 6) N) land Hydro	econdary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) blogy Present? Yes No

#### WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region 183 up Project/Site: Humboldt Wind Energy Project City/County: Humboldt Sampling Date: 07/19/22/8 Applicant/Owner: Humboldt Wind, LLC \_\_\_\_\_ State: <u>CA</u>\_\_\_\_ Sampling Point: <u>405</u>6 \_\_\_\_\_ Section, Township, Range: \_\_\_\_\_ Investigator(s): KHENRY ALOVELESS Landform (hillslope, terrace, etc.): \_\_\_\_\_\_ Local relief (concave, convex, none): \_\_\_\_\_\_ Slope (%): \_\_\_\_\_ Subregion (LRR): A: Northwest Forests and Coast\_Lat: -124.104262 Long: 40.453896 Datum: NWI classification: Soil Map Unit Name: \_\_ Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation $\underline{\mathcal{N}}_{}$ , Soil $\underline{\mathcal{N}}_{}$ , or Hydrology $\underline{\mathcal{N}}_{}$ significantly disturbed? Are "Normal Circumstances" present? Yes X No Are Vegetation $N_{,}$ Soil $N_{,}$ or Hydrology $N_{,}$ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes \_\_\_\_\_ No \_\_\_\_ Yes \_\_\_\_\_ No 📉 Is the Sampled Area Hydric Soil Present? Yes No X Wetland Hydrology Present? Yes No X within a Wetland? Yes \_\_\_\_\_ No \_ Remarks: roadside drain wetland VEGETATION – Use scientific names of plants. Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: \_\_\_\_\_) <u>% Cover Species?</u> Status Number of Dominant Species 1. \_\_\_\_\_ That Are OBL, FACW, or FAC: (A) 2. Total Number of Dominant 3 З. (B) Species Across All Strata:

4					. (- /
		= Total C	Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: 0,3	(A/B)
Sapling/Shrub Stratum (Plot size:)	5	Ý	FAC	Prevalence Index worksheet:	
1. Rubus insinus				Total % Cover of:Multiply by:	
2				OBL species2 x 1 =2	
3				FACW species x 2 =	
4			······	FAC species $ O  \times 3 = \frac{20}{20}$	_
5 50=2.5 20=1.				FACU species $5$ $x = 20$	
-	<u>5</u>	_ = Total C	Cover	UPL species $2\Im$ $x = 70$	
Herb Stratum (Plot size:) 1. Plantago lanceotata	5	N	FACU	Column Totals: $31$ (A) $152$	 (B)
2. Gynoserus echinatus			UPL	Prevalence Index = $B/A = \frac{4}{1}$	_ (-/
3. Aira praecox		- <del>- \</del>	uel.	Hydrophytic Vegetation Indicators:	
4. Holais Lanatus		N	FAC		
		N	OPL	- 1 - Rapid Test for Hydrophytic Vegetation	
5. Menther pilegium				2 - Dominance Test is >50%	
7				3 - Prevalence Index is ≤3.0 <sup>1</sup>	
7				4 - Morphological Adaptations <sup>1</sup> (Provide sup data in Remarks or on a separate sheet)	
9				5 - Wetland Non-Vascular Plants <sup>1</sup>	
10				Problematic Hydrophytic Vegetation <sup>1</sup> (Expla	ain)
				<sup>1</sup> Indicators of hydric soil and wetland hydrology	must
115D=10 20=6,4	32	_= Total Co	over	be present, unless disturbed or problematic.	
Woody Vine Stratum (Plot size:)					
1				Hydrophytic	
2				Vegetation	
		= Total Co	over	Present? Yes No	
% Bare Ground in Herb Stratum					
Remarks:					

Sampling Point: \_\_\_\_\_\_\_

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Profile Description: (De	escribe to the dept			or or confirm t	the absence of indicators.)
	Matrix poist) %	<u>Redox</u> Color (moist)	Loc <sup>2</sup>	Texture Remarks	
$\frac{\text{(inches)}}{0-6} = \frac{\text{Color}(m)}{7.57R^{-2}}$			<u>%</u> Type		
0-6 7.5YR C.	-11+ 100				gravely loam.
					۷
	······				·
				•	
·····			<u> </u>		
<sup>1</sup> Type: C=Concentration				ated Sand Gra	ains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:	(Applicable to all	LRRs, unless other	wise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)		Sandy Redox (S	\$5)		2 cm Muck (A10)
Histic Epipedon (A2)		Stripped Matrix			Red Parent Material (TF2)
Black Histic (A3)			lineral (F1) (exce	pt MLRA 1)	Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A		Loamy Gleyed M			Other (Explain in Remarks)
Depleted Below Darl		Depleted Matrix			<sup>3</sup> Indicators of hydrophytic vegetation and
Thick Dark Surface (		Redox Dark Sur Depleted Dark S			wetland hydrology must be present,
Sandy Mucky Minera		Redox Depressi			unless disturbed or problematic.
Restrictive Layer (if pre					
Type: Road V					
Depth (inches):					Hydric Soil Present? Yes No 📈
Remarks:					
HYDROLOGY					
Wetland Hydrology Ind					
Primary Indicators (minin	num of one required				Secondary Indicators (2 or more required)
Surface Water (A1)			ned Leaves (B9)		Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A	.2)		1, 2, 4A, and 4B	1	4A, and 4B)
Saturation (A3)		Salt Crust	. ,		Drainage Patterns (B10)
Water Marks (B1)			vertebrates (B13)		Dry-Season Water Table (C2)
Sediment Deposits (	B2)		Sulfide Odor (C1		Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)			hizospheres alo		
Algal Mat or Crust (E	34)		of Reduced Iron		Shallow Aquitard (D3)
Iron Deposits (B5)			n Reduction in T		
Surface Soil Cracks	(B6)		Stressed Plants		
Inundation Visible of			olain in Remarks)		Frost-Heave Hummocks (D7)
Sparsely Vegetated	Concave Surface (	B8)			
Field Observations:					
Surface Water Present?		No $\underline{\times}$ Depth (in		Í	
Water Table Present?	Yes	No $\underline{\times}$ Depth (in	ches):		
Saturation Present?	Yes	No 🥂 Depth (in		Wetla	and Hydrology Present? Yes No _X
(includes capillary fringe Describe Recorded Data	) L (stream dauge im)	nitoring well seriel	ahotos previous	inspections) it	if available:
Describe Recorded Data	i (Sucani yauye, Illi	antoinig wen, aenai j	anotos, previous		
Remarks:					

## WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region 183 wet

Project/Site: Humboldt Wind Energy Project	City/County: <u>Humboldt</u>		Sampling Date: 0	7/19/2018
Applicant/Owner: Humboldt Wind, LLC		State: <u>CA</u>	Sampling Point:	405a
Investigator(s): KHENRY, ALOVELESS	Section, Township, Range: _		<u> </u>	
Landform (hillslope, terrace, etc.): HIUSLOPE	Local relief (concave, conve	ex, none): <u>Conc</u>	are Slope	e (%): <u>5</u>
Subregion (LRR): <u>A: Northwest Forests and Coast</u> Lat:	-124.104238 Lon	g:40.4538	88 Datum	:
Soil Map Unit Name:		NWI classific	cation:	
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes 📈 No	(If no, explain in R	(emarks.)	
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> significar	ntly disturbed? Are "Norm	al Circumstances"	present?Yes 🔀	No
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally	problematic? (If needed	, explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showi	ng sampling point locat	ions, transects	, important fea	tures, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u>X</u> No Yes No Yes No	ls the Sampled Area within a Wetland?	Yes No
Remarks:			

### **VEGETATION – Use scientific names of plants.**

Remarks:				
% Bare Ground in Herb Stratum		-		
· ·		_= Total Co		Present? Yes No
2				Vegetation
1				Hydrophytic
Woody Vine Stratum         (Plot size:)	54	= Total Co	ver	
11 50= 20= 10.4				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
10				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
9				5 - Wetland Non-Vascular Plants <sup>1</sup>
8	·			data in Remarks or on a separate sheet)
7	-			4 - Morphological Adaptations <sup>1</sup> (Provide supporting
6				$\overline{2}$ 3 - Prévalence Index is $\leq 3.0^{1}$
5				2 - Dominance Test is ≥50%
4. CAMOSERING echinatur	2	N.		1 - Rapid Test for Hydrophytic Vegetation
3. Mentha pullegium		Ý	OBL	Hydrophytic Vegetation Indicators:
2. aira praecox		N	UPL	Prevalence Index = B/A =
1. Holcus Lanatus	10	N	FAC	Column Totals: <u>52</u> (A) <u>110</u> (B)
Herb Stratum (Plot size:)	10	_ = Total Co	over	UPL species $2 \times 5 = 10$
550=5 W=2	<u> </u>			FACU species b x4 = 470
4	. <u></u>			FAC species $10$ x 3 = $30$
3				FACW species x 2 =
2				$\frac{1}{OBL \text{ species } 30} \times 1 = 30$
1. Rubut insinum	<u> </u>	Y	FACU	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:)				Prevalence Index worksheet:
4	·	= Total Co	)ver	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
3				Species Across All Strata: (B)
2			•••••	Total Number of Dominant Species Across All Strate: 2 (B)
1				That Are OBL, FACW, or FAC: (A)
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
	Absolute		Indicator	Dominance Test worksheet:

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MOSA Sampling Point:

183 wet

		to the depti				or comm	the absence of indicators.)
Depth (inches)	<u>Matrix</u> Color (moist)	%	Color (moist)	x Features %	2 '9avT	Loc <sup>2</sup>	Texture Remarks
U·W	7.51R <sup>2,5</sup> /1		7.54R4+/6	/0		<u></u> ι.	
	TOIR M	·	F. 211 16	<u> </u>			- gravelly day loam
,							
					<u></u>		
••••••••••	·						<u></u>
							· · · · · · · · · · · · · · · · · · ·
$\frac{1}{1}$ Typo: C=C	concentration, D=Dep	lotion DM-E	Poducod Matrix CS				ains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
	Indicators: (Applica					u Saliu Gia	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Sandy Redox (S		,		2 cm Muck (A10)
	pipedon (A2)	-	Stripped Matrix	,			Red Parent Material (TF2)
	listic (A3)	-	Loamy Mucky M		) (except	MLRA 1)	Very Shallow Dark Surface (TF12)
	en Sulfide (A4)		Loamy Gleyed I			,	Other (Explain in Remarks)
	d Below Dark Surface	e (A11)	Depleted Matrix	(F3)			
Thick D	ark Surface (A12)	Ž	🗧 Redox Dark Sur	face (F6)			<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy M	Mucky Mineral (S1)	-	Depleted Dark S	Surface (F	7)		wetland hydrology must be present,
	Gleyed Matrix (S4)		Redox Depress	ions (F8)			unless disturbed or problematic.
	Layer (if present):	<i>»</i> ,					
Туре:	Rock/Road	s base					
Depth (in	nches):						Hydric Soil Present? Yes No
Remarks:	Prominent	د ما مع	, concentr	a di s	~ in	onal-a i	v
	reominent	ready	( Writeniv	mon	2)	rentre 1	<b>A</b>
HYDROLO	GY						
Wetland Hy	drology Indicators:						
Primary Indi	cators (minimum of o	ne required;	check all that apply	/)			Secondary Indicators (2 or more required)
	Water (A1)		Water-Stai		es (B9) (e	xcept	Water-Stained Leaves (B9) (MLRA 1, 2
Surrace							
	ater Table (A2)		MIRA	124A a	nd 4B)		
High Wa	ater Table (A2) ion (A3)			<b>1, 2, 4A, a</b> (B11)	nd 4B)		4A, and 4B)
High Wa Saturati	ion (A3)		Salt Crust	(B11)			<b>4A, and 4B)</b> Drainage Patterns (B10)
High Wa Saturati Water M	ion (A3) ⁄Iarks (B1)		Salt Crust	(B11) /ertebrate	s (B13)		<b>4A, and 4B)</b> Drainage Patterns (B10) Dry-Season Water Table (C2)
High Wa High Wa Saturati Water M Sedime	ion (A3) /larks (B1) nt Deposits (B2)		Salt Crust Aquatic Inv Hydrogen S	(B11) vertebrate Sulfide Oc	s (B13) lor (C1)	Livina Root	4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9
High Wa High Wa Saturati Water Mater Mater Sedime Drift De	ion (A3) ⁄Iarks (B1)		Salt Crust	(B11) vertebrate Sulfide Oc hizosphei	s (B13) lor (C1) es along	-	4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C5)

\_\_\_\_ Stunted or Stressed Plants (D1) (LRR A) Surface Soil Cracks (B6) \_\_\_\_ Inundation Visible on Aerial Imagery (B7) \_\_\_\_ Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8)

		•	-	
Field	Ob	serva	tions:	
Surfa	۱ مم	Nator	Present?	``

-----

Surface Water Present?       Yes No _X Depth (inches):         Water Table Present?       Yes No Depth (inches):         Saturation Present?       Yes No Depth (inches):         Wetland Hydrology Present?       Yes Yes No         Includes capillary fringe)       No Depth (inches):         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Remarks:			5°	1. muintiz	ced rhizospherez.		
Water Table Present? Yes No Depth (inches):	(includes capillary fringe)				-		Yes <u>x</u>	NO
Surface Water Present? Yes No X Depth (inches):			×.			-		
	Surface Water Present?	Yes	No <u></u>	Depth (inches):	s.,	-		

\_\_\_\_ Raised Ant Mounds (D6) (LRR A)

Frost-Heave Hummocks (D7)

× Puggina

WETLAND DETERMINATION DATA	A FORM – Western Moun	tains, Valleys, a	ind Coast Region 185 up
Project/Site: Humboldt Wind Energy Project	City/County: Humbold1	t	Sampling Date:/19/18
Applicant/Owner: <u>Humboldt Wind, LLC</u>	· · · · · · · · · · · · · · · · · · ·	State: CA	Sampling Point: 302(Up)
Investigator(s): <u>S. CCCC A Sorci</u>	Section, Township, Rang		
Landform (hillslope, terrace, etc.): <u>                                    </u>			Slope (%): 10"/
Subregion (LRR): <u>A: Northwest Forests and Coast</u>	Lat: -124.105802 <sup>,</sup>	Lona: 40.460	Datum:
Soil Map Unit Name: Dolason - For havx - Peak	ced amplex, 5.30.	15 DRA NWI class	ification: NONQ
Are climatic / hydrologic conditions on the site typical for this tin			
Are Vegetation, Soil, or Hydrology sign			s" present? Yes 🗶 No
Are Vegetation, Soil, or Hydrology natι		ded, explain any ans	
SUMMARY OF FINDINGS – Attach site map sh	owing sampling point loc	cations, transec	ts, important features, etc.
Hydrophytic Vegetation Present? Yes No	X		
Hydric Soil Present? Yes No _			
Wetland Hydrology Present? Yes No	within a Wetland	? Yes	No <u> </u>

## VEGETATION – Use scientific names of plants.

Yes

No\_

 $\mathbf{X}$ 

Wetland Hydrology Present?

Remarks:

1		Absolute Dominant Indicator	Dominance Test worksheet:
1	Tree Stratum (Plot size:)	<u>% Cover Species? Status</u>	Number of Dominant Species
3	1		
3	2		
4.	3		
Sapling/Shrub Stration       (Plot size:)       = Total Cover       Percent of Dominant Species That & PoBL, FACW, or FAC: (A/B)         1.			
Saping/Shrub Stration       (Plot size:			
1.       2.	Sapling/Shrub Stratem (Plot size:	= Total Cover	That Are OBL, FACW, or FAC: (A/B)
2			Prevalence Index worksheet:
3.			Total % Cover of: Multiply by:
4.	3		OBL species x 1 =
5.			
Herb Stratum (Plot size:       IM - Digwelse       = Total Cover         Herb Stratum (Plot size:       IM - Digwelse       = Total Cover         I. Vendage lancestade       20       X       FAcu         2. Lyno surves echnorems       1.5       Mel         3. Festine       plectation       10       EAC         4. Browns hordraceous       5       FAcu       Prevalence Index = B/A =         9.       1. Rapid Test for Hydrophytic Vegetation       1. Rapid Test for Hydrophytic Vegetation         6. MUlicean fallymor(ma       20       X       FAcu         7. Hordewed Murrinum       5       FAcu       3. Prevalence Index is \$3.0^1         9.       3. Prevalence Index is \$3.0^1       4. Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)       5. Vettand Non-Vascular Plants'         9.       5. Wetland Non-Vascular Plants'       Problematic Hydrophytic Vegetation' (Explain)         11.       80       = Total Cover       Hydrophytic         Woody Vine Stratum (Plot size:       1       = Total Cover       Hydrophytic         % Bare Ground in Herb Stratum 20       = Total Cover       Hydrophytic       Vessettion	1		
Herb Stratum (Plot size:       IM - Digwed or       IM - Digwed or       IM - Digwed or         1.       Yearage lanceoted       Image: Stratum of the stratum	··		
1.       Yearage lancestatin       20       X       FACU       Column Totals:       (A)       (B)         2.       Lynoburus edunatus       10       LAC       Prevalence Index = B/A =       Hydrophytic Vegetation Indicators:         3.       F851-cn       perevalence Index = B/A =       Hydrophytic Vegetation Indicators:       1       Hydrophytic Vegetation Indicators:         4.       Browns hordraceous       5       FACU       UPL       1       Rapid Test for Hydrophytic Vegetation         5.       Linum birni       3       UPL       2       Dominance Test is >50%       3       -         6.       MURIcano pelymorpha       20       X       FACU       -	Herb Stratum (Plot size: M-Dlamater	= Total Cover	
3.       Festince plequine index = B/A =         4.       Browns hordraceous       5         5.       Linny buni         6.       Midicano polymorpha         7.       Abrodeun Murinum         8.	1. Plantago lanceolati	20 X FACU	
3.       Pesticial periodit       10       LHL         4.       Browns hordeaceous       5       FACU         5.       Liann burg       2       Dominance Test is >50%         6.       MUdicago polymorpha       20       X       FACU         7.       Hordean Murinum       5       FACU       3 - Prevalence Index is ≤3.01         8.		15 NEL	Provolonce Index - R/A -
4.       Browns hordraceous       5.       FACU       1. Rapid Test for Hydrophytic Vegetation         5.       Licom binit       3.       UPL       2.0       X       FACU       2.0       2.0       2.0       2.0       2.0       2.0       3.       Prevalence Index is \$3.0 <sup>1</sup> 3.       3.       3.       3.       Prevalence Index is \$3.0 <sup>1</sup> 4.       4.       Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)       5.       5.       Weither Murring       5.       FACU       5.       VPL       4.       Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)       5.       S.       5.       Vetland Non-Vascular Plants <sup>1</sup> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)       1.       1.       1.       Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)       1.       1.       1.       Vegetation       1.       Problematic.       Vegetation       Vegetation       Yes	3. Festmen peregi	10 EAC	
5.       Linna bull       Z       UPL         6.       MUdicano polymorpha       20       ×       FACU       3 - Prevalence Index is <3.01	4. Bromus hordeaceous		-
6.       MUdicano polymorpha       20       ×       FACU         7.       Abrokum Murinum       5       FACU       3 - Prevalence Index is ≤3.0 <sup>1</sup> 8.       -       -       -       -       -         9.       -       -       -       -       -         10.       -       -       -       -       -       -         11.       -       -       -       -       -       -       -         Woody Vine Stratum       (Plot size:       -	5. Linuan bini	<u>2</u> <u>110</u>	
7.       Abrdend Murihum       S       FACM       4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)         9.       5 - Wetland Non-Vascular Plants <sup>1</sup> 10.       9.       5 - Wetland Non-Vascular Plants <sup>1</sup> 11.       9.       9.         12.       9.       9.         13.       8.0       = Total Cover         Woody Vine Stratum       Yes       No         14.       9.       1.         15.       Yes       No         16.       1.       1.         17.       1.       1.         18.       1.       1.         19.       1.       1.         10.       1.       1.         10.       1.       1.         12.       1.       1.         13.       1.       1.         14.       Yes       No         15.       Yes       No         16.       Yes       No			
8	7 Machen and and the		
9.      5 - Wetland Non-Vascular Plants <sup>1</sup> 10.      Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)         11.      Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)         11.      Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)         11.      Problematic Hydrophytic Vegetation         Woody Vine Stratum (Plot size:)			
10.        Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)         11.         Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.         Woody Vine Stratum       (Plot size:)			
11.       Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.         Woody Vine Stratum (Plot size:)       Image: Comparison of the present of the p	9		
Woody Vine Stratum       (Plot size:)         1.	10		
Woody Vine Stratum     (Plot size:)       1        2        % Bare Ground in Herb Stratum          Model         Hydrophytic       Vegetation       Present?     Yes	11		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1.		= Total Cover	be present, unless disturbed or problematic.
2 Try drophytic Vegetation Present? Yes No	Woody Vine Stratum (Plot size:)		
2.         Vegetation           % Bare Ground in Herb Stratum        = Total Cover	1		Hydrophytic
% Bare Ground in Herb Stratum 20	2		Vegetation
% Bare Ground in Herb Stratum		= Total Cover	Present? Yes <u>No</u>
Remarks:	% Bare Ground in Herb Stratum 20		
	Remarks:		1

		2	~	Ċ.
Sampling	Point:	1)	()	in the

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)         Depth       Matrix       Redox Features         (inches)       Color (moist)       %       Type!       Loc2       Texture       Remarks         0       1       1       1       1       0       5       5       1       1       1       1       1       0       5       1 <th></th>	
Depth     Matrix     Redox Features       (inches)     Color (moist)     %     Type <sup>1</sup> Loc <sup>2</sup> Texture     Remarks	
(inches) Color (moist) % Color (moist) % Type' Loc <sup>2</sup> Texture Remarks	
0-12-107P 3/ 100	
·	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matri	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soil	s":
Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10)	
Histic Epipedon (A2) Stripped Matrix (S6)	
Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12)	
Depleted Below Dark Surface (A11) Depleted Matrix (F3)	1
Thick Dark Surface (A12) Redox Dark Surface (F6) <sup>3</sup> Indicators of hydrophytic vegetation and	
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present,	
Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic.	
Restrictive Layer (if present):	
Туре:	$\checkmark$
Depth (inches): No	<u> </u>
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more requ	ired)
Surface Water (A1) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLR	RA 1, 2,
Surface water (A1)          MLRA 1, 2, 4A, and 4B)         4A, and 4B)	
Night Water Fable (A2) Saturation (A3) Saturation (A3) Saturation (A3) Saturation (A1)	
Water Marks (B1)     Aquatic Invertebrates (B13)     Dry-Season Water Table (C2)	

- \_\_\_\_ Saturation Visible on Aerial Imagery (C9)
- Oxidized Rhizospheres along Living Roots (C3) \_\_\_\_ Geomorphic Position (D2)
  - \_\_\_\_ Shallow Aquitard (D3)
  - \_\_\_\_ FAC-Neutral Test (D5)
  - \_ Raised Ant Mounds (D6) (LRR A)
  - Front Honyo Hummocks (D7)

Inundation Visible on A	erial Imagery (B7)	Other (Explain in Remarks)	Frost-Heave H	Hummocks (D7)
Sparsely Vegetated Co	ncave Surface (B8)			
Field Observations:				х
Surface Water Present?	Yes No _	Depth (inches):	-	
Water Table Present?	Yes No _	✓ Depth (inches):	-	×7
Saturation Present?	Yes No _	Depth (inches):	_ Wetland Hydrology Present?	Yes No <u>X</u>
(includes capillary fringe)				
Describe Recorded Data (st	ream gauge, monito	ring well, aerial photos, previous insp	ections), if available:	
Remarks:				

\_\_\_\_ Hydrogen Sulfide Odor (C1)

Presence of Reduced Iron (C4)

Recent Iron Reduction in Tilled Soils (C6)

\_\_\_\_ Stunted or Stressed Plants (D1) (LRR A)

\_\_\_\_ Sediment Deposits (B2)

\_\_\_ Algal Mat or Crust (B4)

\_\_\_\_ Surface Soil Cracks (B6)

\_\_\_\_ Drift Deposits (B3)

\_\_\_\_ Iron Deposits (B5)

WETLAND DETERMINATION DATA FOR	M – Western Mountain	s. Vallevs. and	Coast Region 185 wet
WEILAND DETERMINATION DATA FOR		, ranoyo, ana	Flixlia
Project/Site: Humboldt Wind Energy Project	City/County: <u>Humboldt</u>		Sampling Date: 7/14/18
Applicant/Owner: Humboldt Wind, LLC		State: <u>CA</u>	Sampling Point: <u>302 w</u>
Investigator(s): S. Creer. A Sarci	Section, Township, Range: _		15.6
Landform (hillslope, terrace, etc.): 1/15/0	Local relief (concave, conve	x, none): <u> </u>	<u>CAVE</u> Slope (%): <u>107</u> ,
Subregion (LRR): A: Northwest Forests and Coast_ Lat: -1	24.105802 Long	g: <u>40.46000</u>	8 Datum:
Soil Map Unit Name Dolason-Fuchque Peaked Comp	1×, 5-30% STOPUS	NWI classifica	ation: <u></u>
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes <u> </u> No	(If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrology significantly	/ disturbed? Are "Norma	al Circumstances" p	resent? Yes No
Are Vegetation, Soil, or Hydrology naturally p	oblematic? (If needed,	explain any answer	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locati	ions, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes X No			

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X No Yes X No Yes X No	Is the Sampled Area within a Wetland? Yes No
Remarks: Weak hur Strong	jero logy; oth	er 2 indicators are

	Absolute	Dominant Indi	icator	Dominance Test worksheet:		
Tree Stratum (Plot size:)	<u>% Cover</u>	Species? Sta	atus	Number of Dominant Species	$\sim$	
1.	and a state of the			That Are OBL, FACW, or FAC		(A)
2	Comments of the second s			Total Number of Dominant		
				Species Across All Strata:	2	(B)
3					_ <u>_</u>	(-7
4	\			Percent of Dominant Species	001	
Sapling/Shrub Stratum (Plot size	<u>}</u>	= Total Cover		That Are OBL, FACW, or FAC		(A/B)
				Prevalence Index workshee	t:	
1				Total % Cover of:	Multiply by:	_
2	- /			OBL species	x 1 =	_ 1
3.				FACW species	x 2 =	
4				FAC species		1
5				FACU species		1
Herb Stratum (Plot size: Im diam plot		_ = Total Cover		1		
Herb Stratum (Plot size: 1 11 CA WU)	1.	Nr -	Λ	UPL species		1
TJUNCUS DATEMS	40	× ×	AW	Column Totals:	(A)	- (B)
2. Montha Dul	26	- <u>}01</u>	BL_	Prevalence Index = B/A	\ =	
3 UNICUS LAVARENUS	<sup>°</sup> S	N F	AČ.	Hydrophytic Vegetation Ind		
1 Millio Curristatus	5		4011	1 - Rapid Test for Hydrop		
5. ZOHARNA VONUSTA	16	UT VT	21	X 2 - Dominance Test is >5		
6. CILLAS SULVE, PCM MAXIN	- 17		11	3 - Prevalence Index is ≤		
			AC			
7. Padentucellia inscaso	- <u> </u>			4 - Morphological Adapta data in Remarks or or	tions' (Provide sup a separate sheet)	porting
8. Festura perennis			C-AL			
9		· ····································		5 - Wetland Non-Vascula		
10				Problematic Hydrophytic		1
11.				<sup>1</sup> Indicators of hydric soil and v	wetland hydrology	must
	89	= Total Cover		be present, unless disturbed	or problematic.	
Woody Vine Stratum (Plot size:)		-				
1.				Hydrophytic		
2				Vegetation		
2		_= Total Cover		Present? Yes	No	
% Bare Ground in Herb Stratum						
Remarks:				.l		

185	wet
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SOIL					Sampling Point: <u>SOA W</u>
Profile Desc	ription: (Descri	be to the dept	h needed to document the indicato	or or confirm	
Depth	Matrix		Redox Features		
(inches)	Color (moist)	%	Color (moist) % Type	Loc <sup>2</sup>	Texture Remarks
0-12	104R31	2-11/	7.546 78.37.		silty yay log in
		·			, 
					·····
	/				·
<sup>1</sup> Type: C=Co	oncentration, D=D	epletion, RM=	Reduced Matrix, CS=Covered or Coa	ted Sand Gra	ains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (App	licable to all L	RRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)	_	Sandy Redox (S5)		2 cm Muck (A10)
Histic Ep	ipedon (A2)	-	Stripped Matrix (S6)		Red Parent Material (TF2)
Black His	stic (A3)	-	Loamy Mucky Mineral (F1) (exce	pt MLRA 1)	Very Shallow Dark Surface (TF12)
	n Sulfide (A4)	-	Loamy Gleyed Matrix (F2)		Other (Explain in Remarks)
	Below Dark Surf	ace (A11)	_ Depleted Matrix (F3)		
	rk Surface (A12)	-	$\underline{\times}$ Redox Dark Surface (F6)		<sup>3</sup> Indicators of hydrophytic vegetation and
	ucky Mineral (S1)	-	Depleted Dark Surface (F7)		wetland hydrology must be present,
	leyed Matrix (S4)	-	Redox Depressions (F8)		unless disturbed or problematic.
	ayer (if present).	:			· 3
Туре:					No.
	hes):				Hydric Soil Present? Yes 🔨 No 🛹
Remarks:					
					and a state of the
				,	
HYDROLO	~\v	· · · · · · · · · · · · · · · · · · ·			
	rology Indicator				
Primary Indic	<u>ators (minimum o</u>	fone required;	check all that apply)		Secondary Indicators (2 or more required)
	Vater (A1)		Water-Stained Leaves (B9) (	except	Water-Stained Leaves (B9) (MLRA 1, 2,
High Wat	er Table (A2)		MLRA 1, 2, 4A, and 4B)	) }	4A, and 4B)
Saturatio	n (A3)		Salt Crust (B11)		Drainage Patterns (B10)
Water Ma	arks (B1)		Aquatic Invertebrates (B13)		Dry-Season Water Table (C2)
Sediment	t Deposits (B2)		Hydrogen Sulfide Odor (C1)		Saturation Visible on Aerial Imagery (C9)
Drift Dep	osits (B3)		Oxidized Rhizospheres along	g Living Roots	s (C3) Geomorphic Position (D2)
Algal Mat	or Crust (B4)		Presence of Reduced Iron (C	(4)	Shallow Aquitard (D3)
Iron Depo	osits (B5)		Recent Iron Reduction in Tille	ed Soils (C6)	FAC-Neutral Test (D5)
Surface S	Soil Cracks (B6)		Stunted or Stressed Plants (I	D1) (LRR A)	Raised Ant Mounds (D6) (LRR A)
Inundatio	n Visible on Aeria	l Imager <mark>y</mark> (B7)	Other (Explain in Remarks)		Frost-Heave Hummocks (D7)
Sparsely	Vegetated Conca	ve Surfa <mark>ce</mark> (B	3)		
Field Observ	ations:				
Surface Wate	r Present?	Yes N	o <u> </u> Depth (inches):		
Water Table F	Present?	Yes N	o 🧹 Depth (inches):		χ.
Saturation Pre			• Depth (inches):	1	nd Hydrology Present? Yes 🔀 No
(includes capi	llary fringe)		1		
Describe Rec	orded Data (strea	m gauge, mon	itoring well, aerial photos, previous in	spections), if	available:
Remarks:		Derin			4
		TYM	M, Magner	had	rology presenter
		· • /		····JV	I preserve
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WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast R	egion 193 up
Project/Site: Humboldt Wind Energy Project City/County: Humboldt Sampling [	Date: 8/1/18
Applicant/Owner: <u>Humboldt Wind, LLC</u> State: <u>CA</u> Sampling F	voint: 702/UP)
Investigator(s): S.C.C.L.W. L. Mol (1, S. Section, Township, Range:	
Landform (hillslope, terrace, etc.): <u>Coad cut</u> Local relief (concave, convex (none))	Slope (%): <u>47</u> ,
Subregion (LRR): A: Northwest Forests and Coast Lat: -124.058148 Long: 40.472916	Datum:
382: Southamp- Rescreet Complex 15-301 Stopes NWI classification:	ione
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)	$\mathbf{\nabla}$
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Ye	
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remark	(s.) <b>\</b>
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, importa	nt features, etc.
Hydrophytic Vegetation Present?       Yes       No       Is the Sampled Area within a Wetland?       No         Hydric Soil Present?       Yes       No       No       within a Wetland?       Yes       No         Wetland Hydrology Present?       Yes       No       Yes       No       No       No       No       No         Remarks:       No       No       No       No       No       No       No       No       No	<u>Х</u>
VEGETATION – Use scientific names of plants. Absolute Dominant Indicator Dominance Test worksheet:	
Tree Stratum (Plot size:)       % Cover Species? Status       Number of Dominant Species         1         That Are OBL, FACW, or FAC:	(A)
2.	3 <sub>(B)</sub>
	2
= Total Cover That Are OBL, FACW, or FAC:	<u> 25/.</u> (A/B)
Sapling/Shrub Stratum (Rlot size:) Prevalence Index worksheet:	
1.	Aultiply by:
OBL species X =	
A FACW species X 2	
5.         FAC species         x 3 =	
FACU species x 4 = Total Cover	
$\frac{\text{Herb Stratum}}{1 - Creating (Plot size: M, Tadius = Total Cover \frac{1 - Creating (Plot size: M, Tadius = 2 - Column Totals: (A))}{2 - Column Totals: (A)}$	
2. <u>Prometica unganis</u> <u>70</u> <u>FAC</u> Prevalence Index = B/A = 3. <u>Holcus langeris</u> <u>70</u> <u>FAC</u> <u>Hydrophytic Vegetation Indicator</u>	
4. <u>Agrostic exarata</u> <u>5</u> <u>N</u> FACW <u>1</u> - Rapid Test for Hydrophytic	
5. LORUS TENUIS E N FACU 2 - Dominance Test is >50%	( egotation
6. HADODARNS radicator: 15 Y FACU 3- Prevalence Index is <3.01	
7. Daitylis geomerata II N FACU 4 - Morphological Adaptations <sup>1</sup> 8. data in Remarks or on a seg	(Provide supporting parate sheet)
9 5 - Wetland Non-Vascular Plan	its <sup>1</sup>
10. Problematic Hydrophytic Vege	ation <sup>1</sup> (Explain)
<sup>1</sup> Indicators of hydric soil and wetlan	
Woody Vine Stratum     (Plot size:)         Image: Contract of the present, unless disturbed or product of the present of the presen	piematic.
1 Hydrophytic	
Vegetation	$\sim$
- Total Cover	No
% Bare Ground in Herb Stratum <u>25</u>	1

Sampling Point: <u>302 (up</u>)

193 up

Profile Des Depth	Matrix	x	-	x Features				
(inches)	Color (moist)	%	Color (moist)	%Ty	pe <sup>1</sup> Loc <sup>2</sup>	Texture		Remarks
0-16	104R3/2	95	104R5/8	5 C	m	silte	day	1 sam
						3115	7	p
							/	
				•				
	******							
	<u></u>							
1								
			I=Reduced Matrix, CS II LRRs, unless other		oated Sand Gr			Pore Lining, M=Matrix. Iematic Hydric Soils <sup>3</sup> :
								•
Histoso	. ,		Sandy Redox (				n Muck (A10	
	pipedon (A2) isti <b>c</b> (A3)		Stripped Matrix Loamy Mucky M				I Parent Mat	ark Surface (TF12)
	en Sulfide (A4)		Loamy Gleyed		Cept MERA I)		er (Explain i	
	d Below Dark Sur	face (A11)	Depleted Matrix			0(iii	o, (Evhiain i	n nomanio)
	ark Surface (A12)	. ,	Redox Dark Su			<sup>3</sup> Indicato	ors of hydror	phytic vegetation and
	, Mucky Mineral (S1		Depleted Dark					y must be present,
	Gleyed Matrix (S4)		X Redox Depress					or problematic.
	Layer (if present					1		~~~~~
Туре:								<b>、</b> .
Depth (in	iches):					Hydric Soil	Present?	Yes X No
Remarks:						1		
YDROLC								
	drology Indicato			•				
Primary Indi	cators (minimum o	of one requir	ed; check all that appl			Seco	ndary Indica	tors (2 or more required)
Surface	Water (A1)		Water-Sta	ined Leaves (B	9) (except	V	Vater-Staine	d Leaves (B9) (MLRA 1, 2,
High W	ater Table (A2)		MLRA	1, 2, 4A, and 4	B)		4A, and 4	B)
Saturati	ion (A3)		Salt Crust	(B11)		C	Prainage Pat	terns (B10)
Water N	/larks (B1)		Aquatic In	vertebrates (B1	3)	C	)ry-Season∖	Nater Table (C2)
Sedime	nt Deposits (B2)			Sulfide Odor (C				sible on Aerial Imagery (C9
Drift De	posits (B3)		Oxidized F	Rhizospheres al	ong Living Roo	ts (C3) G	Geomorphic	Position (D2)
Algal M	at or Crust (B4)			of Reduced Iror			hallow Aqui	tard (D3)
	posits (B5)				Tilled Soils (C6		AC-Neutral	Test (D5)
Surface	Soil Cracks (B6)				s (D1) ( <b>LRR A</b> )	- F	aised Ant N	lounds (D6) (LRR A)
Inundat	ion Visible on Aeri	al Imagery (	B7) Other (Exp	plain in Remark	s)	F	rost-Heave	Hummocks (D7)
	y Vegetated Conc	ave Surface	(B8)					
ield Obser	vations:							
Surface Wat	ter Present?	Yes	No Depth (in-	ches):				
/Vater ⊤able	Present?	Yes	No Depth (in	ches):				$\backslash$
Saturation P		Yes	No Depth (in	ches):	Wetla	and Hy <mark>drol</mark> og	y Present?	Yes No
	pillary fringe) corded Data (stre	am dauge in	nonitoring well, aerial	photos, previou	s inspections)	if available:		
			terneoning wont dontur					
Remarks:								
Remarks:								
Remarks:								
Remarks:								

		untains, Valleys, and Coast Region 193 wet
Project/Site: Humboldt Wind Energy Project	City/County: Humbo	Didt Sampling Date: 81118
Applicant/Owner: Humboldt Wind, LLC		State: CA Sampling Point: 702 (wet)
nvestigator(s): (, Morris, Screw	Section Township R	lange:
7		a, convex, none): Slope (%):
		Long: 40.472936 Datum:
		- 15 - 512 KWI classification: 0 040
Are climatic / hydrologic conditions on the site typical for th		
		e "Normal Circumstances" present? Yes <u> </u>
Are Vegetation, Soil, or Hydrology	naturally problematic? (If r	needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site mag	showing sampling point	locations, transects, important features, etc.
X	No Is the Sample	ed Area
Wetland Hydrology Present? Yes		and? Yes <u> </u>
Remarks: dd lagging ro	bad, ponds wate	r adjacent to waterban
VEGETATION – Use scientific names of pla	nts.	
	Absolute Dominant Indicator	
<u>Tree Stratum</u> (Plot size:)	<u>% Cover Species? Status</u>	- Number of Dominant Species
~		
		<ul> <li>Total Number of Dominant</li> <li>Species Across All Strata:</li> <li>(B)</li> </ul>
4		
	= Total Cover	That Are OBL, FACW, or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot size: 1mr adi)	trace FACV	Prevalence Index worksheet:
2	- Your	Total % Cover of: Multiply by:
3.		OBL species x 1 =
4.		FACW species x 2 =
5		FAC species x 3 =
	trace = Total Cover	FACU species x 4 =
Herb Stratum (Plot size: 1 m radi )	20 Y FACU	UPL species         x 5 =           Column Totals:         (A)
1. Juncus paterns 2. Juncus accidentalis	-50 Y FACW	
3. Prunella Vulaavis	-13 N FACU	Prevalence Index = B/A =
4. Holcus Lanatus	5 N FAC	Hydrophytic Vegetation Indicators:    1 - Rapid Test for Hydrophytic Vegetation
5. Aarostic exarata	5 M. FACIN	$\frac{1}{2}$ $\frac{1}{2}$ 2 - Dominance Test is >50%
6. Ins douglasiama	5 N UPL	$ 3 - Prevalence Index is \leq 3.0^{1} $
7		<ul> <li> 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)</li> </ul>
8		5 - Wetland Non-Vascular Plants <sup>1</sup>
9 10		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)	<u> </u>	
		Hydrophytic
1		- Hydrophytic X Vegetation
	= Total Cover	Present? Yes No No
		1
% Bare Ground in Herb Stratum		

Inches       Color (most)       %       Color (most)       %       Type       Loz       Type       Type       Color (most)       %       Color (most)		epth needed to document the indicator or c	confirm the absence of indicators.)
Image:	Depth <u>Matrix</u>	<u>Redox Features</u>	oc <sup>2</sup> Texture Remarks
Type:			
rdic Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>2</sup> :         Histic Epipedon (A2)       Sandy Redox (S5)       — Red Parent Material (TF2)         Biack Histic (A3)       Loamy Mucky Mineral (F1) (except MLRA 1)       — Very Shallow Dark Surface (T12)         Hydrogen Suffice (A41)       Depleted Matrix (F3)       — Other (Explain in Remarks)         Sandy Mucky Mineral (S1)       Depleted Matrix (F3)       — Other (Explain in Remarks)         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       — wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       — Wydric Soil Present?       _ No         Depth (inches):	10 1012 45	<u> </u>	- Jung cung jou na
cdric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>1</sup> ;         Histos Djoedon (A2)       Sandy Redox (S5)			
dric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils?:         Histos Epipedon (A2)       Sandy Redox (S5)			
dric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils?:         Histos Epipedon (A2)       Sandy Redox (S5)	······		
dric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils?:         Histos Epipedon (A2)       Sandy Redox (S5)			· · ·
rdric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>2</sup> :         Histic Epipedon (A2)       Sandy Redox (S5)			
rdric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>2</sup> :         Histic Epipedon (A2)       Sandy Redox (S5)			
rdirc Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>1</sup> :         Histos Epicedon (A2)       Sandy Redox (S5)       — Red Parent Material (TF2)         Black Histic (A3)       Loamy Mucky Mineral (F1) (except MLRA 1)       _ Very Shallow Dark Surface (TF12)         Depleted Below Dark Surface (A11)       Depleted Matrix (F3)       _ Other (Explain in Remarks)         Sandy McKy Mineral (S1)       Depleted Matrix (F3)       _ "Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy McKy Mineral (S1)       Depleted Matrix (F3)       _ "Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy McKy Mineral (S1)       Depleted Dark Surface (F7)       _ wetland hydrology must be present, unless disturbed or problematic.         Sandy McKy Mineral (S1)       _ Water-Stained Leaves (B9) (except       _ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)		**************************************	
rdric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>2</sup> :         Histic Epipedon (A2)       Sandy Redox (S5)	vine: C=Concentration D=Depletion R	M=Reduced Matrix_CS=Covered or Coated S	and Grains <sup>2</sup> Location: PL=Pore Lining M=Matrix
Hetic Epipedon (A2)       Stripped Matrix (S6)       Ped Parent Material (TF2)         Black Histic (A3)       Loamy Gleyed Matrix (F3)       Very Shallow Dark Surface (TF12)         Optieted Below Dark Surface (A11)       Depleted Matrix (F3)       Other (Explain in Remarks)         Thick Dark Surface (A12)       Redox Dark Surface (F5)       *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       unless disturbed or problematic.         Stripted Vegetation Composition       Yes       No         Depth (inches):       material (TA2)       No         mark filt       Wetland Hydrology Indicators:       No         marks:       Water-Stained Leaves (B9) (except       Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         Saturation (A3)       Salt Crust (B11)       Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         Saturation (A3)       Salt Crust (B11)       Drainage Patterns (B10)         Water Marks (B1)       Aquatic Invertebrates (B13)       Dry-Season Water Table (C2)         Sediment Deposits (B3)       Oxidiced Rhizospheres along Living Roots (C3)       Secondary Indicators (C2)         Saturation (A3)       Salt Crust (B11)       Dry-Season Water Table (C2)         Saturation Visible on Aerial Imagery (C9)       Oxidiced Rhizosp			-
- Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)      Other (Explain in Remarks)		Stripped Matrix (S6)	Red Parent Material (TF2)
Thick Dark Surface (A12)       Redox Dark Surface (F6) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Gleyed Matrix (S4)       X       Redox Depressions (F8)       unless disturbed or problematic.         strictive Layer (if present):       Type:			Other (Explain in Remarks)
			<sup>3</sup> Indicators of hydrophytic vegetation and
_ Sandy Gleyed Matrix (S4)			
Type:			
Depth (inches):       Hydric Soil Present? Yes       No         emarks:			
emarks:         fDROLOGY         ettand Hydrology Indicators:         imary Indicators (minimum of one required; check all that apply)       Secondary Indicators (2 or more required)	estrictive Layer (if present):		
/DROLOGY         etland Hydrology Indicators:         imary Indicators (minimum of one required; check all that apply)       Secondary Indicators (2 or more required)			$\mathbf{X}$
rimary Indicators (minimum of one required; check all that apply)       Secondary Indicators (2 or more required)	Type: Depth (inches):		Hydric Soil Present? Yes <u>No</u> No
Surface Water (A1)       Water-Stained Leaves (B9) (except       Water-Stained Leaves (B9) (MLRA 1, 2, 4, and 4B)         High Water Table (A2)       MLRA 1, 2, 4A, and 4B)       4A, and 4B)         Saturation (A3)       Salt Crust (B11)       Yours (B10)         Water Marks (B1)       Aquatic Invertebrates (B13)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)       Saturation Visible on Aerial Imagery (C9)         Oxidized Rhizospheres along Living Roots (C3)       Geomorphic Position (D2)         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)       Shallow Aquitard (D3)         Iron Deposits (B5)       Recent Iron Reduction in Tilled Soils (C6)       FAC-Neutral Test (D5)         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)       Raised Ant Mounds (D6) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       Frost-Heave Hummocks (D7)         Sparsely Vegetated Concave Surface (B8)       Depth (inches):       Depth (inches):       Depth (inches):         water Table Present?       Yes       No       Depth (inches):       No       No         Jepth (inches):       Depth (inches):       Depth (inches):       No       No       No       No	Type: Depth (inches): emarks: /DROLOGY		Hydric Soil Present? Yes <u>No</u> No
High Water Table (A2)       MLRA 1, 2, 4A, and 4B)       4A, and 4B)         Saturation (A3)       Salt Crust (B11)       X       Drainage Patterns (B10)         Water Marks (B1)       Aquatic Invertebrates (B13)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Oxidized Rhizospheres along Living Roots (C3)       Geomorphic Position (D2)         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)       Shallow Aquitard (D3)         Iron Deposits (B5)       Recent Iron Reduction in Tilled Soils (C6)       FAC-Neutral Test (D5)         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)       Raised Ant Mounds (D6) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       Frost-Heave Hummocks (D7)         Sparsely Vegetated Concave Surface (B8)       Depth (inches):       Depth (inches):       No         vaturation Present?       Yes       No       Depth (inches):       No       No         aturation Present?       Yes       No       Depth (inches):       No       No       No	Type: Depth (inches): emarks: /DROLOGY /etland Hydrology Indicators:		
Saturation (A3)	Type: Depth (inches): emarks: /DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one regui	red; check all that apply)	Secondary Indicators (2 or more required)
Water Marks (B1)       Aquatic Invertebrates (B13)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Oxidized Rhizospheres along Living Roots (C3)       Geomorphic Position (D2)         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)       Shallow Aquitard (D3)         Iron Deposits (B5)       Recent Iron Reduction in Tilled Soils (C6)       FAC-Neutral Test (D5)         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)       Raised Ant Mounds (D6) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       Frost-Heave Hummocks (D7)         Sparsely Vegetated Concave Surface (B8)       Depth (inches):       Depth (inches):       No         /ater Table Present?       Yes       No       Depth (inches):       No         /ater Table Present?       Yes       No       Depth (inches):       No         aturation Present?       Yes       No       Depth (inches):       No       No       No       No       No	Type: Depth (inches): emarks: //DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one requi Surface Water (A1)	red; check all that apply) Water-Stained Leaves (B9) ( <b>exce</b>	<u>Secondary Indicators (2 or more required)</u> ppt Water-Stained Leaves (B9) (MLRA 1, 2,
<ul> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Presence of Reduced Iron (C4)</li> <li>Shallow Aquitard (D3)</li> <li>Iron Deposits (B5)</li> <li>Recent Iron Reduction in Tilled Soils (C6)</li> <li>FAC-Neutral Test (D5)</li> <li>Stunted or Stressed Plants (D1) (LRR A)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Other (Explain in Remarks)</li> <li>Frost-Heave Hummocks (D7)</li> <li>Sparsely Vegetated Concave Surface (B8)</li> <li>eld Observations:</li> <li>urface Water Present?</li> <li>Yes</li> <li>No</li> <li>Depth (inches):</li> <li>Depth (inches):</li> <li>Depth (inches):</li> <li>Depth (inches):</li> <li>Wetland Hydrology Present?</li> <li>Yes</li> <li>No</li> <li>No</li> <li>Depth (inches):</li> <li>Wetland Hydrology Present?</li> <li>Yes</li> <li>No</li> </ul>	Type: Depth (inches): emarks: //DROLOGY //etland Hydrology Indicators: rimary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2)	red; check all that apply) Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B)	<u>Secondary Indicators (2 or more required)</u> pt Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) FAC-Neutral Test (D5) Stunded or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Depth (inches): Inundation Present? Yes No Depth (inches): No No Depth (inches): No	Type: Depth (inches): emarks: //DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3)	red; check all that apply) Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B) Sait Crust (B11)	Secondary Indicators (2 or more required) pt Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
Iron Deposits (B5)   Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) FAC-Neutral Test (D5)   Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)   Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7)   Sparsely Vegetated Concave Surface (B8) Depth (inches): Depth (inches):   ield Observations: Depth (inches): Depth (inches):   //ater Table Present? Yes No   Yes No Depth (inches):   maturation Present? Yes No   Yes No Depth (inches):   Wetland Hydrology Present? Yes  No	Type: Depth (inches): emarks: //DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	red; check all that apply) Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13)	Secondary Indicators (2 or more required)         ept
Surface Soil Cracks (B6)Stunted or Stressed Plants (D1) (LRR A)Raised Ant Mounds (D6) (LRR A)Rounds (D6) (LRR A)Rounds (D6) (LRR A)Rounds (D6) (LRR A)Rounds (D7)Rounds (D7)R	Type: Depth (inches): emarks: //DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	red; check all that apply) Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Secondary Indicators (2 or more required)         ept
Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)Frost-Heave Hummocks (D7)Sparsely Vegetated Concave Surface (B8) eld Observations: urface Water Present? YesNo XDepth (inches): //ater Table Present? YesNo XDepth (inches): Bepth (inches): Wetland Hydrology Present? YesNo	Type: Depth (inches): emarks: <b>'DROLOGY</b> <b>etland Hydrology Indicators:</b> imary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	red; check all that apply) Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livit	Secondary Indicators (2 or more required)         ept
_ Sparsely Vegetated Concave Surface (B8) eld Observations: urface Water Present? Yes No X Depth (inches): (ater Table Present? Yes No X Depth (inches): aturation Present? Yes No X Depth (inches): Depth (inches): Wetland Hydrology Present? Yes X No ncludes capillary fringe)	Type: Depth (inches): emarks: //DROLOGY //etland Hydrology Indicators: //imary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	red; check all that apply) Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livii Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Secondary Indicators (2 or more required)         wpt
ield Observations:	Type: Depth (inches): emarks: // // // // // // // // // // // // //	red; check all that apply) Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livii Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (I	Secondary Indicators (2 or more required)         ept
urface Water Present? Yes No X Depth (inches): /ater Table Present? Yes No X Depth (inches): aturation Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes X No	Type: Depth (inches): emarks: <b>'DROLOGY</b> <b>'etland Hydrology Indicators:</b> rimary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery	red; check all that apply) — Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B) — Salt Crust (B11) — Aquatic Invertebrates (B13) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres along Livii — Presence of Reduced Iron (C4) — Recent Iron Reduction in Tilled So — Stunted or Stressed Plants (D1) (I (B7) — Other (Explain in Remarks)	Secondary Indicators (2 or more required)         ept
/ater Table Present?       Yes No X       Depth (inches):         aturation Present?       Yes No X       Depth (inches):         mcludes capillary fringe)       Wetland Hydrology Present? Yes X       No	Type: Depth (inches): emarks: TDROLOGY etland Hydrology Indicators: imary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery ( Sparsely Vegetated Concave Surface	red; check all that apply) — Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B) — Salt Crust (B11) — Aquatic Invertebrates (B13) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres along Livii — Presence of Reduced Iron (C4) — Recent Iron Reduction in Tilled So — Stunted or Stressed Plants (D1) (I (B7) — Other (Explain in Remarks)	Secondary Indicators (2 or more required)         ept
aturation Present? Yes No 🔀 Depth (inches): Wetland Hydrology Present? Yes X No	Type: Depth (inches): emarks: <b>'DROLOGY</b> <b>'etland Hydrology Indicators:</b> rimary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery for Sparsely Vegetated Concave Surface <b>ield Observations:</b>	red; check all that apply) Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livi Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (I (B7) Other (Explain in Remarks) (B8)	Secondary Indicators (2 or more required)         ept
ncludes capillary fringe)	Type: Depth (inches): emarks: //DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery ( Sparsely Vegetated Concave Surface ield Observations: urface Water Present? Yes	red; check all that apply) Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livii Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (I (B7) Other (Explain in Remarks) a (B8) No Depth (inches):	Secondary Indicators (2 or more required)         ept
escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Type: Depth (inches): emarks: // / / / / / / / / / / / / / / / / /	red; check all that apply) 	Secondary Indicators (2 or more required)         ept
	Type: Depth (inches): emarks: //DROLOGY /etland Hydrology Indicators:  surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery ( Sparsely Vegetated Concave Surface eld Observations: urface Water Present? Yes /ater Table Present? Yes aturation Present? Yes	red; check all that apply) Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livii Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (I (B7) Other (Explain in Remarks) e (B8) No Depth (inches): No Depth (inches):	Secondary Indicators (2 or more required)         ept
emarks: Soil damp	Type: Depth (inches): emarks:	red; check all that apply) Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livii Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (I (B7) Other (Explain in Remarks) e (B8) No Depth (inches): No Depth (inches):	Secondary Indicators (2 or more required)         ept

WETLAND DETERMINATION DATA FOR	M – Western Mountai	ns, Valleys, an	d Coast Region 198 wet
	City/County: <u>Humboldt</u>		_ Sampling Date: <u>7 - 31 - / %</u> _ Sampling Point: <u>601 (</u> W)
Investigator(s): <u>G. Yowngblood</u> Landform (hillslope, terrace, etc.): <u>Road cut across hillslope</u> Subrogian (LRP): <u>A</u> : Northwest Forests and Coast Lat:	-123.995617 <sub>Lo</sub>	ex, none): ng:40.471	
Soli Map Unit Name: $\underline{Stowtcamp-Red Crest complex_1}^{IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII$	ear? Yes <u>V</u> No <u>No</u> disturbed? Are "Norr oblematic? (If neede	_ (If no, explain in F nal Circumstances" d, explain any answ	Remarks.) present? Yes No ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point loca	tions, transect	s, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes No Yes No Yes No	Is the Sampled Area within a Wetland?	Yes No
Remarks: Seep Spring wer	Hand along road (	2ut-	

	Absolute	Dominant		Dominance Test worksheet:		
Tree Stratum (Plot size:)		Species?		Number of Dominant Species That Are OBL, FACW, or FAC		(A)
2				Total Number of Dominant Species Across All Strata:	3	(B)
3						- ` '
4		= Total Co	ver	Percent of Dominant Species That Are OBL, FACW, or FAC	:	_ (A/B)
Sapling/Shrub Stratum (Plot size: 4 × 10)	50	V	FAG	Prevalence Index workshee	t:	
1. Alnus rubra				Total % Cover of:	Multiply by:	
2			<u> </u>	OBL species	x 1 =	
3				FACW species		1
4				FAC species		
5				FACU species		
JXU	50	_ = Total Co	over	UPL species		
<u>Herb Stratum</u> (Plot size: $4 \times 4$ )	20	Ŋ	FAC	Column Totals:		
1. <u>Caulseran</u> an and a co	$-\frac{\lambda \nu}{\lambda c}$		FAC		(//)	(=/
2. Juneus tennis	$-\frac{12}{N_{\rm H}}$		The contract	Prevalence Index = B/A		
3. Prunela Vulgaris	Kong	<u>N</u>	1740 <u>0</u>	Hydrophytic Vegetation Ind	licators:	
4. Mentha pieluquim		<u>N</u>	<u>086</u>	1 - Rapid Test for Hydror	ohytic Vegetation	
5. Holcus lanatis	3	$\mathbb{N}$	<u>HAC</u>	2 - Dominance Test is >5	50%	
6. Veronich americanch	dia.	N	OBL	3 - Prevalence Index is ≤	3.0 <sup>1</sup>	
7				4 - Morphological Adapta data in Rem <b>a</b> rks or or	ations <sup>1</sup> (Provide su	upporting t)
8				5 - Wetland Non-Vascula	ar Plants <sup>1</sup>	
9				Problematic Hydrophytic		lain)
10				<sup>1</sup> Indicators of hydric soil and		
11	50	 _= Total Co		be present, unless disturbed	or problematic.	
		_= ⊤otal Co	over			
Woody Vine Stratum (Plot size:)				Live due a by the		
1				- Hydrophytic Vegetation	/	
2				Present? Yes	No	
% Bare Ground in Herb Stratum		_= Total Co				
Remarks:						

198	wet
 ,	

		to the dep	th needed to docu			or contirm	i the absend	ce of indicators.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	ox Features %	_Type <sup>1</sup>	Loc <sup>2</sup>	Tautura	
0-6	2104 7 3/104	70	7.5 /R 4/6	- <u>/8</u> ;5	C	PL M	<u> </u>	Remarks
	Juy 1 9/53	15				[ [ ] ] [ ]	<u></u>	
6.12	NN 61		17 MP STA	110		* *		
<u>b-id</u>	)1eg 1/519/	60	7.57R \$18	40	<u> </u>	<u> </u>	Clay	
		<u></u>	-					
	R							
• · · · · · · · · · · · · · · · · · · ·								
Type: C=Conc	entration, D=Depl	etion, RM=	Reduced Matrix, C	S=Covered	or Coate	d Sand Gr		ocation: PL=Pore Lining, M=Matrix.
Histosol (A		able to all l	LRRs, unless othe		d.)			tors for Problematic Hydric Soils <sup>3</sup> :
— Histosof (A — Histic Epipe	-		Sandy Redox (					cm Muck (A10)
Black Histic			Stripped Matrix Loamy Mucky I		(excent			ed Parent Material (TF2)
Hydrogen S			Loamy Gleyed	Matrix (F2)	except	WEINA I)		ry Shallow Dark Surface (TF12) her (Explain in Remarks)
Depleted Be	elow Dark Surface	e (A11)	Depleted Matrix				01	
	Surface (A12)		Redox Dark Su	. ,			<sup>3</sup> Indica	tors of hydrophytic vegetation and
	y Mineral (S1)		Depleted Dark		<b>`</b> )			and hydrology must be present,
Sandy Gley	ed Matrix (S4)		Redox Depress	ions (F8)		n	unle	ess disturbed or problematic.
Type: NO								
	2010 B							
	s).	· · · · ·	·					
Depth (inches	5):		······				Hydric So	il Present? Yes <u>X</u> No
Depth (inches Remarks: YDROLOGY			· · · · · · · · · · · · · · · · · · ·				Hydric So	il Present? Yes <u>X</u> No
Depth (inches Remarks: YDROLOGY Wetland Hydrol	ogy Indicators:		· · · · · · · · · · · · · · · · · · ·				Hydric So	il Present? Yes <u>X</u> No
Depth (inches Remarks: YDROLOGY Wetland Hydrol Primary Indicator	ogy Indicators: rs (minimum of on	e required;	check all that apply					il Present? Yes <u>No</u> No <u>ndary Indicators (2 or more required)</u>
Depth (inches Remarks: YDROLOGY Vetland Hydrol Primary Indicator Surface Wat	ogy Indicators: rs (minimum of on er (A1)	e required;	Water-Stai	ned Leaves		cept	Secc	· · · · · · · · · · · · · · · · · · ·
Depth (inches Remarks: YDROLOGY Vetland Hydrol Primary Indicator Surface Wat High Water	ogy Indicators: rs (minimum of on er (A1) Table (A2)	e required;	Water-Stai MLRA	ned Leaves 1, 2, 4A, an		cept	Secc	indary Indicators (2 or more required)
Depth (inches Remarks: YDROLOGY Vetland Hydrol Primary Indicator Surface Wat High Water High Water ( X Saturation (/	ogy Indicators: rs (minimum of on er (A1) Table (A2) \3)	e required;	Water-Stai MLRA <sup>/</sup> Salt Crust	ned Leaves 1, <b>2, 4A,</b> a <b>n</b> (B11)	d 4B)	cept	<u>Secc</u> \	indary Indicators (2 or more required) Water-Stained Leaves (B9) ( <b>MLRA 1, 2</b> <b>4A, and 4B)</b> Drainage Patterns (B10)
Depth (inches Remarks: YDROLOGY Netland Hydrol Primary Indicator Surface Wat High Water Saturation (A Water Marks	ogy Indicators: rs (minimum of on er (A1) Table (A2) A3) 5 (B1)	e required;	Water-Stai MLRA Salt Crust Aquatic Inv	ned Leaves 1, 2, 4A, an (B11) vertebrates	<b>d 4B)</b> (B13)	cept	<u>Secc</u> \ [ [	Indary Indicators (2 or more required) Water-Stained Leaves (B9) ( <b>MLRA 1, 2</b> <b>4A, and 4B)</b> Drainage Patterns (B10) Dry-Season Water Table (C2)
Depth (inches Remarks: YDROLOGY Vetland Hydrol Primary Indicator Surface Wat High Water X Saturation (A Water Marks Sediment De	ogy Indicators: rs (minimum of on er (A1) Table (A2) A3) s (B1) eposits (B2)	e required;	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen S	ned Leaves <b>1, 2, 4A, an</b> (B11) vertebrates Sulfide Odo	<b>d 4B)</b> (B13) r (C1)		<u>Secc</u> \ [ [ [	Indary Indicators (2 or more required) Water-Stained Leaves (B9) ( <b>MLRA 1, 2</b> <b>4A, and 4B)</b> Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C6
Depth (inches Remarks: YDROLOGY Vetland Hydrol Primary Indicator Surface Wat High Water Xaturation (A Water Marks Sediment De Drift Deposit	ogy Indicators: rs (minimum of on er (A1) Table (A2) A3) ; (B1) eposits (B2) s (B3)	e required;	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen S	ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odo hizosphere	<b>d 4B)</b> (B13) r (C1) s along L		<u>Secc</u> \ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ ]	Indary Indicators (2 or more required) Water-Stained Leaves (B9) ( <b>MLRA 1, 2</b> <b>4A, and 4B)</b> Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS Geomorphic Position (D2)
Depth (inches Remarks: YDROLOGY Vetland Hydrol Primary Indicator Surface Wat High Water Xaturation (A Water Marks Sediment De Drift Deposit Algal Mat or	ogy Indicators: rs (minimum of on er (A1) Table (A2) A3) 5 (B1) eposits (B2) 5 (B3) Crust (B4)	e required;	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence o	ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odo hizosphere of Reduced	d 4B) (B13) r (C1) s along L Iron (C4)	iving Roots	<u>Secc</u> \ [ [ [ [ [ [ [ [ [ [ [ [ [ [ ]	andary Indicators (2 or more required) Water-Stained Leaves (B9) ( <b>MLRA 1, 2</b> <b>4A, and 4B)</b> Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS Seomorphic Position (D2) Shallow Aquitard (D3)
Depth (inches Remarks: YDROLOGY Wetland Hydrol Primary Indicator Surface Wat High Water X Saturation (A Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposits	ogy Indicators: rs (minimum of on er (A1) Table (A2) A3) 5 (B1) eposits (B2) 5 (B3) Crust (B4) 5 (B5)	e required;	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror	ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odo hizosphere of Reduced n Reductior	d 4B) (B13) r (C1) s along L Iron (C4) i in Tilled	iving Roots Soils (C6)	<u>Secc</u> \ [ ] [ [ ] [ [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]	Andary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (inches Remarks: YDROLOGY Vetland Hydrol Primary Indicator Surface Wat High Water X Saturation (A Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposits Surface Soil	ogy Indicators: rs (minimum of on er (A1) Table (A2) A3) 5 (B1) eposits (B2) 5 (B3) Crust (B4) 5 (B5)		Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iron Stunted or	ned Leaves <b>1, 2, 4A, an</b> (B11) vertebrates Sulfide Odo hizosphere of Reduced n Reductior Stressed P	d 4B) (B13) r (C1) s along L Iron (C4) i in Tilled lants (D1)	iving Roots Soils (C6)	<u>Secc</u> \ [ [ [ [ 5 s (C3) 6 5 F	Indary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Depth (inches Remarks: YDROLOGY Vetland Hydrol Primary Indicator Surface Wate High Water Xaturation (A Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposits Surface Soil Inundation V	ogy Indicators: rs (minimum of on er (A1) Table (A2) A3) 5 (B1) eposits (B2) 5 (B3) Crust (B4) 5 (B5) Cracks (B6)	agery (B7)	Water-Stain MLRA Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iron Stunted or Other (Exp	ned Leaves <b>1, 2, 4A, an</b> (B11) vertebrates Sulfide Odo hizosphere of Reduced n Reductior Stressed P	d 4B) (B13) r (C1) s along L Iron (C4) i in Tilled lants (D1)	iving Roots Soils (C6)	<u>Secc</u> \ [ [ [ [ 5 s (C3) 6 5 F	Andary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (inches Remarks: YDROLOGY Vetland Hydrol Primary Indicator Surface Wate High Water Xaturation (A Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposits Surface Soil Inundation V Sparsely Veg	ogy Indicators: rs (minimum of on er (A1) Table (A2) A3) s (B1) eposits (B2) s (B3) Crust (B4) s (B5) Cracks (B6) isible on Aerial Im getated Concave S	agery (B7)	Water-Stain MLRA Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iron Stunted or Other (Exp	ned Leaves <b>1, 2, 4A, an</b> (B11) vertebrates Sulfide Odo hizosphere of Reduced n Reductior Stressed P	d 4B) (B13) r (C1) s along L Iron (C4) i in Tilled lants (D1)	iving Roots Soils (C6)	<u>Secc</u> \ [ [ [ [ 5 s (C3) 6 5 F	Indary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Depth (inches Remarks: YDROLOGY Vetland Hydrol Primary Indicator Surface Wate High Water Xaturation (A Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposits Surface Soil Inundation V Sparsely Veg ield Observatio	ogy Indicators: rs (minimum of on er (A1) Table (A2) A3) 5 (B1) eposits (B2) 5 (B3) Crust (B4) 5 (B5) Cracks (B6) isible on Aerial Im getated Concave S ons:	agery (B7)	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iron Stunted or Other (Exp B)	ned Leaves <b>1, 2, 4A, an</b> (B11) vertebrates Sulfide Odo hizosphere of Reduced n Reductior Stressed P lain in Rem	d 4B) (B13) r (C1) s along L lron (C4) i in Tilled lants (D1) arks)	iving Roots Soils (C6) ) (LRR A)	<u>Secc</u> \ [ [ [ [ 5 s (C3) 6 5 F	Indary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Depth (inches Remarks: YDROLOGY Wetland Hydrol Primary Indicator Surface Wate High Water Xaturation (A Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposits Surface Soil Inundation V	ogy Indicators: rs (minimum of on er (A1) Table (A2) A3) 6 (B1) eposits (B2) s (B3) Crust (B4) s (B5) Cracks (B6) isible on Aerial Im getated Concave S ons: resent? Yes	agery (B7) Surface (B8	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen 3 Oxidized R Presence c Recent Iron Stunted or Other (Exp 3)	ned Leaves <b>1, 2, 4A, an</b> (B11) vertebrates Sulfide Odo hizosphere of Reduced n Reductior Stressed P	d 4B) (B13) r (C1) s along L Iron (C4) i in Tilled lants (D1) arks)	iving Roots Soils (C6) ) (LRR A)	<u>Secc</u> \ [ [ [ [ 5 s (C3) 6 5 F	Indary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Depth (inches Remarks: YDROLOGY Wetland Hydrol Primary Indicator Surface Wate High Water X Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or Iron Deposits Surface Soil Inundation V Sparsely Veg Field Observation Surface Water Present Saturation Present Present Present P	ogy Indicators: rs (minimum of on er (A1) Table (A2) A3) s (B1) eposits (B2) s (B3) Crust (B4) s (B5) Cracks (B6) isible on Aerial Im getated Concave S ons: esent? Yes ent? Yes	agery (B7) Surface (B8 5 N	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen 3 Oxidized R Presence c Recent Iron Stunted or Other (Exp 3)	ned Leaves <b>1, 2, 4A, an</b> (B11) vertebrates Sulfide Odo hizosphere of Reduced n Reductior Stressed P lain in Rem hes): hes):	d 4B) (B13) r (C1) s along L Iron (C4) i in Tilled lants (D1) arks)	iving Roots Soils (C6) ) ( <b>LRR A</b> )	<u>Secc</u> \ [ [ [ [ [ [ [ [ [ [ [ [ [	Indary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Depth (inches Remarks: YDROLOGY Vetland Hydrol Primary Indicator Surface Wate High Water X Saturation (A Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposits Surface Soil Inundation V Sparsely Veg ield Observation furface Water Present aturation Present Algal Mat or Present Surface Soil	ogy Indicators: rs (minimum of on er (A1) Table (A2) A3) 6 (B1) eposits (B2) s (B3) Crust (B4) s (B5) Cracks (B6) isible on Aerial Im getated Concave S ons: resent? Yes ent? Yes / fringe)	agery (B7) Surface (B8 5 N 5 N 5 N	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or Other (Exp B) Depth (inc Depth (inc	ned Leaves <b>1, 2, 4A, an</b> (B11) vertebrates Sulfide Odo hizosphere of Reduced n Reduction Stressed P lain in Rem hes): hes): hes):	d 4B) (B13) r (C1) s along L Iron (C4) i in Tilled lants (D1) arks)	iving Roots Soils (C6) ) (LRR A)	<u>Secc</u> \ [ ] ] [ ] ] [ ] ] [ ] ] [ ] ]	Andary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Depth (inches Remarks: YDROLOGY Vetland Hydrol Primary Indicator Surface Wate High Water X Saturation (A Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposits Surface Soil Inundation V Sparsely Veg ield Observation urface Water Pro- Vater Table Present aturation Present Curdes capillary	ogy Indicators: rs (minimum of on er (A1) Table (A2) A3) 6 (B1) eposits (B2) s (B3) Crust (B4) s (B5) Cracks (B6) isible on Aerial Im getated Concave S ons: resent? Yes ent? Yes / fringe)	agery (B7) Surface (B8 5 N 5 N 5 N	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or Other (Exp B) Depth (inc Depth (inc	ned Leaves <b>1, 2, 4A, an</b> (B11) vertebrates Sulfide Odo hizosphere of Reduced n Reduction Stressed P lain in Rem hes): hes): hes):	d 4B) (B13) r (C1) s along L Iron (C4) i in Tilled lants (D1) arks)	iving Roots Soils (C6) ) (LRR A)	<u>Secc</u> \ [ ] ] [ ] ] [ ] ] [ ] ] [ ] ]	Andary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

#### 198 up WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region - 31-14 Project/Site: Humboldt Wind Energy Project City/County: Humboldt Sampling Date: State: CA Sampling Point: Applicant/Owner: Humboldt Wind, LLC Investigator(s): (9. Youryblood & Section, Township, Range: \_ Landform (hillslope, terrace, etc.): Toad across slop ... Local relief (concave, convex, none): Slope (%): Subregion (LRR): A: Northwest Forests and Coast Lat: -123.995632 Long: \_\_ 40.471208 Datum: Soil Map Unit Name: Scoutcamp - Rederiast Complex's 15-30% NWI classification: No \_\_\_\_\_ (If no, explain in Remarks.) Are climatic / hydrologic conditions on the site typical for this time of year? Yes Are "Normal Circumstances" present? Yes \_ No , Soil $\mathbb{N}$ , or Hydrology $\mathbb{N}$ significantly disturbed? Are Vegetation , or Hydrology $\mathcal{N}_{-}$ naturally problematic? N (If needed, explain any answers in Remarks.) Soil Are Vegetation SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Yes No Hydrophytic Vegetation Present? is the Sampled Area Hydric Soil Present? Yes No Yes No within a Wetland? No 🗸 Wetland Hydrology Present? Yes Remarks: (), and pair

	Absolute			Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1.				That Are OBL, FACW, or FAC: (A)
1 2 3				Total Number of Dominant
3.				Species Across All Strata:(B)
4				Percent of Dominant Species 50
Sapling/Shrub Stratum (Plot size: $10 \vee 10$ )		= Total Cov	ver	That Are OBL, FACW, or FAC: (A/B)
1. Rubus Ursinus	E	Y -	FACIL	Prevalence Index worksheet:
				Total % Cover of: Multiply by:
2		·····		OBL species x 1 =
3				FACW species x 2 =
4				FAC species $2.3 \times 3 = 69$
5.				FACU species $4 = 44$
	5	= Total Co	ver	FACU species $4 - 7$
<u>Herb Stratum</u> (Plot size: $5 \times 5$ )	,	-		UPL species $\underbrace{\Theta}_{2,5}$ x 5 = $\underbrace{O}_{114}$
1. Lotus COMICULATUS	<u>- 20</u>	<u> </u>	FAG	Column Totals: $(A) = (A)$
2. Achispan amplicand			FACY	Prevalence Index = $B/A = 3, 2$
3. Prubela valganig			<u>MACU</u>	Hydrophytic Vegetation Indicators:
4. Holeus Innatius	- 2		FAC	1 - Rapid Test for Hydrophytic Vegetation
5. Mentha pelegulium	1		OBL	2 - Dominance Test is >50%
6. Equisetum arvense	}		FAC	
			FACO	3 - Prevalence Index is ≤3.0 <sup>1</sup>
7. Hypocharis radicata				<ul> <li>4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)</li> </ul>
8				5 - Wetland Non-Vascular Plants <sup>1</sup>
9				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
11				be present, unless disturbed or problematic.
		_= Total Cov	/er	
Woody Vine Stratum (Plot size:)				
1		- <u></u>		Hydrophytic
2.				Vegetation Present? Yes No
		_= Total Cov	/er	Present? Yes No
% Bare Ground in Herb Stratum				
Remarks:				

Sampling Pointon (

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(inches)	Matrix		Redo	<u>x Features</u>	;			
	Color (moist)	%	Color (moist)	%	_Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
<u>0-16</u> (	Fley 2 6/5gy	50	7.57R 5/8	50	C	$\mathbb{M}$	Clay	
	~ U						0	
								· · · · · · · · · · · · · · · · · · ·
<u></u>								
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								••••••••••••••••••••••••••••••••••••••
						<u> </u>		
	contration D-Don		Deduced Matrix CC				21	
	centration, D=Depl dicators: (Applica					a Sand Grai		ation: PL=Pore Lining, M=Matrix. 's for Problematic Hydric Soils <sup>3</sup> :
Histosol (A			Sandy Redox (S		,			Muck (A10)
Histic Epip	oedon (A2)		Stripped Matrix					Parent Material (TF2)
_ Black Histi	ic (A3)		Loamy Mucky N	Aineral (F1)	) (except	MLRA 1)		Shallow Dark Surface (TF12)
	Sulfide (A4)		Loamy Gleyed I	Matrix (F2)				r (Explain in Remarks)
Depleted E	Below Dark Surface	e (A11) 🛛 _	_ Depleted Matrix	(F3)	and and a second se			
	< Surface (A12)		Redox Dark Sur	face (F6)		an a	<sup>3</sup> Indicator	s of hydrophytic vegetation and
	cky Mineral (S1)		Depleted Dark S	Surface (F7	7)			d hydrology must be present,
	eyed Matrix (S4)		Redox Depress	ions (F8)			unless	disturbed or problematic.
2 -	yer (if present):							
Type: <u>No</u>								
Depth (inche							Hydric Soil F	Present? Yes No
marks: No	· indicator	5						
		1						
								· · · · · · · · · · · · · · · · · · ·
etland Hydro	ology Indicators:							
etland Hydro imary Indicate	ology Indicators: tors (minimum of or	ne required;						dary Indicators (2 or more required)
etland Hydro imary Indicate Surface Wa	ology Indicators: tors (minimum of or 'ater (A1)	ne required;	Water-Stail	ned Leave		cept	Wa	ater-Stained Leaves (B9) (MLRA 1,
etland Hydro imary Indicate Surface Wa High Water	ology Indicators: tors (minimum of or 'ater (A1) r-Table (A2)	ne required;	Water-Stail MLRA 1	ned Leave I, 2, 4A, ar		cept	Wa	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B)
etland Hydro imary Indicato _ Surface Wa _ High Water _ Saturation	ology Indicators: tors (minimum of or dater (A1) r-Table (A2) (A3)	ne required;	Water-Stain MLRA 1 Salt Crust (	ned Leave: I <b>, 2, 4A, a</b> r (B11)	nd 4B)	cept	Wa	ater-Stained Leaves (B9) ( <b>MLRA 1,</b> <b>4A, and 4B)</b> ainage Patterns (B10)
etland Hydro imary Indicate Surface Wa High Water Saturation Water Mark	ology Indicators: tors (minimum of or fater (A1) r-Table (A2) (A3) ks (B1)	ne required;	Water-Stain MLRA 1 Salt Crust ( Aquatic Inv	ned Leaves I <b>, 2, 4A, ar</b> (B11) rertebrates	(B13)	cept	Wa Dra Dra	ater-Stained Leaves (B9) ( <b>MLRA 1,</b> <b>4A, and 4B)</b> ainage Patterns (B10) y-Season Water Table (C2)
etland Hydro imary Indicate Surface Wa High Water Saturation Water Mark Sediment E	ology Indicators: tors (minimum of or /ater (A1) -r-Table (A2) (A3) -ks (B1) Deposits (B2)	ne required;	Water-Stain MLRA 1 Salt Crust ( Aquatic Inv Hydrogen-S	ned Leaves I <b>, 2, 4A, a</b> r (B11) rertebrates Sulfide Odd	nd 4B) (B13) pr (C1)		Wa Dra Dry Sa	ater-Stained Leaves (B9) ( <b>MLRA 1,</b> <b>4A, and 4B)</b> ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C
etland Hydro imary Indicate Surface Wa High Water Saturation Water Mark Sediment E Drift Depos	ology Indicators: tors (minimum of or dater (A1) rr-Table (A2) (A3) rks (B1) Deposits (B2) sits (B3)	ne required;	Water-Stain MLRA 1 Salt Crust ( Aquatic Inv Hydrogen-S Oxidized R	ned Leaves I, <b>2, 4A, ar</b> (B11) ertebrates Sulfide Odo hizosphere	nd 4B) (B13) pr (C1) es along L	iving Roots	Wa Dra Sa (C3) Ge	ater-Stained Leaves (B9) ( <b>MLRA 1,</b> <b>4A, and 4B)</b> ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C comorphic Position (D2)
etland Hydro imary Indicate Surface Wa High Water Saturation Water Mark Sediment D Drift Depos Algal Mat o	ology Indicators: tors (minimum of or dater (A1) r-Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4)	ne required;	Water-Stain MLRA Salt Crust ( Aquatic Inv Hydrogen-S Oxidized R Presence c	ned Leaves I, <b>2, 4A, ar</b> (B11) rertebrates Sulfide Odd hizosphere of Reduced	nd 4B) (B13) pr (C1) es along L I Iron (C4)	iving Roots	Wa Dra Sa (C3) Ge Sh	ater-Stained Leaves (B9) ( <b>MLRA 1,</b> <b>4A, and 4B)</b> ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C comorphic Position (D2) allow Aquitard (D3)
etland Hydro imary Indicate Surface Wa High Water Saturation Water Mark Sediment E Drift Depos Algal Mat o Iron Depos	ology Indicators: tors (minimum of or fater (A1) rr-Table (A2) (A3) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5)	ne required;	Water-Stain MLRA 1 Salt Crust ( Aquatic Inv Hydrogen- Oxidized R Presence c Recent Iror	ned Leaves I, 2, 4A, ar (B11) rertebrates Sulfide Odd hizosphere of Reduced n Reduction	(B13) or (C1) s along L l Iron (C4) n in Tilled	iving Roots Soils (C6)	Wa Dra Sa (C3) Ge Sh FA	ater-Stained Leaves (B9) ( <b>MLRA 1,</b> <b>4A, and 4B)</b> ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C comorphic Position (D2) allow Aquitard (D3) Q-Neutral Test (D5)
imary Indicate Surface Wa High Water Saturation Water Mark Sediment E Drift Depos Algal Mat o Iron Depos Surface So	ology Indicators: tors (minimum of or dater (A1) r-Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4)		Water-Stain MLRA Salt Crust ( Aquatic Inv Hydrogen-S Oxidized R Presence c	ned Leaves I, 2, 4A, ar (B11) rertebrates Sulfide Odd hizosphere of Reduced n Reduction	(B13) or (C1) s along L l Iron (C4) n in Tilled	iving Roots Soils (C6)	Wa Dra Sa (C3) Ge Sh FA	ater-Stained Leaves (B9) ( <b>MLRA 1,</b> <b>4A, and 4B)</b> ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C comorphic Position (D2) allow Aquitard (D3)

Sparsely Vegetated Con-	cave Surfa	ace (B8)					
Field Observations:							
Surface Water Present?	Yes	No	Depth (inches):				
Water Table Present?	Yes	No	Depth (inches):				<b>N</b> .
Saturation Present? (includes capillary fringe)	Yes	No <u>×</u>	_ Depth (inches): _	<b>2</b> 00000000	Wetland Hydrology Present?	Yes	No <u>X</u>
Describe Recorded Data (stre	eam gauge	e, monitoring v	vell, aerial photos,	previous inspe	ctions), if available:		
Remarks: No indicator	-5				·		

WETLAND DETERMINATION DATA FO	RM – Western Mountains, Va	alleys, and Coa	ast Region [	200 wet
Project/Site: Humboldt Wind Energy Project	city/County: Humboldt		pling Date: <u>1</u>	600 (W)
Applicant/Owner: <u>Humboldt Wind, LLC</u> Investigator(s): <u>S. TONG &amp; G. Youngbood</u> Landform (hillslope, terrace, etc.): <u>depression</u>	Section Township Range			
Landform (hillslope, terrace, etc.): <u><u>APPPSSON</u> Subregion (LRR): <u>A: Northwest Forests and Coast</u> Lat: <u></u> Soil Map Unit Name: <u>384 · Scoutcamp- Rootcreek</u> ·</u>	-123.947773 Long:	40.457924	Datum:	· · ·
Are climatic / hydrologic conditions on the site typical for this time o	fyear? Yes _X No (If no	o, explain in Reman	KS.)	
Are Vegetation $\underline{N}$ , Soil $\underline{N}$ , or Hydrology $\underline{N}$ significant Are Vegetation $\underline{N}$ , Soil $\underline{N}$ , or Hydrology $\underline{N}$ naturally	ntly disturbed? Are "Normal Circ	cumstances" preser ain any answers in F	11? res $/$	N0
	the maint leastions	transacts im	nortant feat	ures, etc.

#### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important featur 7

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u>x</u> No Yes <u>x</u> No Yes <u>x</u> No	Is the Sampled Area within a Wetland?	Yes <u>X</u> No
Remarks:			

## VEGETATION – Use scientific names of plants.

/EGETATION – Use scientific names of plant	Absolute	Dominant	Indicator	Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size:) 1)	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC:	4)
2	$ \ge$			Total Number of Dominant Species Across All Strata:(E	3)
3		= Total Co		Percent of Dominant Species 757	4/B)
Sapling/Shrub Stratum (Plot size: 2 meter ragius	· · · · · · · · · · · · · · · · · · ·			Prevalence Index worksheet:	
1. Salix husheriana	10	7	FACW	Total % Cover of: Multiply by:	
2. Rubus ursinus	20	<u> </u>	FACU	OBL species         x 1 =	
3. Buccharis pilularis	5		FACI	FACW species         x 2 =	
4.	-			FAC species         x 2           FAC species         x 3 =	
5			- <u></u>	FACU species x 4 =	
50= 17.5 20:7	35	_ = Total Co	over	UPL species            x 5 =	
Herb Stratum (Plot size: IM rudius) 1. Equisetum arvense	15	Y	FAC	Column Totals: (A)	(B)
2. Holcus lanatus	5		FAL	Prevalence Index = B/A =	
3. Lotus corridulatus	3		FAC	Hydrophytic Vegetation Indicators:	
4. Scirpus Micharpus		- <u>-</u> <u>-</u> <u>-</u>	OBL	1 - Rapid Test for Hydrophytic Vegetation	
	5		OBL	2 - Dominance Test is >50%	
5. Mentria pulgeum	-			3 - Prevalence Index is ≤3.0 <sup>1</sup>	
7				4 - Morphological Adaptations <sup>1</sup> (Provide support data in Remarks or on a separate sheet)	orting
8			,	5 - Wetland Non-Vascular Plants <sup>1</sup>	
9				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	)
10		<u> </u>		<sup>1</sup> Indicators of hydric soil and wetland hydrology mu	ust
11 50 = 17.5 20 = 7.0	35	= Total Co	over	be present, unless disturbed or problematic.	
Woody Vine Stratum (Plot size:)					
1				- Hydrophytic	
2				Vegetation Present? Yes <u>V</u> No	
		_= Total C	over		
% Bare Ground in Herb Stratum					
Remarks:					

Sampling Point: <u>660 (wet</u>)

200 wet

Depth (inchos)	<u>Matrix</u>	<u> </u>	Red	<u>ox Feature</u>				
inches)	$\frac{\text{Color (moist)}}{5}$	%	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks
1-3	7.5 YR 5/1	_80_	7.54124/6	_ 20		PL	Clayloam	
3-12	<u>Gley1 6/104</u>	60	7.5412 5/8	40		M, PL	Clay	
					_			
						·		
					-			
ype: C=Co /dric Soil Ir	ncentration, D=Deple ndicators: (Applicat	tion, RM=	Reduced Matrix, C	S=Covered	d or Coate	d Sand Gra		PL=Pore Lining, M=Matrix.
_ Histosol (			Sandy Redox (		ea.)			roblematic Hydric Soils <sup>3</sup> :
	pedon (A2)		Stripped Matrix				2 cm Muck (	
Black His			Loamy Mucky		1) (excent		Red Parent	
	Sulfide (A4) Below Dark Surface (		🗡 Loamy Gleyed	Matrix (F2	) (except	WERA I)		w Dark Surface (TF12) ain in Remarks)
	k Surface (A12)	ATT)	Depleted Matrix Redox Dark Su				31	
	icky Mineral (S1)		Depleted Dark		7)			drophytic vegetation and
_ Sandy Gle	eyed Matrix (S4)		Redox Depress		• /			plogy must be present, red or problematic.
	ayer (if present):			- (/				
Type:								
Depth (inch marks: 01			<del>_</del>				Hydric Soil Present	? Yes X No
		tix p	resent starti	ny w/i	n 12	in ch of	the soil surf.	1 ( c
DROLOG etland Hydr	Y ology Indicators:				n 12	in ch of	the soil surf.	1 (k.
DROLOG etland Hydr mary Indicat	Y ology Indicators: ors (minimum of one		check all that apply	·)			the soil surf. Secondary Ind	icators (2 or more required)
DROLOG etland Hydro mary Indicat Surface W	Y ology Indicators: ors (minimum of one ater (A1)		check all that apply	() ned Leave	s (B9) ( <b>ex</b>		the soil sucf <u>Secondary Ind</u> Water-Stai	icators (2 or more required) ned Leaves (B9) (MLRA 1, 2
DROLOG tland Hydro mary Indicat Surface W High Wate	Y ology Indicators: ors (minimum of one ater (A1) r Table (A2)		<u>check all that apply</u> Water-Stair <b>MLRA 1</b>	/) ned Leave	s (B9) ( <b>ex</b>		the soil sucfa <u>Secondary Ind</u> Water-Stai 4A, and	i <u>cators (2 or more required)</u> ned Leaves (B9) ( <b>MLRA 1, 2</b> <b>I 4B</b> )
DROLOG tland Hydr mary Indicat Surface W High Wate Saturation	Y ology Indicators: ors (minimum of one ater (A1) r Table (A2) (A3)		<u>check all that apply</u> Water-Stain <b>MLRA 1</b> Salt Crust (	ned Leave , <b>2, 4A, a</b> r B11)	s (B9) (ex nd 4B)		Hu       So'il SUCF.	icators (2 or more required) ned Leaves (B9) ( <b>MLRA 1, 2</b> <b>1 4B</b> ) Patterns (B10)
DROLOG atland Hydr mary Indicat Surface W High Wate Saturation Water Mar	Y ology Indicators: ors (minimum of one ater (A1) r Table (A2) (A3)		<u>check all that apply</u> Water-Stain <b>MLRA 1</b> Salt Crust ( Aquatic Inv	() ned Leave: I, <b>2, 4A, a</b> r B11) ertebrates	s (B9) (ex nd 4B) (B13)		Hu       So'il       SUCF.	icators (2 or more required) ned Leaves (B9) ( <b>MLRA 1, 2</b> <b>i 4B</b> ) Patterns (B10) n Water Table (C2)
DROLOG tland Hydr mary Indicat Surface W High Wate Saturation Water Mar	Y ology Indicators: ors (minimum of one ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2)		<u>check all that apply</u> Water-Stain <b>MLRA 1</b> Salt Crust ( Aquatic Inv Hydrogen S	() ned Leave: I, <b>2, 4A, ar</b> B11) ertebrates Sulfide Odd	s (B9) (exa nd 4B) (B13) or (C1)	cept	ML       So'il SUCF.	icators (2 or more required) ned Leaves (B9) ( <b>MLRA 1, 2</b> <b>i 4B</b> ) Patterns (B10) n Water Table (C2) Visible on Aerial Imagery (CS
DROLOG tland Hydr mary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat c	Y ology Indicators: ors (minimum of one ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4)		<u>check all that apply</u> Water-Stain <b>MLRA 1</b> Salt Crust ( Aquatic Inv	() ned Leave: I, <b>2, 4A, ar</b> B11) ertebrates Sulfide Odd hizosphere	s (B9) ( <b>ex</b> i n <b>d 4B</b> ) (B13) or (C1) es along Li	cept	Hu       So'l SU(F,	icators (2 or more required) ned Leaves (B9) ( <b>MLRA 1, 2</b> <b>1 4B</b> ) Patterns (B10) n Water Table (C2) Visible on Aerial Imagery (CS ic Position (D2)
DROLOG Atland Hydr Mary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat c Iron Depos	Y ology Indicators: cors (minimum of one ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5)		<u>check all that apply</u> <u>           Water-Stair</u> <u>             MLRA 1</u> <u>           Salt Crust (</u> <u> </u>	() ned Leave , <b>2, 4A, ar</b> B11) ertebrates Sulfide Odd hizosphere f Reduced	s (B9) (ex nd 4B) (B13) or (C1) es along Li I Iron (C4)	cept ving Roots	ML       Soil SUCF.          Secondary Ind          Water-Stail          Water-Stail          Drainage F          Dry-Seaso          Saturation         (C3)           Shallow Ac	icators (2 or more required) ned Leaves (B9) ( <b>MLRA 1, 2</b> <b>1 4B</b> ) Patterns (B10) n Water Table (C2) Visible on Aerial Imagery (CS ic Position (D2) juitard (D3)
DROLOG tland Hydr mary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat c Iron Depos Surface So	Y ology Indicators: cors (minimum of one ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) il Cracks (B6)	required;	check all that apply Water-Stain MLRA 1 Salt Crust ( Aquatic Inv Hydrogen S X Oxidized RI Presence o Recent Iron Stunted or S	ned Leave l, <b>2, 4A, ar</b> B11) ertebrates Sulfide Odd hizosphere f Reduced Reductor	s (B9) ( <b>ex</b> n <b>d 4B</b> ) (B13) or (C1) es along Li I Iron (C4) n in Tilled :	cept ving Roots Soils (C6)	Hu       So'il SU(Fi	icators (2 or more required) ned Leaves (B9) (MLRA 1, 2 4 4B) Patterns (B10) n Water Table (C2) Visible on Aerial Imagery (C9 ic Position (D2) juitard (D3) al Test (D5)
DROLOG etland Hydr mary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat c Iron Depos Surface So Inundation	Y ology Indicators: ors (minimum of one ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Imag	required;	<u>check all that apply</u> Water-Stain MLRA 1 Salt Crust ( Aquatic Inv Hydrogen S X Oxidized RI Presence o Recent Iron Stunted or S Other (Expl	() ned Leaves (, <b>2, 4A, ar</b> B11) ertebrates Sulfide Odd hizosphere f Reduced i Reduced Reductior Stressed P	s (B9) (ex nd 4B) (B13) or (C1) es along Li l Iron (C4) n in Tilled s Plants (D1)	cept ving Roots Soils (C6)	Hu       So'il SU(Fi	icators (2 or more required) ned Leaves (B9) ( <b>MLRA 1, 2</b> <b>1 4B</b> ) Patterns (B10) n Water Table (C2) Visible on Aerial Imagery (CS ic Position (D2) juitard (D3) al Test (D5) Mounds (D6) ( <b>LRR A</b> )
DROLOG etland Hydr mary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat c Iron Depos Surface So Inundation Sparsely W	Y ology Indicators: ors (minimum of one ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Image egetated Concave Su	required;	<u>check all that apply</u> Water-Stain MLRA 1 Salt Crust ( Aquatic Inv Hydrogen S X Oxidized RI Presence o Recent Iron Stunted or S Other (Expl	() ned Leaves (, <b>2, 4A, ar</b> B11) ertebrates Sulfide Odd hizosphere f Reduced i Reduced Reductior Stressed P	s (B9) (ex nd 4B) (B13) or (C1) es along Li l Iron (C4) n in Tilled s Plants (D1)	cept ving Roots Soils (C6)	Hu       So'il SU(Fi	icators (2 or more required) ned Leaves (B9) ( <b>MLRA 1, 2</b> <b>1 4B</b> ) Patterns (B10) n Water Table (C2) Visible on Aerial Imagery (C9 ic Position (D2) juitard (D3) al Test (D5)
DROLOG etland Hydr mary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat o Iron Depos Surface So Inundation Sparsely Ve	Y ology Indicators: ors (minimum of one ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Image egetated Concave Su ions:	required; gery (B7) irface (B8	<u>check all that apply</u> Water-Stair MLRA 1 Salt Crust ( Aquatic Inv Hydrogen S X Oxidized RI Presence o Recent Iron Stunted or S Other (Expl. 3)	() ned Leave (, <b>2, 4A, ar</b> B11) ertebrates Sulfide Odd hizosphere f Reduced r Reductior Stressed P ain in Rem	s (B9) (ex nd 4B) (B13) or (C1) es along Li I Iron (C4) n in Tilled s Plants (D1) narks)	cept ving Roots Soils (C6)	Hu       So'il SU(Fi	icators (2 or more required) ned Leaves (B9) ( <b>MLRA 1, 2</b> <b>1 4B</b> ) Patterns (B10) n Water Table (C2) Visible on Aerial Imagery (CS ic Position (D2) juitard (D3) al Test (D5) Mounds (D6) ( <b>LRR A</b> )
DROLOG tland Hydr mary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat c Iron Depos Surface So Inundation Sparsely W d Observat face Water F	Y ology Indicators: cors (minimum of one ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Image egetated Concave Su ions: Present? Yes	required; gery (B7) irface (B8	check all that apply         Water-Stain         MLRA 1         Salt Crust (         Aquatic Inv         Hydrogen S         X       Oxidized RI         Presence o         Recent Iron         Other (Expl.         3)         Depth (incl	() ned Leave 1, 2, 4A, ar B11) ertebrates Sulfide Odd hizosphere f Reduced Reductior Stressed P ain in Rem nes):	s (B9) (ex nd 4B) (B13) or (C1) es along Li l Iron (C4) n in Tilled s Plants (D1) narks)	cept ving Roots Soils (C6)	Hu       So'il SU(Fi	icators (2 or more required) ned Leaves (B9) ( <b>MLRA 1, 2</b> <b>1 4B</b> ) Patterns (B10) n Water Table (C2) Visible on Aerial Imagery (CS ic Position (D2) juitard (D3) al Test (D5) Mounds (D6) ( <b>LRR A</b> )
DROLOG etland Hydr mary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat c Iron Depos Surface So Inundation Sparsely W d Observat face Water F	Y ology Indicators: ors (minimum of one ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Image egetated Concave Su ions: Present? Yes _ esent? Yes _	required; gery (B7) Irface (B8	check all that apply         Water-Stain         MLRA 1         Salt Crust (         Aquatic Inv         Hydrogen S         X       Oxidized RI         Presence o         Recent Iron         Stunted or S         Other (Expl.         Depth (incl         Y       Depth (incl	() ned Leaves 1, <b>2, 4A, ar</b> B11) ertebrates Sulfide Odd hizosphere f Reduced i Reduced Reductor Stressed P ain in Rem nes):	s (B9) (ex nd 4B) (B13) or (C1) es along Li l Iron (C4) n in Tilled Plants (D1) narks)	cept Soils (C6) (LRR A)	Hu       So'il SU(Fi          Secondary Ind          Water-Stai         4A, and          Drainage F          Dry-Seaso          Saturation         (C3)       Geomorph          Shallow Ac          FAC-Neutr          Raised Ant          Frost-Heav	icators (2 or more required) ned Leaves (B9) (MLRA 1, 2 1 4B) Patterns (B10) n Water Table (C2) Visible on Aerial Imagery (C9 ic Position (D2) juitard (D3) al Test (D5) Mounds (D6) (LRR A) e Hummocks (D7)
DROLOG etland Hydr mary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat c Iron Depos Surface So Inundation Sparsely W d Observat face Water F ter Table Pre- uration Press	Y ology Indicators: ors (minimum of one ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Image egetated Concave Su ions: Present? Yes _ esent? Yes _ ent? Yes _ or Yes _ ent? Yes _ or Yes _ or Ye	pery (B7) Inface (B8	check all that apply		s (B9) (ex nd 4B) (B13) or (C1) es along Li l Iron (C4) n in Tilled : Plants (D1) narks)	cept ving Roots Soils (C6) (LRR A)	Hu       So'il SU(Fi          Secondary Ind          Water-Stai         4A, and          Drainage F          Dry-Seaso          Saturation         (C3)       Geomorph          Shallow Ac          FAC-Neutr          Raised Ant          Frost-Heav	icators (2 or more required) ned Leaves (B9) (MLRA 1, 2 1 4B) Patterns (B10) n Water Table (C2) Visible on Aerial Imagery (CS ic Position (D2) juitard (D3) al Test (D5) Mounds (D6) (LRR A) e Hummocks (D7)
DROLOG etland Hydr mary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat c Iron Depos Surface So Inundation Sparsely W d Observat face Water F ter Table Pre- uration Press	Y ology Indicators: ors (minimum of one ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Image egetated Concave Su ions: Present? Yes _ esent? Yes _	pery (B7) Inface (B8	check all that apply		s (B9) (ex nd 4B) (B13) or (C1) es along Li l Iron (C4) n in Tilled : Plants (D1) narks)	cept ving Roots Soils (C6) (LRR A)	Hu       So'il SU(Fi          Secondary Ind          Water-Stai         4A, and          Drainage F          Dry-Seaso          Saturation         (C3)       Geomorph          Shallow Ac          FAC-Neutr          Raised Ant          Frost-Heav	icators (2 or more required) ned Leaves (B9) (MLRA 1, 2 1 4B) Patterns (B10) n Water Table (C2) Visible on Aerial Imagery (CS ic Position (D2) juitard (D3) al Test (D5) Mounds (D6) (LRR A) e Hummocks (D7)
DROLOG etland Hydr mary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat c Iron Depos Surface So Inundation Sparsely W d Observat face Water F face Water F face Water F ter Table Presultation Press ludes capilla	Y ology Indicators: ors (minimum of one ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Image egetated Concave Su ions: Present? Yes ent? Yes ent? Yes or Crust (stream gau	pery (B7) prface (B8 No No No No No	check all that apply         Water-Stain         MLRA 1         Salt Crust (         Aquatic Inv         Hydrogen S         X Oxidized RI         Presence o         Recent Iron         Stunted or S         Other (Expl.)         Depth (incl         Depth (incl         Depth (incl         Depth (incl         Depth (incl	() ned Leave: (), 2, 4A, ar B11) ertebrates Sulfide Odd hizosphere f Reduced Reductior Stressed P ain in Rem nes): nes): notos, prev	s (B9) (ex nd 4B) (B13) or (C1) es along Li l Iron (C4) n in Tilled : Plants (D1) narks)	cept ving Roots Soils (C6) (LRR A) Wetland	Hu       So'il SU(Fi          Secondary Ind          Water-Stai         4A, and          Drainage F          Dry-Seaso          Saturation         (C3)       Geomorph          Shallow Ac          FAC-Neutr          Raised Ant          Frost-Heav	icators (2 or more required) ned Leaves (B9) (MLRA 1, 2 1 4B) Patterns (B10) n Water Table (C2) Visible on Aerial Imagery (CS ic Position (D2) juitard (D3) al Test (D5) Mounds (D6) (LRR A) e Hummocks (D7)
DROLOG etland Hydr mary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat c Iron Depos Surface So Inundation Sparsely W d Observat face Water F face Water F face Water F ter Table Presultation Press ludes capilla	Y ology Indicators: ors (minimum of one ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Image egetated Concave Su ions: Present? Yes ent? Yes ent? Yes or Crust (stream gau	pery (B7) prface (B8 No No No No No	check all that apply         Water-Stain         MLRA 1         Salt Crust (         Aquatic Inv         Hydrogen S         X Oxidized RI         Presence o         Recent Iron         Stunted or S         Other (Expl.)         Depth (incl         Depth (incl         Depth (incl         Depth (incl         Depth (incl	() ned Leave: (), 2, 4A, ar B11) ertebrates Sulfide Odd hizosphere f Reduced Reductior Stressed P ain in Rem nes): nes): notos, prev	s (B9) (ex nd 4B) (B13) or (C1) es along Li l Iron (C4) n in Tilled : Plants (D1) narks)	cept ving Roots Soils (C6) (LRR A) Wetland	Hu       So'il SU(Fi          Secondary Ind          Water-Stai         4A, and          Drainage F          Dry-Seaso          Saturation         (C3)       Geomorph          Shallow Ac          FAC-Neutr          Raised Ant          Frost-Heav	icators (2 or more required) ned Leaves (B9) (MLRA 1, 2 1 4B) Patterns (B10) n Water Table (C2) Visible on Aerial Imagery (C9 ic Position (D2) juitard (D3) al Test (D5) Mounds (D6) (LRR A) e Hummocks (D7)
DROLOG etland Hydr mary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat c Iron Depos Surface So Inundation Sparsely W d Observat face Water F face Water F face Water F ter Table Presultation Press ludes capilla	Y ology Indicators: ors (minimum of one ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Image egetated Concave Su ions: Present? Yes _ esent? Yes _ ent? Yes _ or Yes _ ent? Yes _ or Yes _ or Ye	pery (B7) prface (B8 No No No No No	check all that apply         Water-Stain         MLRA 1         Salt Crust (         Aquatic Inv         Hydrogen S         X Oxidized RI         Presence o         Recent Iron         Stunted or S         Other (Expl.)         Depth (incl         Depth (incl         Depth (incl         Depth (incl         Depth (incl	() ned Leave: (), 2, 4A, ar B11) ertebrates Sulfide Odd hizosphere f Reduced Reductior Stressed P ain in Rem nes): nes): notos, prev	s (B9) (ex nd 4B) (B13) or (C1) es along Li l Iron (C4) n in Tilled : Plants (D1) narks)	cept ving Roots Soils (C6) (LRR A) Wetland	Hu       So'il SU(Fi          Secondary Ind          Water-Stai         4A, and          Drainage F          Dry-Seaso          Saturation         (C3)       Geomorph          Shallow Ac          FAC-Neutr          Raised Ant          Frost-Heav	icators (2 or more required) ned Leaves (B9) (MLRA 1, 2 1 4B) Patterns (B10) n Water Table (C2) Visible on Aerial Imagery (CS ic Position (D2) juitard (D3) al Test (D5) Mounds (D6) (LRR A) e Hummocks (D7)

WETLAND DETERMINATION DAT	A FORM	i – West	e <mark>rn</mark> Mour	ntains, Valleys, and Coast Region 200 up
Project/Site: Humboldt Wind Energy Project	С	itv/County:	Humbold	t Sampling Date: 7/30/18
Applicant/Owner: Humboldt Wind, LLC				State: CA Sampling Point: @00
Investigator(s): S.TONA, G. Young blood				
Landform (hillslope, terrace, etc.):	Ŭ	ocal relief	(concave c	onvex none): Concave Slope (%): 2
Subregion (LRR): <u>A: Northwest Forests and Coast</u>		3.94778	7	Long: 40.457918 Datum:
Soil Map Unit Name: 384 Scoutcamp Rootcree	k. Red	rrest a	mplex. 3	U DU NWI classification: U A UL
Are climatic / hydrologic conditions on the site typical for this				
Are climatic / hydrologic conditions on the site typical for this Are Vegetation $N_{\rm e}$ , Soil $N_{\rm e}$ , or Hydrology $N_{\rm e}$ sig			No Are "ì	Normal Circumstances" present? Yes <u>X</u> No
Are Vegetation $N$ , Soil $N$ , or Hydrology $N$ na	turally prob	ematic?	(If nee	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map s	howing	samplin	g point lo	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	<u>×</u>	1- 44	- Compled	Area
Hydric Soil Present? Yes No		with	e Sampled in a Wetlan	d? Yes <u>No X</u>
Wetland Hydrology Present? Yes No				
Remarks: Sampling point docume	nts the	e upla	and pa	ir point for a wetland.
VEGETATION – Use scientific names of plant	s.			
	Absolute			Dominance Test worksheet:
	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
1				
2				Total Number of Dominant Species Across All Strata: <u>3</u> (B)
Δ				
Sapling/Shrub Stratum (Plot size: 2 m radius)		= Total Co	ver	Percent of Dominant Species <u>32,3</u> (A/B)
LA PUBLIC UPSTORE	30	7	FACU	Prevalence Index worksheet:
2. Bacchais pilularis	5	Z	UPL	
3. Vaccinium parviflucum	15	<u> </u>	FACI	
4				FACW species $0$ $x 2 =FAC species 17 x 3 = _51$
5				FACU species $47$ x4 = $188$
51-25 20:10	50	= Total Co	ver	UPL species $5 \times 5 = 25$
Herb Stratum (Plot size: IM TONIUS) 1. Bolium apacine	2		FACU	Column Totals: (A) <u>274</u> (B)
2. Holcus Ignatus			FAC	Prevalence Index = $B/A = 3.3$
3. Equisetum arvense	15			Hydrophytic Vegetation Indicators:
4				N 1 - Rapid Test for Hydrophytic Vegetation
5				$\frac{1}{N}$ 2 - Dominance Test is >50%
6				N 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
8				✓ 5 - Wetland Non-Vascular Plants <sup>1</sup>
9 10				➡ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
50=11 20=4.4	22	= Total Co	ver	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)				Ludron butio
1				Hydrophytic Vegetation
2		= Total Co		Present? Yes <u>No X</u>
% Bare Ground in Herb Stratum			-	
Remarks:		1		
			2	

29

Sampling Point: 600 (UP)

200 up

Profile Des	cription: (Descri	be to the dep	th needed to docu	ment the i	indicator	or confirm	the absence of ind	cators.)
Depth	Matrix			x Feature				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	<u>Loc<sup>2</sup></u>	Texture	Remarks
0-6	101R512	100					Clayloam	
6-16	101R 5/2	60	1042518	40	С	$\mathcal{M}$	Clayloum	
							<u> </u>	
			•					
				••• ••••••••••••••••••••••••••••••••••				
							······	
<sup>1</sup> Type: C=C	oncentration D=C	enletion RM=	Reduced Matrix, CS		d or Coato	d Sand Cr	21 appliant	
Hydric Soil	Indicators: (App	licable to all	_RRs, unless othe	rwise note		u Sanu Gia		PL=Pore Lining, M=Matrix. Problematic Hydric Soils <sup>3</sup> :
Histosol			Sandy Redox (		54.7			-
	pipedon (A2)		Stripped Matrix				2 cm Muck	Material (TF2)
	istic (A3)		Loamy Mucky N		) (except	MLRA 1)		w Dark Surface (TF12)
	en Sulfide (A4)		Loamy Gleyed					ain in Remarks)
Deplete	d Below Dark Surf	ace (A11)	Depleted Matrix					
	ark Surface (A12)		Redox Dark Su	rface (F6)			<sup>3</sup> Indicators of hy	drophytic vegetation and
	Aucky Mineral (S1		Depleted Dark 3		7)		wetland hydr	ology must be present,
-	Bleyed Matrix (S4)		Redox Depress	ions (F8)			unless distur	bed or problematic.
	Layer (if present)	:						
								ħ./
Depth (in Remarks:	ches):						Hydric Soil Preser	nt? Yes No
	ATT FELL 7							
HYDROLO								
-	drology Indicator							
		f one required	check all that apply	/)			Secondary In	dicators (2 or more required)
Surface	Water (A1)		Water-Stai	ned Leave	es (B9) ( <b>ex</b>	cept	Water-St	ained Leaves (B9) (MLRA 1, 2,
-	ater Table (A2)			1, 2, 4A, a				nd 4B)
Saturatio			Salt Crust				Drainage	Patterns (B10)
	larks (B1)		Aquatic Inv				Dry-Seas	on Water Table (C2)
	nt Deposits (B2)		Hydrogen	Sulfide Od	or (C1)		Saturatio	n Visible on Aerial Imagery (C9)
	posits (B3)		Oxidized R		-	-	s (C3) 🦲 Geomorp	hic Position (D2)
	at or Crust (B4)		Presence of				Shallow A	
	oosits (B5)		Recent Iron			. ,		
	Soil Cracks (B6)		Stunted or			) (LRR A)		nt Mounds (D6) (LRR A)
	on Visible on Aeria			lain in Rer	narks)		Frost-Hea	ave Hummocks (D7)
Field Observ	Vegetated Conca	ve Surface (B	8)					
					Constant of the local division of the local			
Surface Wate			o Depth (inc			-		
Water Table		res N	o <u> </u>	nes):	90000000000	-		$\sim$
Saturation Pr (includes cap Describe Rec	oillary fringe)		o Depth (inc				nd Hydrology Prese	nt? Yes No X
		330,01	and p			couoria), il	avanabie.	
Remarks:								
NO WE	Hand hydro	logy ind	icators pre	scat.				
· v -	ι. 	J	1.					

WETLAND DETERMINATION DA		– Weste	rn Moun	tains, Valleys, an	d Coast Region 202 up
Project/Site: Humboldt Wind Energy Project	Cit	v/County: I	Humbold	t	_ Sampling Date: 7/25/18
Applicant/Owner: Humboldt Wind, LLC		j j _		State: CA	Sampling Point: 502 (UP)
Investigator(s): J. Hulson, S. Crear					
and the second se		and rollef (		anyor hones:	Slope (%):
Landform (hillslope, terrace, etc.):		.877413	,	Long: 40.4407	63 Datum:
Subregion (LRR). A. Northwest rolests and Obast	ek-mai	lvidae	CONG	NW classifi	cation: 00000
Are climatic / hydrologic conditions on the site typical for thi	is time of year?	Ves N	/ No	(If no, explain in I	Remarks.)
			۲۰۰ ۵ ۲۰۰ "۱	lormal Circumstances"	present? Yes X No
Are Vegetation, Soil, or Hydrology				eded, explain any answ	
Are Vegetation, Soil, or Hydrology			•		
SUMMARY OF FINDINGS – Attach site map	5 mt	ampling	point lo	cations, transect	s, important reatures, etc.
Hydrophytic Vegetation Present?       YesN         Hydric Soil Present?       YesN         Wetland Hydrology Present?       YesN	√o <u> </u>	ls the withir	Sampled n a Wetlan	Area d? Yes	<u>No X</u>
Remarks:	<u>`</u>				
VEGETATION – Use scientific names of plan		Dominant	Indicator	Dominance Test wor	ksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>			Number of Dominant	
Tree Stratum (Plot size:) 1. Sequer semplimitent	_ <u>2                                   </u>	<u> </u>	JPL	That Are OBL, FACW	, or FAC: (A)
2				Total Number of Dom Species Across All St	
4.	<u> </u>			Percent of Dominant	
	<u>as</u> =	= Total Cov	er	That Are OBL, FACW	
Sapling/Shrub Stratum (Plot size:) 1. <u>Ceuvot-NUS Integrinmus</u>	5	<u> </u>	JPL	Prevalence Index wo	
2				Total % Cover of	x 1 =
3					x 2 =
4					× 3 =
5				FACU species	
Llash Stratum (Diataiza:	=	= Total Cov	/er		x 5 =
Herb Stratum (Plot size:) 1. Hurus lanatus	2Ô	У.	FAC	Column Totals:	(A) (B)
2. Acmispon americanus	20	Y	FACU	Prevalence Inde	ex = B/A =
3. Madia Plogans		Ý.	UPL	Hydrophytic Vegeta	
4. Usland Carex Sp.	100	<u>N</u>		1 - Rapid Test fo	r Hydrophyti <b>c</b> Vegetation
5. Dica carrophillen	<u> </u>	<u> </u>	FACU	2 - Dominance T	
6				3 - Prevalence In	
7				4 - Morphologica	I Adaptations <sup>1</sup> (Provide supporting rks or on a separate sheet)
8				5 - Wetland Non-	
9					rophytic Vegetation <sup>1</sup> (Explain)
10				<sup>1</sup> Indicators of hydric s	soil and wetland hydrology must
11	- 68 =	= Total Cov	er	be present, unless di	sturbed or problematic.
Woody Vine Stratum (Plot size:)					
1				Hydrophytic Vegetation	$\mathcal{V}$
2				Present?	Yes No
% Bare Ground in Herb Stratum <u>3</u> 2		- 10tai C0\			
Remarks:					

										202 up
SOIL								Sam	oling Point:	502(up)
Profile Desc	ription: (Describe t	o the depth	needed to docur	nent the i	ndicator	or confirm	the absence o		-	
Depth	Matrix			x Feature					,	
<u>(inches)</u>	Color (moist)		Color (moist)	%	_Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
0-12	757R.1/2	100	and a second and a second and a second and a second and the second and the second and the second and the second	and the second se	ni-soomooraa acadamaanya ay	(	day 100	a lan		
		<u></u>				<u> </u>	<u> a a a a a a a a a a a a a a a a a a a</u>	<u>~~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~</u>		
		······							•••••••	
		<u> </u>								
				· · · · · · · · · · · · · · · · · · ·						
				·			·	-u		
				· · · · · · · · · · · · · · · · · · ·						
<sup>1</sup> Type: C=Co	ncentration, D=Deple	etion. RM=Re	educed Matrix, CS	=Covered	or Coate	 d Sand Gr	ains <sup>2</sup> locat	ion: PL=Pore	alining M	
Hydric Soil I	ndicators: (Applica	ble to all LR	Rs, unless other	wise note	ed.)			for Problem		
Histosol			Sandy Redox (S					Muck (A10)		00000
	ipedon (A2)		_ Stripped Matrix	· ·				arent Materia	L(TE2)	
Black His	stic (A3)		Loamy Mucky M		) (except	MLRA 1)		Shallow Dark		E12)
Hydroger	n Sulfide (A <b>4</b> )		Loamy Gleyed N			,		(Explain in Re		12)
Depleted	Below Dark Surface	(A11)	Depleted Matrix					(		
Thick Da	rk Surface (A12)		_ Redox Dark Sur	face (F6)			<sup>3</sup> Indicators	of hydrophyt	ic vegetatio	on and
Sandy M	ucky Mineral (S1)		_ Depleted Dark S	Surface (F	7)			hydrology m	0	
	eyed Matrix (S4)		Redox Depressi	ons (F8)				disturbed or p		
Restrictive L	ayer (if present):						]			
Туре:										$\searrow$
	hes):						Hydric Soil Pr	resent? Ye	es	No
Remarks:							4			

## HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
	ept
Field Observations:	
Surface Water Present?         Yes No Depth (inches):           Water Table Present?         Yes No Depth (inches):	X
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:
Remarks:	

WETLAND DETERMINATION DAT	A FORM –	Western Mour	ntains, Valleys, and Co	bast Region 20	2 wet
Project/Site: Humboldt Wind Energy Project					
Project/Site: Humboldt VVInd Energy Project	City/C	Jounty. <u>Indribold</u>	State: <u>CA</u> Sar	mpling Bale: $\underline{-}$	3/1.204)
					<del>s ( us</del> )
Investigator(s): S. Cheer, J. Hulson					A= 3
Landform (hillslope, terrace, etc.):	Loca	I relief (concave, c	convex, none):	Slope (%)	:0 &
Subregion (LRR): <u>A: Northwest Forests and Coast</u>	Lat:123.8	77378	Long: <u>40.440753</u>	Datum:	
Soil Map Unit Name: <u>Reduced house Yagerere</u>	et Maiir	ida, Cumpl	NWI classification	n: <u>noke</u>	
Are climatic / hydrologic conditions on the site typical for this	time of year? `	Yes No	(If no, explain in Rema	urks.)	
Are Vegetation, Soil, or Hydrology sig	nificantly distu	rbed? Are "I	Normal Circumstances" prese	ent? Yes 🔏 🚬 N	10
Are Vegetation, Soil, or Hydrology na	turally problem	atic? (If ne	eded, explain any answers in	Remarks.)	
SUMMARY OF FINDINGS – Attach site map s					es, etc.
		Τ		· · · · · · · · · · · · · · · · · · ·	
Hydric Soil Present? Yes Xes No		Is the Sampled within a Wetlan	Т.	No	
Remarks: adjust to road converse vegetation – Use scientific names of plant					
		minant Indicator	Dominance Test workshe	et:	
Tree Stratum         (Plot size:)           1	<u>% Cover Sp</u>	ecies? <u>Status</u>	Number of Dominant Speci That Are OBL, FACW, or F	/	(A)
2	······		Total Number of Dominant Species Across All Strata:	_2	_ (B)
4	= T	otal Cover	Percent of Dominant Speci That Are OBL, FACW, or F		_ (A/B)
Sapling/Shrub Stratum (Plot size:)			Prevalence Index worksh	eet:	
1			Total % Cover of:		
2		<u> </u>	OBL species	x 1 =	
3			FACW species	x 2 =	_
4			FAC species	x 3 =	
5			FACU species		1
Herb Stratum (Plot size! Meter diam	= T	UIAI COVEI	UPL species		
1. JUNCUS EPPUSUS	35 \	1 FACW	Column Totals:	(A)	(B)

I waster diam		_ =   otal	Cover	UPL species x 5 =
Herb Stratum (Plot size! Meter Lipm	35	V	FACW	Column Totals: (A) (B)
1. JUNCUS EPPUSUS		/		
2. Parentucellia viscosa	-10	<u> </u>	_ FAS_	Prevalence Index = B/A =
3. Junius bolanderi	15		_OBL	Hydrophytic Vegetation Indicators:
4. Horus lanatus		<u>    N      </u>	<u>FAC</u>	1 - Rapid Test for Hydrophytic Vegetation
5. Mentha Dulecium		<u>N</u>	<u>OBL</u>	∠ 2 - Dominance Test is >50%
6. Achispan americanus	<u> </u>	<u>N</u>	TACU	3 - Prevalence Index is ≤3.0 <sup>1</sup>
7. Juncus patens	5	$\mathbb{N}$	FACW	4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
				5 - Wetland Non-Vascular Plants <sup>1</sup>
9				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10 11	90	= Total	Cover	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)	10_		00001	
1.				Hydrophytic
2.				Vegetation Present? Yes No
% Bare Ground in Herb Stratum 15		_= Total	Cover	Present? Yes No
Remarks:				

	202	W	<b>vet</b>
1			

Profile Description: (Describe to the depth		Sampling Point: $50 + (\omega)$
	needed to document the indicator or con-	
Depth <u>Matrix</u>	Redox Features	_
(inches) Color (moist) %	<u>Color (moist)</u> <u>%</u> <u>Type<sup>1</sup></u> Loc <sup>2</sup>	Texture Remarks
0-2 10/124/3 95 4	51278 5 C M	loam
<u>2-4 107K-74 45 _</u>	5	loam
4-10 <u>757R3/ 97</u>	<u> </u>	dauloan
······································		
· · · · · · · · · · · · · · · · · · ·	······································	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=R	educed Matrix, CS=Covered or Coated Sand	Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LF	Rs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	_ Sandy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2) Black Histic (A3)	_ Stripped Matrix (S6)	Red Parent Material (TF2)
Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1) (except MLRA Loamy Gleyed Matrix (F2)	1) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	_ Depleted Matrix (F3)	
Thick Dark Surface (A12)	Redox Dark Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	_ Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	_ Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):		
Type:	_	$\sim$
Depth (inches): Remarks:		Hydric Soil Present? Yes No
HYDROLOGY		
Wetland Hydrology Indicators:		•
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; c		Secondary Indicators (2 or more required)
Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one required; c</u> Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one required; c</u> Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; c Surface Water (A1) High Water Table (A2) Saturation (A3)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; c Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	<ul> <li>Water-Stained Leaves (B9) (except</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> </ul>
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; c Surface Water (A1) High Water Table (A2) Saturation (A3)	<ul> <li>Water-Stained Leaves (B9) (except</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> </ul>
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; c Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	<ul> <li>Water-Stained Leaves (B9) (except</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living R</li> </ul>	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Crainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) oots (C3) Ceomorphic Position (D2)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; c	<ul> <li>Water-Stained Leaves (B9) (except</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>coots (C3)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> </ul>
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; c Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	<ul> <li>Water-Stained Leaves (B9) (except</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living R</li> <li>Presence of Reduced Iron (C4)</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>oots (C3)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>C6)</li> <li>FAC-Neutral Test (D5)</li> </ul>
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; c Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	<ul> <li>Water-Stained Leaves (B9) (except</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living R</li> <li>Presence of Reduced Iron (C4)</li> <li>Recent Iron Reduction in Tilled Soils (</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>oots (C3)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>C6)</li> <li>FAC-Neutral Test (D5)</li> </ul>
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; c Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)	<ul> <li>Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living R</li> <li>Presence of Reduced Iron (C4)</li> <li>Recent Iron Reduction in Tilled Soils ( Stunted or Stressed Plants (D1) (LRR</li> <li>Other (Explain in Remarks)</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>oots (C3)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>C6)</li> <li>FAC-Neutral Test (D5)</li> <li>A)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> </ul>
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; c Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations:	<ul> <li>Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living R</li> <li>Presence of Reduced Iron (C4)</li> <li>Recent Iron Reduction in Tilled Soils ( Stunted or Stressed Plants (D1) (LRR</li> <li>Other (Explain in Remarks)</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>oots (C3)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>C6)</li> <li>FAC-Neutral Test (D5)</li> <li>A)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> </ul>
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; of a surface Water (A1)	Water-Stained Leaves (B9) (except     MLRA 1, 2, 4A, and 4B)     Salt Crust (B11)     Aquatic Invertebrates (B13)     Hydrogen Sulfide Odor (C1)     Oxidized Rhizospheres along Living R     Presence of Reduced Iron (C4)     Recent Iron Reduction in Tilled Soils (     Stunted or Stressed Plants (D1) (LRR     Other (Explain in Remarks)     Depth (inches):	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>oots (C3)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>C6)</li> <li>FAC-Neutral Test (D5)</li> <li>A)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> </ul>
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations:	Water-Stained Leaves (B9) (except     MLRA 1, 2, 4A, and 4B)     Salt Crust (B11)     Aquatic Invertebrates (B13)     Hydrogen Sulfide Odor (C1)     Oxidized Rhizospheres along Living R     Presence of Reduced Iron (C4)     Recent Iron Reduction in Tilled Soils (     Stunted or Stressed Plants (D1) (LRR     Other (Explain in Remarks)     Depth (inches):     Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Crainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) oots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) C6) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; of a surface Water (A1)	Water-Stained Leaves (B9) (except         MLRA 1, 2, 4A, and 4B)         Salt Crust (B11)         Aquatic Invertebrates (B13)         Hydrogen Sulfide Odor (C1)         Oxidized Rhizospheres along Living R         Presence of Reduced Iron (C4)         Recent Iron Reduction in Tilled Soils (         Stunted or Stressed Plants (D1) (LRR         Other (Explain in Remarks)         Depth (inches):         Depth (inches):         Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) An and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) oots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) C6) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) ettand Hydrology Present? Yes No
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; of surface Water (A1)	Water-Stained Leaves (B9) (except         MLRA 1, 2, 4A, and 4B)         Salt Crust (B11)         Aquatic Invertebrates (B13)         Hydrogen Sulfide Odor (C1)         Oxidized Rhizospheres along Living R         Presence of Reduced Iron (C4)         Recent Iron Reduction in Tilled Soils (         Stunted or Stressed Plants (D1) (LRR         Other (Explain in Remarks)         Depth (inches):         Depth (inches):         Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) An and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) oots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) C6) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) ettand Hydrology Present? Yes No
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; of a second content content of a second content of a second conten	Water-Stained Leaves (B9) (except         MLRA 1, 2, 4A, and 4B)         Salt Crust (B11)         Aquatic Invertebrates (B13)         Hydrogen Sulfide Odor (C1)         Oxidized Rhizospheres along Living R         Presence of Reduced Iron (C4)         Recent Iron Reduction in Tilled Soils (         Stunted or Stressed Plants (D1) (LRR         Other (Explain in Remarks)         Depth (inches):         Depth (inches):         Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) An and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) oots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) C6) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) ettand Hydrology Present? Yes <u>No</u>
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; of a surface Water (A1)	Water-Stained Leaves (B9) (except         MLRA 1, 2, 4A, and 4B)         Salt Crust (B11)         Aquatic Invertebrates (B13)         Hydrogen Sulfide Odor (C1)         Oxidized Rhizospheres along Living R         Presence of Reduced Iron (C4)         Recent Iron Reduction in Tilled Soils (         Stunted or Stressed Plants (D1) (LRR         Other (Explain in Remarks)         Depth (inches):         Depth (inches):         Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) An and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) oots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) C6) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) ettand Hydrology Present? Yes <u>No</u>
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; of a second content content of a second content of a second conten	Water-Stained Leaves (B9) (except         MLRA 1, 2, 4A, and 4B)         Salt Crust (B11)         Aquatic Invertebrates (B13)         Hydrogen Sulfide Odor (C1)         Oxidized Rhizospheres along Living R         Presence of Reduced Iron (C4)         Recent Iron Reduction in Tilled Soils (         Stunted or Stressed Plants (D1) (LRR         Other (Explain in Remarks)         Depth (inches):         Depth (inches):         Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) An and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) oots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) C6) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) ettand Hydrology Present? Yes <u>No</u>

WETLAND DETERMINATION DATA FOR	RM – Western Mountains, Valleys, and Coast Region 211 up					
Project/Site: <u>Humboldt Wind Energy Project</u> Applicant/Owner: <u>Humboldt Wind, LLC</u>	_ City/County: <u>Humboldt</u> Sampling Date: <u>&amp;/1//&amp;</u> State: <u>CA</u> Sampling Point: <u></u>					
Investigator(s): <u>S.TONA</u> <u>G.Youmblood</u> Landform (hillslope, terrace, etc.): <u>Hillslop</u>	_ Section, Township, Range:					
Subregion (LRR): A: Northwest Forests and Coast       Lat: -123.804465       Long: 40.461388       Datum:						
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present?       Yes No _X         Hydric Soil Present?       Yes No _X         Wetland Hydrology Present?       Yes No _X	Is the Sampled Area within a Wetland? Yes No					
Remarks: Sampling point documents the upla	and pair point for a wetland.					

Omolius		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 3m radius)	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
1.	-			That Are OBL, FACW, or FAC: (A)
2	n de na			
3.				Total Number of Dominant Species Across All Strata: 2 (B)
		••••••••••••••••••••••••••••••••••••••		Species Across Ali Strata (D)
4				Percent of Dominant Species $50$ (A/D)
O M C LUL		= Total Co	ver	That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size: 2M radius)	_	. /		Prevalence Index worksheet:
1. Rubus armeniacus		X	FAC	Total % Cover of: Multiply by:
2				·
3				OBL species x 1 =
				FACW species x 2 =
4	. <u> </u>			FAC species $20$ x 3 = $60$
5		<u>.</u>	<u></u>	FACU species $50$ x4 = $200$
lung of hit	20	= Total Co	ver	UPL species $5 \times 5 = 25$
Herb Stratum (Plot size: 1 M Ruchus)		ν.	K	
1. Phalanis aquatica	40	<u> </u>	FACI	Column Totals: <u>80</u> (A) <u>296</u> (B)
2. Ductylis glomerata	16		FACU	Prevalence Index = $B/A = 3.5$
3. Mentha pulgeumi	5		OBL	Hydrophytic Vegetation Indicators:
1 that is compare	5		UPL	
				$\bigwedge_{t}$ 1 - Rapid Test for Hydrophytic Vegetation
5				<u> パ</u> 2 - Dominance Test is >50%
6	- <u></u>		<u> </u>	N 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7			<u>.</u>	
8				data in Remarks or on a separate sheet)
9				$\underline{N}$ 5 - Wetland Non-Vascular Plants <sup>1</sup>
				<ul> <li>Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)</li> </ul>
10				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
11. <u>56: 30</u> 20: 12	·			be present, unless disturbed or problematic.
50-30 20112	60	= Total Cov	ver	
Woody Vine Stratum (Plot size:)				
1			<u> </u>	Hydrophytic
2				Vegetation
		= Total Cov	ver	Present? Yes No
% Bare Ground in Herb Stratum				
Remarks:				

S

211 up

SOIL							Sampling Point:602	2
Profile Des	cription: (Descri	ibe to the dept	h needed to docu	ment the indicator	or confirm	the absence		<u></u>
Depth	Matri			ox Features				
(inches)	Color (moist)		Color (moist)	%Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-16	10YR 3/2	100				loam		
••••								
					. <u></u>			
 1т		·				2	ation: DL-Daro Lining M-Matrix	
			RRs, unless othe	S=Covered or Coate	a Sand Gra		cation: PL=Pore Lining, M=Matrix. rs for Problematic Hydric Soils <sup>3</sup> :	
							n Muck (A10)	
Histoso	pipedon (A2)		Sandy Redox Stripped Matrix				Parent Material (TF2)	
	istic (A3)			Mineral (F1) ( <b>excep</b>	t MLRA 1)		/ Shallow Dark Surface (TF12)	
	en Sulfide (A4)		Loamy Gleyed				er (Explain in Remarks)	
	d Below Dark Sur	rface (A11)	Depleted Matr					
	ark Surf <b>a</b> ce (A12)		Redox Dark S				rs of hydrophytic vegetation and	
	Mucky Mineral (S´		Depleted Dark				nd hydrology must be present,	
	Gleyed Matrix (S4		Redox Depres	sions (F8)		unles	s disturbed or problematic.	
Restrictive	Layer (if present	t):						
								~
Depth (in	iches):					Hydric Soil	Present? Yes No	<u>X</u>
Remarks:								
HYDROLC	)GY							
Wetland Hy	drology Indicate	ors:						
Primary Indi	cators (minimum	of one required	; check all that app	oly)		Secor	ndary Indicators (2 or more required	<u>(t</u>
	Water (A1)			ained Leaves (B9) (e	except	W	/ater-Stained Leaves (B9) (MLRA 1	1, 2,
	ater Table (A2)		MLRA	1, 2, 4A, and 4B)		••••	4A, and 4B)	
Saturati			Salt Crus	t (B11)		D	rainage Patterns (B10)	
Water N	/larks (B1)		Aquatic I	nvertebrates (B13)		D	ry-Season Water Table (C2)	
Sedime	nt Deposits (B2)		Hydroger	n Sulfide Odor (C1)		S	aturation Visible on Aerial Imagery	(C9)
Drift De	posits (B3)		Oxidized	Rhizospheres along	Living Root	s (C3) G	eomorphic Position (D2)	
Algal M	at or Crust (B <b>4)</b>		Presence	of Reduced Iron (C	4)	S	hallow Aquitard (D3)	
Iron De	posits (B5)		Recent Ir	on Reduction in Tille	d Soils (C6)	і <u> </u>	AC-Neutral Test (D5)	
Surface	soil Cracks (B6)		Stunted of	or Stressed Plants (D	01) (LRR A)	R	aised Ant Mounds (D6) (LRR A)	
Inundat	ion Visible on Aer	rial Imagery (B7	) Other (E>	(plain in Remarks)		F	rost-Heave Hummocks (D7)	
Sparsel	ly Vegetated Cond	cave Surface (E	88)					
Field Obser	rvations:							
Surface Wa	ter Present?	Yes N	lo Depth (i	nches):				
Water Table	e Present?	Yes N	lo Depth (i	nches):				
	pillary fringe)			nches):			y Present? Yes No _⊉	<u> </u>
Describe Re	ecorded Data (stre	eam gauge, mo	nitoring well, aeria	photos, previous in	spections), i	f available:		

Remarks:

WETLAND DETERMINATION DA	TA FORI	M – West	ern Mou	ntains, Valleys, an	d Coast Region	211 wet
Project/Site: Humboldt Wind Energy Project	(	Citv/Countv	Humbol	dt	Sampling Date: 8	11/18
Applicant/Owner: Humboldt Wind, LLC			· · · · · · · · · · · · · · · · · · ·	State: <u>CA</u>	Sampling Point:	602(W)
CT. ALLILL				nge:	_ company cana <u></u>	
Landform (hillslope, terrace, etc.): Hillslope					NP Slopo	10/1): 2
Subregion (LRR): <u>A: Northwest Forests and Coast</u>						
<b>`</b> ``						
Soil Map Unit Name: <u>No 2a.ta</u>				NWI classifi		
Are climatic / hydrologic conditions on the site typical for this						
Are Vegetation $N_{,}$ Soil $N_{,}$ or Hydrology $N_{,}$ s			Are "	'Normal Circumstances"	present? Yes	No
Are Vegetation _ $\mathcal{N}$ , Soil $\mathcal{N}$ , or Hydrology _ $\mathcal{N}$ n	aturally pro	blematic?	(If ne	eded, explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map	showing	samplin	g point l	ocations, transects	s, important feat	ures, etc.
Hydrophytic Vegetation Present? Yes <u>×</u> N		le th	o Compled	4.00		
Hydric Soil Present? Yes N		is th	e Sampled in a Wetlar	nd? Yes X	, No	
Wetland Hydrology Present? Yes <u>N</u>						
Remarks: Sumpling point documents a ephemicial stream.	season	al wet	land.	tydiology is sou	rced by an	
VEGETATION – Use scientific names of plan	ts.			-	•	
	Absolute	Dominant	Indicator	Dominance Test wor	ksheet:	
	% Cover	Species?	Status	Number of Dominant S		
1. Populus Fremontii	_25		FAC	That Are OBL, FACW,	or FAC:7	(A)
2	·			Total Number of Domi	nant 4	
3	·			Species Across All Stra	ata:	(B)
4	25	= Total Co		Percent of Dominant S		
Sapling/Shrub Stratum (Plot size: 2 M Radius)		= Total Co	ver	That Are OBL, FACW,		(A/B)
1.				Prevalence Index wo		
2				Total % Cover of:	/	
3				OBL species FACW species		1
4		<u></u>		FAC species		
5				FACU species	x 4 =	
Herb Stratum (Plot size: I M. Rodius)	. <u> </u>	= Total Co	ver		×5=	
1. Juncus tanuis	15	V	FACW	Column Totals:		
2. Alopeculus Saccatus	20		FACW			
3. Mentha pulgeum				Prevalence Index Hydrophytic Vegetati	<pre>k = B/A =</pre>	
4				▶ 1 - Rapid Test for		on
5				$\frac{1}{Y}$ 2 - Dominance Te		
6.				3 - Prevalence Ind		
7.				4 - Morphological		e supporting
8					s or on a separate sh	
9			<u></u>	5 - Wetland Non-V		
10				Problematic Hydro		
11	·			<sup>1</sup> Indicators of hydric so be present, unless dist		
50 = 22.5 20: 9.0	_45	= Total Cov	/er			
Woody Vine Stratum (Plot size:)						
2				Hydrophytic Vegetation		
and the second		= Total Cov	/er	Present? Ye	es <u>X</u> No	
% Bare Ground in Herb Stratum <u>55</u>	·					
Remarks: Itydrophytic vegetationis pr	resent.					
	•					

SOIL

Sampling Point: 602

211 wet

Profile Desc	ription: (Describe	to the dept	h needed to docum	nent the i	ndicator	or confirm	the absence of	of indicators.)
Depth	Matrix			K Features				
(inches)	Color (moist)	- %	Color (moist)	%	_Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-6	104R 3/1	_ 100					Loam	
6-16	104/23/1	94	7.5YR 3/3	6	_ <u>_</u>		LOam	
		·			·			· · · · · · · · · · · · · · · · · · ·
				<u></u>				
·								
<sup>1</sup> Type: C=Co	oncentration, D=De	pletion, RM=	Reduced Matrix, CS	=Coverec	l or Coate	d Sand Gra		ation: PL=Pore Lining, M=Matrix.
Hydric Soil	ndicators: (Appli	cable to all l	_RRs, unless other	wise note	∋d.)		Indicator	s for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy Redox (S	5)				Muck (A10)
	oipedon (A2)		Stripped Matrix					Parent Material (TF2)
	stic (A3)		Loamy Mucky N			MLRA 1)		Shallow Dark Surface (TF12)
· - ·	n Sulfide (A4)		Loamy Gleyed N		)		Othe	r (Explain in Remarks)
	d Below Dark Surfa ark Surface (A12)		Depleted Matrix X Redox Dark Sur				<sup>3</sup> Indicator	s of hydrophytic vegetation and
	lucky Mineral (S1)		Depleted Dark Sur	, ,	7)			d hydrology must be present,
	Bleyed Matrix (S4)		Redox Depressi		• /			disturbed or problematic.
	ayer (if present):							
Туре:	None							
Depth (ind	ches):						Hydric Soil F	Present? Yes 🗡 No
Remarks:	nite b 1		Indian or	~ I	, 1	/. i	C )	Dichert
	Distinct red	OX CONC	entrations di	E 106	ated u	/ in th	ne first	12 inches of
	Soil							
	3.011							
HYDROLO	GV							
-	drology Indicators			۵			Casan	den la disetere (2 er more required)
		one required	; check all that apply					dary Indicators (2 or more required)
	Water (A1)		Water-Stai			cept	VVa	ater-Stained Leaves (B9) (MLRA 1, 2,
	iter Table (A2)			l, 2, 4A, a	ina 46)			4A, and 4B)
Saturatio	arks (B1)		Salt Crust (		- (D12)			ainage Patterns (B10)
, —	nt Deposits (B2)		Aquatic Inv Hydrogen S					y-Season Water Table (C2) turation Visible on Aerial Imagery (C9)
8	osits (B3)					iving Root		eomorphic Position (D2)
· ·	at or Crust (B4)		Presence of					allow Aquitard (D3)
1	osits (B5)		Recent Iror					C-Neutral Test (D5)
	Soil Cracks (B6)		Stunted or					ised Ant Mounds (D6) (LRR A)
	on Visible on Aerial	Imagery (B7				., (,		ost-Heave Hummocks (D7)
	Vegetated Concav				,		········	
Field Obser								
Surface Wate	er Present?	YesN	No 🔣 Depth (inc	hes):				
Water Table			No X Depth (inc					
Saturation P			No <u>×</u> Depth (inc			Wetla	nd Hydrology	Present? Yes X No
(includes cap	oillary fringe)							······································
Describe Re	corded Data (strear	n gauge, mo	nitoring well, aerial p	hotos, pre	evious ins	pections), if	f available:	
Remarks: «	sediment to	posits n	n Fallen lon	s and	Sufac	e Soil (	cracks in	dicate ponding.
		r-5.50	J	~~~		\	140°	r • · · · · · · · · · · · · · · · · · ·
								-

# WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region 224 wet

Project/Site: Humboldt Wind Energy Project	_ City/County: <u>Humboldt</u>		Sampling Date: 8/2/1%
Applicant/Owner: Humboldt Wind, LLC			Sampling Point: $603$ (W)
Investigator(s): Sarah Tora G. Yourgblood	_ Section, Township, Range: _		
Landform (hillslope, terrace, etc.): Hillslope	_ Local relief (concave, conve		ave Slope (%): 5
	123.804276 Lon	g: 40.46097	23 Datum:
Soil Map Unit Name: <u>ps cato</u>		NWI classific	ation: DONO
Are climatic / hydrologic conditions on the site typical for this time of y	/ear? Yes X No	(If no, explain in R	emarks.)
Are Vegetation, Soil/, or Hydrology significantl	ly disturbed? Are "Norm	al Circumstances" p	resent? Yes X No
Are Vegetation <u>//</u> , Soil <u>//</u> , or Hydrology <u>//</u> naturally p		, explain any answei	
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locat	ions, transects.	important features, etc.

Hydrophytic Vegetation Present?	Yes 📈 No	
Hydric Soil Present?	Yes No	Is the Sampled Area
Wetland Hydrology Present?	Yes 🔀 No	within a Wetland? Yes <u>X</u> No
Remarks: Sampling point	associated with fea	ture #611 - wetland swale

Tree Otretum (Dist. )			t Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	<u>Species?</u>	<u>Status</u>	Number of Dominant Species
1				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2				
3				Total Number of Dominant Species Across All Strata: 2 (B)
				Species Across All Strata: (B)
4		. <u> </u>		Percent of Dominant Species
	•	= Total Co	over	That Are OBL, FACW, or FAC:(A/B)
Sapling/Shrub Stratum (Plot size:)				Prevalence index worksheet:
1				
2				Total % Cover of:Multiply by:
3				OBL species x 1 =
		•••		FACW species x 2 =
4	· · · · · · · · · · · · · · · · · · ·		- ·	FAC species x 3 =
5		·	· · · · · · · · · · · · · · · · · · ·	FACU species x 4 =
In a main in the others		= Total Co	over	
Herb Stratum (Plot size: IM Rid(11))				UPL species x 5 =
1. Juncus balticus	40	<u> </u>	FACW	Column Totals: (A) (B)
2. Holeus lanatus	10		FAC	Drevelance Index - D/A
3. Mentha pulegium	15	Y	OBL	Prevalence Index = B/A =
4. CYNOSURUS CRYStatus	3		FACY	Hydrophytic Vegetation Indicators:
5. Lotus corniculatus	~		. <u>L</u>	1 - Rapid Test for Hydrophytic Vegetation
			FAC	2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants <sup>1</sup>
10				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11		****	•••••	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
50=35 20=14	70			be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)	<u></u> =	= I otal Co	ver	
		·····		Hydrophytic
2				Vegetation Present? Yes X No
		= Total Cov	/er	Present? Yes <u>X</u> No
% Bare Ground in Herb Stratum30				
Remarks:			······································	L

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Sampling Point: 603/w)

224 wet

Depth	Matrix	~ /		Redo			Loc <sup>2</sup>	Texture	Remarks
	olor (moist)		<u>Color (r</u>	1		Type <sup>1</sup>		day loum	Remarks
	23/1	98_	10YR	5/8	_2_		<u></u>		
5-12 10	123/1	80	INYR	5/8	20	C,PL	<u> </u>	CLAY LOAM	
									·
									-
·····									
								· · · ·	
				Matrix CC					on: PL=Pore Lining, M=Matrix.
ype: C=Concent /dric Soil Indica	tors: (Applic	able to all	Reduced I	ess othe	rwise no	ted.)	u Sanu Gi		for Problematic Hydric Soils <sup>3</sup> :
_ Histosol (A1)				Redox (		,		2 cm N	luck (A10)
Histic Epipedo	n (A2)			ed Matrix				Red Pa	arent Material (TF2)
Black Histic (A						1) (except	MLRA 1)		hallow Dark Surface (TF12)
Hydrogen Sulf	ïde (A4)			y Gleyed		2)		Other (	Explain in Remarks)
Depleted Belov		e (A11)		ted Matrix		•\		<sup>3</sup> Indicators	of hydrophytic vegetation and
Thick Dark Su				k Dark Su ted Dark					hydrology must be present,
Sandy Mucky Sandy Gleyed				k Depress					listurbed or problematic.
estrictive Layer					· · · · · · · · · · · · · · · · · · ·	, 			
-									
Type: NION	-Kan-								
Type: <u>_/ ≬ %</u> Depth (inches): Remarks:  ♪(Ŋ		rdox Ce	encenta	ations	are p	resurt.	,	Hydric Soil Pr	esent? Yes <u>X</u> No
Depth (inches): Remarks: PM	e <sup>min</sup> trates	rdox Ce	encentra	ation s	are p	rescat.		Hydric Soil Pr	esent? Yes <u>X</u> No
Depth (inches): Remarks: P(D) YDROLOGY	minentm		oncentra	ations	are p	rescrit.	,		
Depth (inches): Remarks: P(D) YDROLOGY Wetland Hydrolog	minent n				,	rescrit.	,	<u>Second</u>	ary Indicators (2 or more required)
Depth (inches): Remarks: P(D) YDROLOGY Wetland Hydrolog	gy Indicators		ed; check al	I that app Water-Sta	ly) ained Lea	ives (Β9) (€		<u>Seconda</u>	ary Indicators (2 or more required) er-Stained Leaves (B9) ( <b>MLRA 1</b> , 2
Depth (inches): Remarks: PDROLOGY YDROLOGY Vetland Hydrolog Primary Indicators	gy Indicators (minimum of a r (A1)		ed; check a	l that app Water-Sta MLRA	ly) ained Lea 1, 2, 4A;			<u>Seconda</u> Wat	ary Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2 IA, and 4B)
Depth (inches): Remarks: PDROLOGY YDROLOGY YDROLOGY Primary Indicators Surface Water High Water Ta Saturation (A3	gy Indicators (minimum of of r (A1) able (A2) 3)		ed; check al	<u>I that app</u> Water-Sta <b>MLRA</b> Salt Crus	-lγ) ained Lea . <b>1, 2, 4A</b> , t (B11)	ives (Β9) (ε , and 4B)		<u>Seconda</u> Wat Dra	ary Indicators (2 or more required) er-Stained Leaves (B9) ( <b>MLRA 1</b> , 2 I <b>A, and 4B)</b> inage Patterns (B10)
Depth (inches): Remarks: PO YDROLOGY YDROLOGY Primary Indicators Surface Water High Water Ta Saturation (A3 Water Marks (	gy Indicators (minimum of a r (A1) able (A2) 3) (B1)		ed; check al	l that app Water-Sta <b>MLRA</b> Salt Crus <sup>;</sup> Aquatic Ir	lv) ained Lea . <b>1, 2, 4A</b> , t (B11) nvertebra	ives (Β9) (ε , and 4B) tes (Β13)		<u>Seconda</u> Wat Wat Dra Dra	ary Indicators (2 or more required) er-Stained Leaves (B9) ( <b>MLRA 1,</b> 2 <b>IA, and 4B)</b> inage Patterns (B10) -Season Water Table (C2)
Depth (inches): Remarks: PDROLOGY YDROLOGY Vetland Hydrolog Primary Indicators Surface Water High Water Ta Saturation (A3 Water Marks ( Sediment Dep	gy Indicators (minimum of a r (A1) able (A2) 3) (B1) posits (B2)		ed; check al	I that app Water-Sta <b>MLRA</b> Salt Crus <sup>;</sup> Aquatic Ir Hydroger	lv) ained Lea . <b>1, 2, 4A</b> , t (B11) nvertebra n Sulfide (	ives (Β9) (ε , <b>and 4B)</b> tes (Β13) Odor (C1)	except	<u>Seconda</u> Wat Dra Dra Dry. Sati	ary Indicators (2 or more required) er-Stained Leaves (B9) ( <b>MLRA 1,</b> 2 <b>IA, and 4B)</b> inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C
Depth (inches): Remarks: PDROLOGY YDROLOGY Vetland Hydrolog Primary Indicators Surface Water High Water Ta Saturation (A3 Water Marks ( Sediment Dep Drift Deposits	gy Indicators (minimum of o r (A1) able (A2) 3) (B1) posits (B2) (B3)		ed; check al	<u>I that app</u> Water-Sta <b>MLRA</b> Salt Crus Aquatic Ir Hydroger Oxidized	ily) ained Lea <b>1, 2, 4A</b> , t (B11) nvertebra n Sulfide ( Rhizosph	ives (B9) (e , <b>and 4B)</b> tes (B13) Odor (C1) neres along	except	<u>Seconda</u> Wat Dra Dry Satu ots (C3) Geo	ary Indicators (2 or more required) er-Stained Leaves (B9) ( <b>MLRA 1,</b> 2 <b>IA, and 4B)</b> inage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (Comorphic Position (D2)
Depth (inches): Remarks: P(D) YDROLOGY YDR	gy Indicators (minimum of of r (A1) able (A2) 3) (B1) boosits (B2) (B3) Crust (B4)		ed; check al	<u>I that app</u> Water-Sta <b>MLRA</b> Salt Crus Aquatic Ir Hydroger Oxidized Presence	ily) ained Lea <b>1, 2, 4A</b> , t (B11) nvertebra n Sulfide ( Rhizosph e of Reduc	ives (B9) (¢ , <b>and 4B)</b> tes (B13) Odor (C1) neres along ced Iron (C	except Living Roo 4)	<u>Seconda</u> Wat Dra Dry Satu Satu Satu	ary Indicators (2 or more required) er-Stained Leaves (B9) ( <b>MLRA 1</b> , 2 <b>IA, and 4B)</b> inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C omorphic Position (D2) illow Aquitard (D3)
Depth (inches): Remarks: P(D) YDROLOGY YDR	gy Indicators (minimum of of r (A1) able (A2) 3) (B1) bosits (B2) (B3) Crust (B4) (B5)		ed; check al	I that app Water-Sta MLRA Salt Crust Aquatic Ir Hydroger Oxidized Presence Recent Ir	ily) ained Lea <b>1, 2, 4A</b> , t (B11) nvertebra n Sulfide ( Rhizosph e of Reduc on Reduc	ives (B9) (e , <b>and 4B)</b> tes (B13) Odor (C1) neres along	Except Living Roo 4) ed Soils (C6	<u>Seconda</u> Wat Dra Dry. Satu ots (C3) Geo Sha 5) FAC	ary Indicators (2 or more required) er-Stained Leaves (B9) ( <b>MLRA 1,</b> 2 <b>IA, and 4B)</b> inage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (Comorphic Position (D2)
Depth (inches): Remarks: P(D) YDROLOGY YDR	gy Indicators (minimum of e r (A1) able (A2) 3) (B1) bosits (B2) (B3) Crust (B4) (B5) Cracks (B6)	one require	<u>ed; check al</u>	I that app Water-Sta MLRA Salt Crust Aquatic Ir Hydroger Oxidized Presence Recent Ir	IV) ained Lea <b>1, 2, 4A</b> , t (B11) nvertebra on Sulfide ( Rhizosph of Reduc on Reduc on Reduc	tves (B9) (6 , and 4B) tes (B13) Odor (C1) neres along ced Iron (C ction in Tille ed Plants (E	Except Living Roo 4) ed Soils (C6	<u>Seconda</u> Wat Dra Dry. Satu ots (C3) Geo Sha 5) FAC	ary Indicators (2 or more required) er-Stained Leaves (B9) ( <b>MLRA 1</b> , 2 inage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (C omorphic Position (D2) illow Aquitard (D3) C-Neutral Test (D5)
Depth (inches): Remarks: PDROLOGY YDROLOGY Vetland Hydrolog Primary Indicators Surface Water High Water Ta Saturation (A3 Water Marks ( Sediment Dep Drift Deposits Algal Mat or C Iron Deposits	gy Indicators (minimum of e r (A1) able (A2) 3) (B1) bosits (B2) (B3) Crust (B4) (B5) Cracks (B6) sible on Aerial	one require	ad; check al     	I that app Water-Sta MLRA Salt Crus <sup>i</sup> Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted c	IV) ained Lea <b>1, 2, 4A</b> , t (B11) nvertebra on Sulfide ( Rhizosph of Reduc on Reduc on Reduc	tves (B9) (6 , and 4B) tes (B13) Odor (C1) neres along ced Iron (C ction in Tille ed Plants (E	Except Living Roo 4) ed Soils (C6	<u>Seconda</u> Wat Dra Dry. Satu ots (C3) Geo Sha 5) FAC	ary Indicators (2 or more required) er-Stained Leaves (B9) ( <b>MLRA 1</b> , 2 <b>IA, and 4B)</b> inage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (C omorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) ( <b>LRR A</b> )
Depth (inches): Remarks: P(D) YDROLOGY YDROLOGY Vetland Hydrolog Primary Indicators Surface Watel High Water Ta Saturation (A3 Water Marks ( Sediment Dep Drift Deposits Algal Mat or C Iron Deposits X Surface Soil C Inundation Vis Sparsely Veg	gy Indicators (minimum of a r (A1) able (A2) 3) (B1) bosits (B2) (B3) Crust (B4) (B5) Cracks (B6) sible on Aerial etated Concav ns:	imagery (E re Surface	ad; check al 	I that app Water-Sta MLRA Salt Cruss Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted c Other (E>	ilγ) ained Lea <b>1, 2, 4A</b> , t (B11) nvertebra n Sulfide ( Rhizosph of Reduc on Reduc on Reduc on Stresse cplain in F	tes (B9) (e , <b>and 4B)</b> Ddor (C1) neres along ced Iron (C ction in Tille ed Plants (E Remarks)	Except Living Roo 4) ed Soils (C6	<u>Seconda</u> Wat Dra Dry. Satu ots (C3) Geo Sha 5) FAC	ary Indicators (2 or more required) er-Stained Leaves (B9) ( <b>MLRA 1</b> , 2 <b>IA, and 4B)</b> inage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (C omorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) ( <b>LRR A</b> )
Depth (inches): Remarks: P(D) YDROLOGY YDROLOGY Yetland Hydrolog Primary Indicators Surface Water High Water Ta Saturation (A3 Water Marks ( Sediment Dep Drift Deposits Algal Mat or C Iron Deposits X Surface Soil C Inundation Vis Sparsely Veg Field Observation	gy Indicators (minimum of of r (A1) able (A2) 3) (B1) bosits (B2) (B3) Crust (B4) (B5) Cracks (B6) sible on Aerial etated Concav ns: esent?	Imagery (F re Surface Yes	ed; check al 	I that app Water-Sta MLRA Salt Crust Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted c Other (E) Depth (ii	ily) ained Lea <b>1, 2, 4A</b> , t (B11) nvertebra of Sulfide ( Rhizosph of Reduc on Reduc on Reduc or Stresse cplain in F	ives (B9) (6 , <b>and 4B)</b> tes (B13) Odor (C1) neres along ced Iron (C ction in Tille ction in Tille Remarks)	Except Living Roo 4) ed Soils (C6	<u>Seconda</u> Wat Dra Dry. Satu ots (C3) Geo Sha 5) FAC	ary Indicators (2 or more required) er-Stained Leaves (B9) ( <b>MLRA 1</b> , 2 <b>IA, and 4B)</b> inage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (C omorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) ( <b>LRR A</b> )
Depth (inches): Remarks: POP Primary Indicators Surface Water High Water Ta Saturation (A3 Water Marks ( Sediment Dep Drift Deposits Algal Mat or C Iron Deposits X Surface Soil C Inundation Vis	gy Indicators (minimum of of r (A1) able (A2) 3) (B1) bosits (B2) (B3) Crust (B4) (B5) Crust (B4) (B5) Cracks (B6) sible on Aerial etated Concav ns: esent? ent?	Imagery (E ve Surface Yes Yes	2d; check al 	I that app Water-Sta MLRA Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted c Other (E> Depth (ii Depth (ii	IV) ained Lea . <b>1, 2, 4A</b> , t (B11) nvertebra on Sulfide ( Rhizosph on Reduc on Reduc on Reduc on Reduc on Stresse cplain in F	ives (B9) (6 , and 4B) tes (B13) Odor (C1) neres along ced Iron (C ction in Tille ed Plants (E Remarks)	Eiving Roc 4) ed Soils (Ce D1) (LRR A	<u>Seconds</u> Wat Dra Dry- Satu ots (C3) Geo Sha 6) FAC .) Rais Fro	ary Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2 IA, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C pmorphic Position (D2) illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
Depth (inches): Remarks: POP Primary Indicators Surface Water High Water Ta Saturation (A3 Water Marks ( Sediment Dep Drift Deposits Algal Mat or C Iron Deposits X Surface Soil C Inundation Vis Sparsely Veg Field Observation Surface Water Present Saturation Present	gy Indicators (minimum of a r (A1) able (A2) 3) (B1) bosits (B2) (B3) Crust (B4) (B5) Cracks (B6) sible on Aerial etated Concav ns: esent? ent?	Imagery (E ve Surface Yes Yes	ed; check al 	I that app Water-Sta MLRA Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted c Other (E> Depth (ii Depth (ii	IV) ained Lea . <b>1, 2, 4A</b> , t (B11) nvertebra on Sulfide ( Rhizosph on Reduc on Reduc on Reduc on Reduc on Stresse cplain in F	ives (B9) (6 , and 4B) tes (B13) Odor (C1) neres along ced Iron (C ction in Tille ed Plants (E Remarks)	Eiving Roc 4) ed Soils (Ce D1) (LRR A	<u>Seconds</u> Wat Dra Dry- Satu ots (C3) Geo Sha 6) FAC .) Rais Fro	ary Indicators (2 or more required) er-Stained Leaves (B9) ( <b>MLRA 1</b> , 2 <b>IA, and 4B)</b> inage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (C omorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) ( <b>LRR A</b> )
Depth (inches): Remarks: P(D) YDROLOGY YDROLOGY YDROLOGY YDROLOGY YDROLOGY YDROLOGY YDROLOGY YDROLOGY YOROLOGY Surface Water Drift Deposits Algal Mat or C Iron Deposits X Surface Soil C Inundation Vis Sparsely Veg Field Observation Surface Water Prese Water Table Prese Saturation Present	gy Indicators (minimum of of r (A1) able (A2) 3) (B1) cosits (B2) (B3) Crust (B4) (B5) Crust (B4) (B5) Cracks (B6) sible on Aerial etated Concav ns: esent? ent?	Imagery (F re Surface Yes Yes	ed; check al 	I that app Water-Sta MLRA Salt Crus <sup>i</sup> Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted c Other (E) Depth (ii Depth (ii	IV) ained Lea <b>1, 2, 4A</b> , t (B11) nvertebra on Sulfide ( Rhizosph on Reduc on Reduc on Reduc on Reduc on Stresse (plain in F nches): nches):	ives (B9) (6 , and 4B) tes (B13) Odor (C1) neres along ced Iron (C ction in Tille ad Plants (D Remarks)	Eiving Roo 4) ed Soils (Ce 2)1) (LRR A	<u>Seconds</u> Wat Dra Dry- Satu ots (C3) Geo Sha 6) FAC .) Rais Fro Fro	ary Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2 IA, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C pmorphic Position (D2) illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
Depth (inches): Remarks: P(D) Primary Indicators Surface Water High Water Ta Saturation (A3 Water Marks ( Sediment Dep Drift Deposits Algal Mat or C Iron Deposits X Surface Soil C Inundation Vis Sparsely Veg Field Observation Surface Water Present Water Table Present	gy Indicators (minimum of of r (A1) able (A2) 3) (B1) cosits (B2) (B3) Crust (B4) (B5) Crust (B4) (B5) Cracks (B6) sible on Aerial etated Concav ns: esent? ent?	Imagery (F re Surface Yes Yes	ed; check al 	I that app Water-Sta MLRA Salt Crus <sup>i</sup> Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted c Other (E) Depth (ii Depth (ii	IV) ained Lea <b>1, 2, 4A</b> , t (B11) nvertebra on Sulfide ( Rhizosph on Reduc on Reduc on Reduc on Reduc on Stresse (plain in F nches): nches):	ives (B9) (6 , and 4B) tes (B13) Odor (C1) neres along ced Iron (C ction in Tille ad Plants (D Remarks)	Eiving Roo 4) ed Soils (Ce 2)1) (LRR A	<u>Seconds</u> Wat Dra Dry- Satu ots (C3) Geo Sha 6) FAC .) Rais Fro Fro	ary Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2 IA, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C pmorphic Position (D2) illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)

WETLAND DETERMINATION DATA FORM – Western Mo	untains, Valleys, and Coast Region <mark>224 up</mark>
Project/Site: Humboldt Wind Energy Project City/County: Humbo	pldt Sompting Data: $R/2//R$
Applicant/Owner: Mumpoldt Wind III C	
Investigator(s): 0 10 M V 70 404 (0100)	1.
Landform (hillslope, terrace, etc.): 11/11/1/02 Local relief (concourse)	
Landform (hillslope, terrace, etc.): <u>Hillslope</u> Local relief (concave Subregion (LRR): <u>A: Northwest Forests and Coast</u> Lat: <u>-123.804257</u> Soil Map Unit Name: <u>No 2</u> <u>A</u> <u>A</u> <u>A</u>	40.460975
Soil Map Unit Name: No 2000	Datum:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes $X$ No	NWI classification: hore
Are Vegetation of Call of the target	"Normal Circumstances" present? Yes X No
	needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point	locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present?         Yes No         Is the Sample           Wetland Hydrology Present?         Yes No         within a Wetland	d Area nd? YesNo
Remarks: O I	No <u>V</u>
Remarks: Sampling point documents the upland pair point.	
VEGETATION – Use scientific names of plants.	
Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum         (Plot size:)         % Cover         Species?         Status           1	Number of Dominant Species
1 2	That Are OBL, FACW, or FAC: (A)
3	Total Number of Dominant 3
4	Species Across All Strata: (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:

2.							(A)
2 3 4				Total Number of Domir Species Across All Stra	iant ata:	3	(B)
Sapling/Shrub Stratum (Plot size:)		= Total (	Cover	Percent of Dominant S That Are OBL, FACW,	pecies or FAC:	0	(A/B
1	/			Prevalence Index wor	ksheet:		· · · · · · · · · · · · · · · · · · ·
2	/			Total % Cover of:	N	Aultiply by:	
3				OBL species			
4				FACW species	x 2 =	:	
5				FAC species	x 3 =		
		= Total C		FACU species	x 4 =		-
Herb Stratum (Plot size: M. Fadius)			20161	UPL species	x 5 =		-
1. CYNOSURUS CLISTATUS	5_		FACI	Column Totals:			
2. <u>Plantago lanceolata</u>	10	<u> </u>	FACI				
3. Linux bienne	5		UPL	Prevalence Index Hydrophytic Vegetatio	= B/A =		
4. Lotus corniculatus	2		FAC	<u>N</u> 1 - Rapid Test for ⊢			
5. Cynosurus echinatus	5		UPL	$\frac{N}{N}$ 2 - Dominance Test		egetation	
Bromus hurder ceus	10	Y	FAUL				
Cynolon daclylon -	20	Y	FACU	3 - Prevalence Inde			
3. Aira caryophyllea	3		FAUL	4 - Morphological A data in Remarks	daptations' (	Provide suppo arate sheet)	orting
)			- <u> </u>	5 - Wetland Non-Va			
				Problematic Hydrop			1
				<sup>1</sup> Indicators of hydric soil			
50:30 20:12	60	= Total Co		be present, unless distur	bed or probl	ematic.	JSI
Noody Vine Stratum (Plot size:)	1						-
			-	Hydrophytic			
				Vegetation			
6 Bare Ground in Herb Stratum		_= Total Co	ver	Present? Yes	No	° _X	

so		L
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Sampling Point: \_\_\_\_\_\_

224 up

Depth	Matrix		Redo	v Features			the absence of in		
nches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc		Remarks	
U-12	104R 3/1	100					<u>clayloam</u>		
	,								
,								n: PL=Pore Lining,	M=Matrix.
ype: C=Co	oncentration, D=Depl	etion, RM=	Reduced Matrix, C	S=Covered	d or Coate	ed Sand G	Indicators fo	or Problematic Hy	dric Soils <sup>3</sup> :
Histosol Histic E; Black Hi Hydroge Deplete Thick D Sandy N Sandy (	oipedon (A2) istic (A3) en Sulfide (A4) d Below Dark Surface ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4)		<ul> <li>Sandy Redox (</li> <li>Stripped Matrix</li> <li>Loamy Mucky</li> <li>Loamy Gleyed</li> <li>Depleted Matrix</li> <li>Redox Dark S</li> <li>Depleted Dark</li> <li>Redox Depression</li> </ul>	(S5) (S6) Mineral (F Matrix (F2) (x (F3) urface (F6) Surface (f	1) ( <b>excep</b> 2) ) =7)	t MLRA 1	) Very Sha Other (E <sup>3</sup> Indicators o wetland h	ick (A10) ent Material (TF2) allow Dark Surface xplain in Remarks) f hydrophytic veget ydrology must be p sturbed or problema	ation and present,
Restrictive	Layer (if present):						Hydric Soil Pre	sent? Yes	No
	nches):								
Remarks:	No hydric	1102	indicators	are p	neser	vt.			

Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) g Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) ills (C6) FAC-Neutral Test (D5)
Field Observations:         Surface Water Present?       Yes No Depth (inches):         Water Table Present?       Yes No Depth (inches):         Saturation Present?       Yes No Depth (inches):         Saturation Present?       Yes No Depth (inches):         (includes capillary fringe)       Depth (inches):         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect         Remarks:       NU WCH land hydrology includers are present.	

Project/Site: <u>Humboldt Wind Energy Projec</u>	t City	//County: <u>Humb</u>	oldt	Sampling Date	8/2/1
			- ·		(.04
nvestigator(s): <u>S. Tuna: Gabe Toungb</u>					
	1				(
ubregion (LRR): <u>A: Northwest Forests and</u>	Coast Lat: -123.8	803703	40.45928	30 Slope	e (%): <u> </u>
<u> </u>			NDA/L L 10		:
re climatic / hydrologic conditions on the site typic	al for this time of year?			cation: <u>VIOV Q</u>	
re Vegetation $\underline{N}$ , Soil $\underline{N}$ , or Hydrology _	N significantly dist				
re Vegetation $\underline{N}$ , Soil $\underline{N}$ , or Hydrology _	eighteen and a start of the		e "Normal Circumstances" p		No
		nauc? (If	needed, explain any answe	rs in Remarks.)	
UMMARY OF FINDINGS – Attach site	map showing sa	mpling point	locations, transects	, important feat	ures,
	No				
	No	Is the Sample within a Wetla			
Wetland Hydrology Present? Yes Remarks:			Yes X	No	
Feature # 614, seep spin	g wetland			······································	
EGETATION – Use scientific names of	f plants.				
ree Stratum (Plot size: 3m. radius)	Absolute Dor	minant Indicator	Dominance Test works	heet.	
	<u>% Cover</u> <u>Spe</u>	ecies? <u>Status</u>	Number of Dominant Sp		
		Y FAC	That Are OBL, FACW, or	ecies 3 r FAC:	(A)
			Total Number of Domina	nt	
		•	Species Across All Strata	a: <u>3</u>	(B)
apling/Shrub Stratum (Plot size:	$\frac{30}{30} = T_0$	tal Cover	Percent of Dominant Spe	ecies	
apling/Shrub Stratum (Plot size:	)		That Are OBL, FACW, or		(A/
			Prevalence Index works		
			Total % Cover of:		
			OBL species FACW species		
	······		FAC species	X2=	
	- Tal		FACU species	×4 =	<u>.                                    </u>
erb Stratum (Plot size: 2 m. radius)	= 101	al Cover		x 5 =	
Athyrium felix femina	30 1	FAC	Column Totals:	(A)	(B`
Equisetum arvense	<u>15 Y</u>	FAC			
Carex hendersonii		FAC	Prevalence Index = Hydrophytic Vegetation	B/A =	
Asarum Caudatum	3	FACU	N 1 - Rapid Test for Hyc		
			1 2 - Dominance Test is	s >50%	
			3 - Prevalence Index i	s ≤3.0 <sup>1</sup>	
			4 - Morphological Ada	ptations <sup>1</sup> (Provide si	upportin
			data in Remarks or	on a separate shee	t)
			5 - Wetland Non-Vasc		
			Problematic Hydrophy	tic Vegetation <sup>1</sup> (Exp	lain)
50= 29 20= 11,6	= Total	Cover	<sup>1</sup> Indicators of hydric soil an be present, unless disturbe	iu wetland hydrology ed or problematic	must
ody Vine Stratum (Plot size:)				,	
	<u> </u>		Hydrophytic		
			Vegetation	X	
oro Oround in the trace	= Total	Cover	Present? Yes	No	
are Ground in Herb Stratum		1			

(11 D) *	tions (Decoribo)	to the den	th needed to docu	ment the i	indicator	r or confirm	n the absen	ce of Indi	cators.)		
	Matrix	to the dep	Red	ox Feature	s					emarks	
epth	Color (moist)	%	Color (moist)	%	Type'		Texture Clay (			emano	
6-7	104R5/2	80	10-112 5/6	20	<u> </u>	M,PL	····· • • •			<u></u>	
7-16 6	SLEYI3/N	85	7.54R 5/8		<u> </u>		clayle	<u>30 V</u>			
									<u> </u>		
										· · · · · · · · · · · · · · · · · · ·	
							-				
							_				
			I=Reduced Matrix, (	 CS=Covere	ed or Coa	ated Sand G	Grains.	<sup>2</sup> Location:	PL=Pore	e Lining, M=N	Matrix.
Type: C=Con	dicators: (Appli	cable to al	I LRRs, unless oth	erwise no	oted.)					atic Hydric	30115 .
Histosol (A			Sandy Redox	(85)				2 cm Mucl Red Parer	k (A10) ht Materia	I (TF2)	
Histic Epip	pedon (A2)		Stripped Mate	ix (S6)		ent MIRA 1	1)	Very Shal	low Dark	Surface (TF	12)
Black Hist	tic (A3)		Loamy Muck	d Matrix (F	=1) (exco =2)	eptimeror		Other (Ex	plain in R	emarks)	
Hydrogen	Sulfide (A4) Below Dark Surfa	ice (A11)	Depleted Ma		,		а			ic vegetation	and
Depleted Thick Dar	k Surface (A12)		Redox Dark	Surface (F	6)		°ind	licators of I	nyaropnyi drology n	ust be prese	ent,
Sandy Mu	ucky Mineral (S1)		Depleted Da	rk Surface	(F7) R)		wetland hydrology must be present, unless disturbed or problematic.				
	eyed Matrix (S4)										
Restrictive La	ayer (if present):										
Restrictive La Type: // Depth (incl Remarks:	NOAR		l indicator 1	s pres	unt, s	Starting				es <u>X</u>	No
Type: // Depth (incl Remarks:	NOAL hes): Gleyed Mo		l indicator 1	s pres	unt, s	Starting				es <u>X</u>	No
Type:/ Depth (incl Remarks: HYDROLO0	NOAL hes): Gleyed Wo GY	tix so.	lindicator 1	s pres	unt, s	Starting	$\omega/in$	12 in	ches.		
Type:/ Depth (incl Remarks: HYDROLO( Wetland Hyd	NOAL hes): Gleyed Wo GY drology Indicato	tix sou	ired; check all that a	apply)			$\omega/in$	12 ind	y Indicato	rs (2 or more	e required)
Type: // Depth (incl Remarks: HYDROLO( Wetland Hyc Primary Indic	NORC hes): Gleyed Mo GY drology Indicator cators (minimum c	tix sou	ired; check all that a	apply) Stained Le	eaves (Bs	9) (except	$\omega/in$	2 ind Secondary Water	y Indicato	rs (2 or more Leaves (B9)	e required)
Type:/ Depth (incl Remarks: - TYDROLOO Wetland Hyc Primary Indic Surface	NOAL hes): Gleyed Wo GY drology Indicato	tix sou	ired; check all that a Water- ML	apply) Stained Le RA 1, 2, 4	eaves (Bs	9) (except	$\omega/in$	12 ind Secondary Water 4A	y Indicato -Stained	rs (2 or more Leaves (B9)	e required)
Type: Depth (incl Remarks: HYDROLOO Wetland Hyc Primary Indic Surface X High Wa X Saturatio	NOAL hes): Gleyed Wo GY drology Indicator cators (minimum c Water (A1) ater Table (A2) on (A3)	tix sou	i <u>red; check all that a</u> Water Water <b>M</b> L Salt C	apply) Stained Le <b>RA 1, 2, 4</b> rust (B11)	eaves (BS	9) (except B)	$\omega/in$	Secondary Water Drain: Dry-S	y Indicato -Stained , and 4B age Patte ieason W	r <u>s (2 or more</u> Leaves (B9) ) rns (B10) ater Table (C	<u>e required)</u> (MLRA 1, (22)
Type:/ Depth (incl Remarks: HYDROLO( Wetland Hyc Primary Indic Surface X High Wa X Saturatio Water M	NOAL hes): Gleyed Wo GY drology Indicator cators (minimum c Water (A1) ater Table (A2) on (A3) Marks (B1)	tix sou	i <u>red; check all that a</u> Water <b>ML</b> Salt C Aquat	apply) Stained Le RA 1, 2, 4 rust (B11) c Inverteb	eaves (BS A, and 4 rates (B1	9) (except B) 3)	w/ in	Secondary Water 4A Drain: Dry-S Satur	y Indicato Stained age Patte eason Wa ation Visi	r <u>s (2 or more</u> Leaves (B9) ) rns (B10) ater Table (C ble on Aerial	<u>e required)</u> (MLRA 1, (22)
Type:/ Depth (incl Remarks: TYDROLOO Wetland Hyc Primary Indic Primary Indic Surface X High Wa X Saturatio Water M Sedimen	NORC hes): Gleyed Wid GY drology Indicator cators (minimum c water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2)	tix sou	ired; check all that a Water ML Salt C Aquat Hydro Oxidiz	apply) Stained Le <b>RA 1, 2, 4</b> rust (B11) c Inverteb gen Sulfide red Rhizos	eaves (BS <b>A, and 4</b> rates (B1 e Odor (C pheres a	9) (except B) 3) C1) long Living	w/ in	Secondary <u>Secondary</u> Water 4A Dry-S Satur Geon	y Indicato -Stained age Patte eason Wa ation Visi norphic Po	rs (2 or more Leaves (B9) ) rns (B10) ater Table (C ble on Aerial osition (D2)	<u>e required)</u> (MLRA 1, (22)
Type:/ Depth (incl Remarks: TYDROLOO Wetland Hyo Primary Indic Surface X High Wa X Saturatio Water W Saturatio Drift Dej	NORC hes): Gleyet Wo GY drology Indicator cators (minimum c Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3)	tix sou	ired; check all that a Water ML Salt C Aquat Hydro Oxidiz Prese	apply) Stained Le <b>RA 1, 2, 4</b> rust (B11) c Inverteb gen Sulfide ed Rhizos nce of Rec	eaves (BS A, and 4 rates (B1 e Odor (C pheres a duced Iro	9) (except B) 3) C1) long Living n (C4)	Roots (C3)	Secondary Water Drain: Dry-S Satur Geon Shall	y Indicato -Stained , and 4B age Patte eason W ation Visi norphic Pro ow Aquita	rs (2 or more Leaves (B9) ) rns (B10) ater Table (C ble on Aerial osition (D2) ırd (D3)	<u>e required)</u> (MLRA 1, C2)
Type:/ Depth (incl Remarks: TYDROLOO Wetland Hyc Primary Indic Surface X High Wa X Saturatic Water M Saturatic Drift Dep Algal Ma Iron Dep	NORC hes): Gleyel Wo GY drology Indicator cators (minimum of Vater (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	tix Sov	ired; check all that a Water- Salt C Aquat Hydro Oxidiz Prese Recei	apply) Stained Le <b>RA 1, 2, 4</b> rust (B11) c Invertebr gen Sulfide ed Rhizos nce of Rec nt Iron Red	eaves (BS A, and 4 rates (B1 e Odor (C pheres a duced Iro luction in	9) (except B) 3) C1) long Living n (C4) Tilled Soils	w/ i/ Roots (C3)	Secondary Water 4A Drain Dry-S Satur Geon Shall FAC-	y Indicato -Stained , and 4B age Patte eason W ation Visi norphic Pe ow Aquita Neutral T	rs (2 or more Leaves (B9) ) rns (B10) ater Table (C ble on Aerial osition (D2) ird (D3) est (D5)	e <u>required)</u> (MLRA 1, (22) Imagery (
Type:/ Depth (incl Remarks: TYDROLOO Wetland Hyc Primary Indic Surface X High Wa X Saturatio Water W Sedimen Drift Dep Algal Ma Iron Dep Surface	NOAL hes): Gleyel Wo GY trology Indicator cators (minimum of Vater (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) e Soil Cracks (B6)	tix Sov	ired; check all that a Water ML Salt C Aquat Hydro Oxidiz Prese Recet Stunte	apply) Stained Le RA 1, 2, 4 rust (B11) c Invertebr gen Sulfide ed Rhizos nce of Rec nt Iron Red ed or Stres	eaves (BS A, and 4 rates (B1 e Odor (C pheres a duced Iro luction in sed Plan	9) (except B) 3) C1) long Living n (C4) Tilled Soils its (D1) (LR	w/ i/ Roots (C3)	Secondary Water 4A Drain Dry-S Satur Geon Shall FAC- Raise	y Indicato -Stained age Patte eason W ation Visi norphic Pr ow Aquita Neutral T ed Ant Mc	rs (2 or more Leaves (B9) ) rns (B10) ater Table (C ble on Aerial osition (D2) urd (D3) est (D5) punds (D6) (L	(MLRA 1, (MLRA 1, C2) Imagery ( _RR A)
Type:/ Depth (incl Remarks: TYDROLOO Wetland Hyc Primary Indic Surface X High Wa X Saturatio Water W Sedimen Drift Dep Algal Ma Iron Dep Surface Inundat	NOAL hes): Gleyeld Wo GY drology Indicator cators (minimum of vater (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) e Soil Cracks (B6) ition Visible on Ael	rs: of one requ	ired; check all that a Water ML Salt C Aquat Hydro Oxidiz Prese Recen Stunte / (B7) Other	apply) Stained Le <b>RA 1, 2, 4</b> rust (B11) c Invertebr gen Sulfide ed Rhizos nce of Rec nt Iron Red	eaves (BS A, and 4 rates (B1 e Odor (C pheres a duced Iro luction in sed Plan	9) (except B) 3) C1) long Living n (C4) Tilled Soils its (D1) (LR	w/ i/ Roots (C3)	Secondary Water 4A Drain Dry-S Satur Geon Shall FAC- Raise	y Indicato -Stained age Patte eason W ation Visi norphic Pr ow Aquita Neutral T ed Ant Mc	rs (2 or more Leaves (B9) ) rns (B10) ater Table (C ble on Aerial osition (D2) ird (D3) est (D5)	(MLRA 1, (MLRA 1, C2) Imagery ( _RR A)
Type:/ Depth (incl Remarks: TYDROLOO Wetland Hyo Primary Indic Surface X High Wa X Saturatio Water W Sedimer Drift Dep Algal Ma Iron Def Surface Inundat Sparsel	NORC hes): Gleyel Wo GY drology Indicator cators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) e Soil Cracks (B6) ition Visible on Aer ly Vegetated Con	rs: of one requ	ired; check all that a Water ML Salt C Aquat Hydro Oxidiz Prese Recen Stunte / (B7) Other	apply) Stained Le RA 1, 2, 4 rust (B11) c Invertebr gen Sulfide ed Rhizos nce of Rec nt Iron Red ed or Stres	eaves (BS A, and 4 rates (B1 e Odor (C pheres a duced Iro luction in sed Plan	9) (except B) 3) C1) long Living n (C4) Tilled Soils its (D1) (LR	w/ i/ Roots (C3)	Secondary Water 4A Drain Dry-S Satur Geon Shall FAC- Raise	y Indicato -Stained age Patte eason W ation Visi norphic Pr ow Aquita Neutral T ed Ant Mc	rs (2 or more Leaves (B9) ) rns (B10) ater Table (C ble on Aerial osition (D2) urd (D3) est (D5) punds (D6) (L	(MLRA 1, (MLRA 1, C2) Imagery ( LRR A)
Type:/ Depth (incl Remarks: TYDROLOO Wetland Hyc Primary Indic Surface X High Wa X Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundat Sparsel Field Obset	MORE hes): Gleyel Wo GY trology Indicator cators (minimum of Vater (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) e Soil Cracks (B6) ion Visible on Aer ly Vegetated Con rvations:	rs: of one required for the second se	ired; check all that a Water- Salt C Aquat Hydro Oxidiz Prese Recel Stunte ( (B7) Other ce (B8)	apply) Stained Le <b>RA 1, 2, 4</b> . rust (B11) c Invertebr gen Sulfide ed Rhizos nce of Rec nt Iron Red ed or Stres (Explain in	eaves (BS A, and 4 rates (B1 e Odor (C pheres a duced Iro luction in used Plan n Remark	9) (except B) 3) C1) long Living n (C4) Tilled Soils its (D1) (LR	w/ i/ Roots (C3)	Secondary Water 4A Drain Dry-S Satur Geon Shall FAC- Raise	y Indicato -Stained age Patte eason W ation Visi norphic Pr ow Aquita Neutral T ed Ant Mc	rs (2 or more Leaves (B9) ) rns (B10) ater Table (C ble on Aerial osition (D2) urd (D3) est (D5) punds (D6) (L	(MLRA 1, (MLRA 1, C2) Imagery ( <sup>1</sup>
Type:/ Depth (incl Remarks: TYDROLOO Wetland Hyce Primary Indic Surface X High Wa X Saturatio Water W Sedimer Drift Dep Algal Ma Iron Dep Surface Inundat Sparsel Field Obser Surface Wa	NOAL hes): Gleyel Mo GY drology Indicator cators (minimum of water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) a Soil Cracks (B6) ition Visible on Aer ly Vegetated Con rvations: ater Present?	rial Imagery cave Surfa	ired; check all that a Water- ML Salt C Aquat Hydro Oxidiz Prese Recel Stunter ( (B7) Other ce (B8) No Dep Dep	apply) Stained Le <b>RA 1, 2, 4</b> rust (B11) c Inverteb gen Sulfide red Rhizos nce of Rec ed or Stres (Explain in (Explain in th (inches)	eaves (BS A, and 4 rates (B1 e Odor (C pheres a duced Iro luction in sed Plan n Remark	9) (except B) 3) C1) long Living n (C4) Tilled Soils its (D1) (LR (s)	w/ iA Roots (C3) (C6) R A)	Secondary Water 4A Drain: Dry-S Satur Geon Shall FAC- Raise Frost	y Indicato Stained age Patte eason W ation Visi norphic Pro- ow Aquita Neutral T ed Ant Mc Heave H	rs (2 or more Leaves (B9) ) rns (B10) ater Table (C ble on Aerial osition (D2) urd (D3) est (D5) ounds (D6) (I lummocks (E	e required) (MLRA 1, 22) Imagery ( LRR A) 07)
Type: Depth (incl Remarks: TYDROLOO Wetland Hyce Primary Indic Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundat Sparsel Field Obset Surface Wa Water Table	NUAL hes): Gleyel Wo GY drology Indicator cators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) e Soil Cracks (B6) ion Visible on Aer ly Vegetated Con rvations: ater Present? e Present?	rial Imagery cave Surfa	ired; check all that a Water- ML Salt C Aquat Hydro Oxidiz Prese Recel Stunter ( (B7) Other ce (B8) No Dep Dep	apply) Stained Le <b>RA 1, 2, 4</b> rust (B11) c Inverteb gen Sulfide red Rhizos nce of Rec ed or Stres (Explain in (Explain in th (inches)	eaves (BS A, and 4 rates (B1 e Odor (C pheres a duced Iro luction in sed Plan n Remark	9) (except B) 3) C1) long Living n (C4) Tilled Soils its (D1) (LR (s)	w/ i/ Roots (C3)	Secondary Water 4A Drain: Dry-S Satur Geon Shall FAC- Raise Frost	y Indicato Stained age Patte eason W ation Visi norphic Pro- ow Aquita Neutral T ed Ant Mc Heave H	rs (2 or more Leaves (B9) ) rns (B10) ater Table (C ble on Aerial osition (D2) urd (D3) est (D5) ounds (D6) (I lummocks (E	(MLRA 1, (MLRA 1, C2) Imagery ( LRR A)
Type: Depth (incl Remarks: TYDROLOO Wetland Hyce Primary Indic Surface X High Wa X Saturatio Water W Sedimer Drift Dep Algal Ma Iron Def Surface Inundat Sparsel Field Obset Surface Wa Water Table Saturation F	NOAL hes): Gleyel & Wo GY drology Indicator cators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) e Soil Cracks (B6) ion Visible on Aer ly Vegetated Con rvations: ater Present? Present?	rs: of one required rial Imagery cave Surfa Yes Yes Yes Yes Yes	ired; check all that a Water- ML Salt C Aquat Hydro Oxidiz Prese Recer Stunte ( (B7) Other ce (B8) No Dep No Dep No Dep	apply) Stained Le RA 1, 2, 4 rust (B11) c Invertebr gen Sulfide ed Rhizos nce of Rec nt Iron Red ed or Stres (Explain in ch (inches) th (inches)	eaves (BS A, and 4 rates (B1 e Odor (C pheres a duced Iro luction in sed Plan n Remark	9) (except B) 3) 21) long Living n (C4) Tilled Soils its (D1) (LR (s)	Wetland Hy	Secondary Secondary Water 4A Dry-S Satur Geon Shall FAC- Raise Frost drology P	y Indicato Stained age Patte eason W ation Visi norphic Pro- ow Aquita Neutral T ed Ant Mc Heave H	rs (2 or more Leaves (B9) ) rns (B10) ater Table (C ble on Aerial osition (D2) urd (D3) est (D5) ounds (D6) (I lummocks (E	e required) (MLRA 1, 22) Imagery ( LRR A) 07)
Type:/ Depth (incl Remarks: TYDROLOO Wetland Hyce Primary Indic Surface X High Wa X Saturatio Water W Sedimer Drift Dep Algal Ma Iron Def Surface Inundat Sparsel Field Obset Surface Wa Water Table Saturation F	NOAL hes): Gleyel & Wo GY drology Indicator cators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) e Soil Cracks (B6) ion Visible on Aer ly Vegetated Con rvations: ater Present? Present?	rs: of one required rial Imagery cave Surfa Yes Yes Yes Yes Yes	ired; check all that a Water- ML Salt C Aquat Hydro Oxidiz Prese Recel Stunter ( (B7) Other ce (B8) No Dep Dep	apply) Stained Le RA 1, 2, 4 rust (B11) c Invertebr gen Sulfide ed Rhizos nce of Rec nt Iron Red ed or Stres (Explain in ch (inches) th (inches)	eaves (BS A, and 4 rates (B1 e Odor (C pheres a duced Iro luction in sed Plan n Remark	9) (except B) 3) 21) long Living n (C4) Tilled Soils its (D1) (LR (s)	Wetland Hy	Secondary Secondary Water 4A Dry-S Satur Geon Shall FAC- Raise Frost drology P	y Indicato Stained age Patte eason W ation Visi norphic Pro- ow Aquita Neutral T ed Ant Mc Heave H	rs (2 or more Leaves (B9) ) rns (B10) ater Table (C ble on Aerial osition (D2) urd (D3) est (D5) ounds (D6) (I lummocks (E	e required) (MLRA 1, (2) Imagery ( LRR A) 07)
Type: Depth (incl Remarks: TYDROLOO Wetland Hyce Primary Indic Surface X High Wa X Saturatio Water W Sedimer Drift Dep Algal Ma Iron Dep Surface Inundat Sparsel Field Obser Surface Wa Water Table Saturation F	NOAL hes): Gleyel & Wo GY drology Indicator cators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) e Soil Cracks (B6) ion Visible on Aer ly Vegetated Con rvations: ater Present? Present?	rs: of one required rial Imagery cave Surfa Yes Yes Yes Yes Yes	ired; check all that a Water- ML Salt C Aquat Hydro Oxidiz Prese Recer Stunte ( (B7) Other ce (B8) No Dep No Dep No Dep	apply) Stained Le RA 1, 2, 4 rust (B11) c Invertebr gen Sulfide ed Rhizos nce of Rec nt Iron Red ed or Stres (Explain in ch (inches) th (inches)	eaves (BS A, and 4 rates (B1 e Odor (C pheres a duced Iro luction in sed Plan n Remark	9) (except B) 3) 21) long Living n (C4) Tilled Soils its (D1) (LR (s)	Wetland Hy	Secondary Secondary Water 4A Dry-S Satur Geon Shall FAC- Raise Frost drology P	y Indicato Stained age Patte eason W ation Visi norphic Pro- ow Aquita Neutral T ed Ant Mc Heave H	rs (2 or more Leaves (B9) ) rns (B10) ater Table (C ble on Aerial osition (D2) urd (D3) est (D5) ounds (D6) (I lummocks (E	e required) (MLRA 1, 22) Imagery ( LRR A) 07)

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NUMBER OF STREET

Project/Site: <u>Humboldt Wind Energy Project</u>	C	ity/County: <u>Humb</u>	oldt	Sampling Date: 8/2/18
pplicant/Owner: HUMDOIdt Wind II C				
Westigator(s). <u>S. Torra</u> , <u>G. Touriq prova</u>	S	ection Townshin F	Rande	
andform (hillslope, terrace, etc.): ubregion (LRR): <u>A: Northwest Forests and Coa</u>	L	ocal relief (concave	e, convex, none):	Slope (%):
ubregion (LRR): <u>A: Northwest Forests and Coa</u>	astLat: -12	3.803704	Lona: 40.459	9274 Datum:
bil Map Unit Name:	Jata		NWI classi	fication:
e conditions on the site typical for	this time of year'	?Yes 🗡 No	(If no, explain in	Remarke )
e Vegetation $\underline{N}$ , Soil $\underline{N}$ , or Hydrology $\underline{N}$	_ significantly dis			' present? Yes $X$ No _
e Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u>	naturally proble		needed, explain any answ	
			tee t	
UMMARY OF FINDINGS – Attach site ma	ip snowing s	ampling point	locations, transect	s, important features, o
Hydrophytic Vegetation Present?     Yes       Hydric Soil Present?     Yes		Is the Sample	ad Area	
Vetland Hydrology Present? Yes X			and? Yes	No X
emarks: Sample point documents the u				
sample point accutions they	plana pair	point		
		·		
GETATION – Use scientific names of pla	ants.			
ee Stratum (Plot size: 3m radius)	Absolute D	ominant Indicator	Dominance Test wor	ksheet:
	<u>% Cover</u> S	pecies? Status	Number of Dominant S	Species
		Y FAC	That Are OBL, FACW,	or FAC: $2$ (A)
			Total Number of Domin	nant
	······	······································	Species Across All Stra	ata: <u> </u>
	25 =-	Lotal Cover	Percent of Dominant S	pecies
apling/Shrub Stratum (Plot size: 2. VN (> ())			That Are OBL, FACW,	
Corylus cornuta		Y FACU	Prevalence Index wor	
				x 1 = x 2 =
			FAC species 40	$x_{3} = \frac{170}{1}$
		Tatal O	FACU species 25	
rb Stratum (Plot size: 2 M radius)	= 1	otal Cover	UPL species	× 5 =
Polystichum munitum		Y FACY	Column Totals:65	(A) 220 (B
Equisetum arvense	<u>15 Y</u>	FAC	Prevalence Index	- P/A - 3 G
Asarum Caudatung	5	FACU	Hydrophytic Vegetatic	
			▶ 1 - Rapid Test for H	
		i	N 2 - Dominance Tes	
			N 3 - Prevalence Inde	
			№ 4 - Morphological A	daptations <sup>1</sup> (Provide supportin
			$\sim$ 5 - Wetland Non-Va	or on a separate sheet)
			Problematic Hydrop	hytic Vegetation <sup>1</sup> (Explain)
			<sup>1</sup> Indicators of hydric soil	and wetland hydrology must
50:15 20:6	30 = To	tal Cover	be present, unless distu	rbed or problematic.
ody Vine Stratum (Plot size:)				
	- <u> </u>		Hydrophytic	
//	······································		Vegetation	$\sim N$
Φ E	= Tot	tal Cover	Yes	No
are Ground in Herb Stratum 85				

S	0	Į	L
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Sampling Point: 604

229 up

'NP

Color (moist) 104R 4/6 104R 4/6	<u>ox Features</u> <u>%</u> <u>3</u> 10	C C	$\frac{\text{Loc}^2}{M}$	Texture     Remarks       Clayloam     Clayloam
	10	ζ.	$\overline{\mathcal{M}}$	And hand
				Lang in the
all LRRs, unless off Sandy Redox Stripped Matr Loamy Mucky Loamy Gleye Depleted Mat Redox Dark S	(S5) (S5) (Mineral (F d Matrix (F2) (F3) Surface (F6)	1) (exce 2)		2 cm Muck (A10) Red Parent Material (TF2)
				unless disturbed or problematic.
				Hydric Soil Present? Yes No
	all LRRs, unless off Sandy Redox Stripped Matr Loamy Mucky Loamy Gleye Depleted Matr Redox Dark S Depleted Dar Redox Depres	all LRRs, unless otherwise not Sandy Redox (S5) Stripped Matrix (S6) Loamy Mucky Mineral (F Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (I Redox Depressions (F8)	all LRRs, unless otherwise hoted.)	<ul> <li>Sandy Redox (S5)</li> <li>Stripped Matrix (S6)</li> <li>Loamy Mucky Mineral (F1) (except MLRA 1</li> <li>Loamy Gleyed Matrix (F2)</li> <li>Depleted Matrix (F3)</li> <li>Redox Dark Surface (F6)</li> <li>Depleted Dark Surface (F7)</li> <li>Redox Depressions (F8)</li> </ul>

HYDROLOGY	-
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required: check all that apply)	Secondary Indicators (2 or more required)         Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         Drainage Patterns (B10)         Dry-Season Water Table (C2)         Saturation Visible on Aerial Imagery (C9)         Geomorphic Position (D2)         Shallow Aquitard (D3)         FAC-Neutral Test (D5)         Raised Ant Mounds (D6) (LRR A)         Frost-Heave Hummocks (D7)
Field Observations:       *         Surface Water Present?       Yes       No       Depth (inches):	ydrology Present? Yes X No

WETLAND DETERMINATION D	ATA FORM – Western Mo	untains, Valleys, an	d Coast Region 239 up
Project/Site: Humboldt Wind Energy Project	City/County: Humbo	oldt	Sampling Date: 8/10/18
Applicant/Owner: Humboldt Wind, LLC			
Investigator(s): S. Creer, L. Murris	Section Township R		
Landform (hillslope, terrace, etc.):			
Subregion (LRR): <u>A: Northwest Forests and Coas</u>	t 123 795141	40 4526	Slope (%):
Sail Man Link Name Vack Vasit La Calif Marcall Coas	Lat. <u>125.755111</u>	Long:10.15200	Datum:
Soil Map Unit Name: 101 Knorth-Withenell C.	* h + + + + + + + + + + + + + + + + + +		
Are climatic / hydrologic conditions on the site typical for th			
Are Vegetation, Soil, or Hydrology		"Normal Circumstances"	present? Yes No
Are Vegetation, Soil, or Hydrology	naturally problematic? (If r	eeded, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing sampling point	locations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes I			
Hydric Soil Present? Yes Yes			🗙
Wetland Hydrology Present? Yes	No <u> </u>	ind? Yes	No
Remarks: Sapple Is in a bac for a Utility pule. Bac	kfilled hole kfill has settled	with a gu, creating	y wre anchor a denoración
VEGETATION – Use scientific names of plar		J	
· · · · · · · · · · · · · · · · · · ·	Absolute Dominant Indicator	Dominance Test work	sheet:
Tree Stratum (Plot size:)	% Cover Species? Status	Number of Dominant S	pecies $()$
1		That Are OBL, FACW,	
2		Total Number of Domin	ant 2
3		Species Across All Stra	ant <u>3</u> (B)
	= Total Cover	Percent of Dominant Sp That Are OBL, FACW,	becies At-
Sapling/Shrub Stratum (Plot size:)		Prevalence Index wor	( )
			Multiply by:
			x 1 =
3	4m	1	x 2 =
4			x 3 =
J	= = Total Cover	FACU species	
Herb Stratum (Plot size:)		UPL species	× 5 =
1. Mentha pulegium	10 N OBL	Column Totals:	(A) (B)
2. Holcus lanatus	IO N FAC	Prevalence Index	= B/A =
3. Hordeum marinum	-10 N HAC	Hydrophytic Vegetatic	
4. testuca peyennis	10 N EAC	1 - Rapid Test for H	lydrophytic Vegetation
5. CUPENUS Prograstis	trace N FACU	2 - Dominance Tes	t is >50%
6. Horstis exanata	-5 <u>N</u> FAW	3 - Prevalence Inde	x is ≤3.0 <sup>1</sup>
7. Juncus patens 8. Cunssurus echinatus	$-\frac{5}{15}$ <u>N</u> FACW	4 - Morphological A	daptations <sup>1</sup> (Provide supporting
8. <u>Cynosuru's echinatus</u> 9. <u>Phalan's aquaticus</u>	$-\frac{15}{15} - \frac{y}{y} - \frac{y}{FACU}$	5 - Wetland Non-Va	or on a separate sheet)
10. Bromis horde aceus	$\frac{1}{20}$ $\frac{1}{7}$ $\frac{1}{7}$ FACU	1	ohytic Vegetation <sup>1</sup> (Explain)
11		<sup>1</sup> Indicators of hydric soil	and wetland hydrology must
Woody Vine Stratum (Plot size: )	Total Cover	be present, unless distu	rbed or problematic.
1	······································	Hydrophytic Vegetation	17
$\wedge$	= Total Cover	Present? Yes	s No
% Bare Ground in Herb Stratum			N I
Remarks:			
	,		

	U	11
Sampling	Point <sup>-</sup>	

239 up

		•					he absence of indicators.)
Depth	Matrix	%	Color (m	Redox Featur pist) %	res Type <sup>1</sup>	Loc <sup>2</sup>	Texture Remarks
inches)	Color (moist)					A /k	· · · · · · · · · · · · · · · · · · ·
)-10	1042.7/	98	104R. 3	6 2	$- \underline{\vee}$	· · · · · · · · · · · · · · · · · · ·	silty clay loan
	-					. <u></u> . <u>.</u> .	- 0
				<u></u>			
	_		••••			·	
						<u> </u>	
							ins. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
ype: C=0	Concentration, D=De	epletion, RN	I=Reduced M	atrix, CS=Cover	red or Coat	ed Sand Grai	Indicators for Problematic Hydric Soils <sup>3</sup> :
	I Indicators: (Appl	icable to al			oleu.)		
Histos			Sandy I	Redox (S5) d Matrix (S6)			2 cm Muck (A10) Red Parent Material (TF2)
	Epipedon (A2)			Mucky Mineral (	F1) (excer	MIRA 1)	Very Shallow Dark Surface (TF12)
	Histic (A3) gen Sulfide (A4)			Gleyed Matrix (			Other (Explain in Remarks)
	ed Below Dark Surfa	ace (A11)		ed Matrix (F3)	-/		
	Dark Surface (A12)			Dark Surface (F	6)		<sup>3</sup> Indicators of hydrophytic vegetation and
	Mucky Mineral (S1)			d Dark Surface			wetland hydrology must be present,
	Gleyed Matrix (S4)		Redox	Depressions (F	3)		unless disturbed or problematic.
estrictive	e Layer (if present):	, ,					
Type:							\
							V
Depth (i	inches):						Hydric Soil Present? Yes No
Depth (i Remarks:	nches):						Hydric Soil Present? Yes No
	nches):						Hydric Soil Present? Yes No
Remarks:							Hydric Soil Present? Yes No
Remarks: YDROL							
Remarks: YDROL	OGY	-s:		hat apply)			Hydric Soil Present? Yes No
YDROL Vetland H Primary Inc	OGY lydrology Indicator	-s:	ed; check all t	<u>hat apply)</u> /ater-Stained Le	aves (B9) (	except	
YDROL YDROL Vetland H Primary Ind Surfac	OGY lydrology Indicator dicators (minimum o	-s:	ed; check all t			except	Secondary Indicators (2 or more required)
YDROL YDROL Vetland H Primary Ind Surfac High V	<b>OGY</b> Iydrology Indicator dicators (minimum o ve Water (A1) Vater Table (A2)	-s:	<u>ed; check all t</u> W	ater-Stained Le		except	<u>Secondary Indicators (2 or more required)</u> Water-Stained Leaves (B9) ( <b>MLRA 1, 2,</b>
YDROL YDROL Vetland H Primary Ind Surfac High V Satura	OGY lydrology Indicator dicators (minimum o se Water (A1) Vater Table (A2) ation (A3)	-s:	<u>ed: check all t</u> W Si	ater-Stained Le MLRA 1, 2, 44	, and 4B)	except	<u>Secondary Indicators (2 or more required)</u> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
YDROL YDROL Vetland H Yrimary Ind Surfac High V Satura Water	OGY lydrology Indicator dicators (minimum o se Water (A1) Vater Table (A2) ation (A3) Marks (B1)	-s:	ed: check all t W Sa Ad	/ater-Stained Le MLRA 1, 2, 44 alt Crust (B11)	A, and <b>4B)</b> ates (B13)	except	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
YDROL Vetland H Primary Ind Surfac High V Satura Water Sedim	<b>OGY</b> <u>Jydrology Indicator</u> <u>dicators (minimum o</u> ee Water (A1) Vater Table (A2) tition (A3) Marks (B1) ent Deposits (B2)	-s:	ed: check all t W Si Ai H	/ater-Stained Le MLRA 1, 2, 44 alt Crust (B11) quatic Invertebra	ates (B13) Odor (C1)		<ul> <li><u>Secondary Indicators (2 or more required)</u></li> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> </ul>
YDROLU Yotland H Primary Ind Surfac High V Satura Satura Satura Drift D	OGY lydrology Indicator dicators (minimum o ee Water (A1) Vater Table (A2) tition (A3) Marks (B1) ent Deposits (B2) reposits (B3)	-s:	<u>ed; check all t</u> W S; A; H O	ater-Stained Le MLRA 1, 2, 4A alt Crust (B11) quatic Invertebra ydrogen Sulfide	ates (B13) Odor (C1) heres along	g Living Roots	<ul> <li><u>Secondary Indicators (2 or more required)</u></li> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> </ul>
YDROL Yetland H Primary Ind Surfac High V Satura Satura Sedim Drift D Algal I	<b>OGY</b> <u>Jydrology Indicator</u> <u>dicators (minimum o</u> ee Water (A1) Vater Table (A2) tition (A3) Marks (B1) ent Deposits (B2)	-s:	ed: check all t W Si Ai H O P	ater-Stained Le MLRA 1, 2, 44 alt Crust (B11) quatic Invertebra ydrogen Sulfide xidized Rhizosp	ates (B13) Odor (C1) heres along uced Iron (C	g Living Roots C4)	<ul> <li><u>Secondary Indicators (2 or more required)</u></li> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>s (C3)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> </ul>
YDROL YDROL Vetland H Crimary Ind Surfac High V Satura Satura Sedim Sedim Algal I Algal I Inon D	OGY lydrology Indicator dicators (minimum o ee Water (A1) Vater Table (A2) tition (A3) Marks (B1) ent Deposits (B2) reposits (B3) Mat or Crust (B4)	-s:	ed: check all t W Si Ai H O Pi R	Ater-Stained Le MLRA 1, 2, 44 alt Crust (B11) quatic Invertebra ydrogen Sulfide xidized Rhizosp resence of Redu	ates (B13) Odor (C1) heres along uced Iron (C	g Living Roots C4) ed Soils (C6)	<ul> <li><u>Secondary Indicators (2 or more required)</u></li> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>s (C3)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> </ul>
YDROL YOROL Vetland H Yrimary Ind Surfac Unifac Sedim Sedim Drift D Algal I Iron D Surfac	OGY Jydrology Indicator dicators (minimum o re Water (A1) Vater Table (A2) ation (A3) Marks (B1) tent Deposits (B2) reposits (B3) Wat or Crust (B4) reposits (B5) re Soil Cracks (B6)	's: f one requir	ed: check all t W S; A( P; R R S;	Ater-Stained Le MLRA 1, 2, 44 alt Crust (B11) quatic Invertebra ydrogen Sulfide xidized Rhizosp resence of Redu ecent Iron Redu	ates (B13) Odor (C1) heres along uced Iron (C iction in Till ed Plants (	g Living Roots C4) ed Soils (C6)	<ul> <li><u>Secondary Indicators (2 or more required)</u></li> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>s (C3)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> </ul>
YDROLU YDROLU Yetland H Yrimary Ing Surfac High V Satura Satura Sedim Drift D Algal I Algal I Iron D Surfac Inunda	OGY Jicators (minimum o De Water (A1) Vater Table (A2) Ation (A3) Marks (B1) ent Deposits (B2) Peposits (B3) Mat or Crust (B4) eposits (B5)	s: fone requir fone requir	ed: check all f W Si Ai Ai N R R Si B7) O	Ater-Stained Le MLRA 1, 2, 44 alt Crust (B11) quatic Invertebra ydrogen Sulfide xidized Rhizosp resence of Redu ecent Iron Redu tunted or Stress	ates (B13) Odor (C1) heres along uced Iron (C iction in Till ed Plants (	g Living Roots C4) ed Soils (C6)	<ul> <li>Secondary Indicators (2 or more required)</li> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>s (C3)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> </ul>
Primary Inc YDROLU Vetland H Primary Inc Surfac High V Satura Water Sedim Drift D Algal I Iron D Surfac Inunda Spars	OGY lydrology Indicator dicators (minimum o ee Water (A1) Vater Table (A2) tition (A3) Marks (B1) ent Deposits (B2) veposits (B3) Mat or Crust (B4) eposits (B5) the Soil Cracks (B6) ation Visible on Aeria ely Vegetated Conci	s: fone requir fone requir	ed: check all f W Si Ai Ai N R R Si B7) O	Ater-Stained Le MLRA 1, 2, 44 alt Crust (B11) quatic Invertebra ydrogen Sulfide xidized Rhizosp resence of Redu ecent Iron Redu tunted or Stress	ates (B13) Odor (C1) heres along uced Iron (C iction in Till ed Plants (	g Living Roots C4) ed Soils (C6)	<ul> <li>Secondary Indicators (2 or more required)</li> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>s (C3)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> </ul>
Remarks: YDROL Vetland H Primary Ind Surfac High V Satura Water Sedim Drift D Algal I Iron D Surfac Inunda Spars Field Obs	OGY Jydrology Indicator dicators (minimum o re Water (A1) Vater Table (A2) ation (A3) Marks (B1) rent Deposits (B2) reposits (B3) Wat or Crust (B4) reposits (B5) re Soil Cracks (B6) ation Visible on Aeria ely Vegetated Conca ervations:	s: fone requir fone requir al Imagery ( ave Surface	ed: check all f W S; Ad H O P; R R S; B7) O	Ater-Stained Le MLRA 1, 2, 44 alt Crust (B11) quatic Invertebra ydrogen Sulfide xidized Rhizosp resence of Redu ecent Iron Redu tunted or Stress ther (Explain in	A, and 4B) odor (C1) heres along uced Iron (C action in Till ed Plants ( Remarks)	g Living Roots C4) ed Soils (C6) D1) ( <b>LRR A</b> )	<ul> <li>Secondary Indicators (2 or more required)</li> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>s (C3)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> </ul>
Remarks: YDROLU Vetland H Primary Inc Surfac High V Satura Vater Sedim Drift D Algal I Iron D Surfac Surface W	OGY lydrology Indicator dicators (minimum o ee Water (A1) Vater Table (A2) tition (A3) Marks (B1) ent Deposits (B2) veposits (B3) Mat or Crust (B4) eposits (B5) the Soil Cracks (B6) ation Visible on Aeria ely Vegetated Conci	s: fone requir fone requir al Imagery ( ave Surface	ed: check all t W Si Ai Ai O Pi R Si B7) O .(B8)	Ater-Stained Le MLRA 1, 2, 44 alt Crust (B11) quatic Invertebra ydrogen Sulfide xidized Rhizosp resence of Redu ecent Iron Redu tunted or Stress	ates (B13) Odor (C1) heres along uced Iron (C iction in Till ed Plants ( Remarks)	g Living Roots C4) ed Soils (C6) D1) ( <b>LRR A</b> )	<ul> <li>Secondary Indicators (2 or more required)</li> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>s (C3)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> </ul>

Saturation Present? (includes capillary fringe)	Yes No	_ Depth (inches):	Wetland Hydrology Present?	Y
Describe Recorded Data (stre	eam gauge, monitoring	well, aerial photos, previous inspec	tions), if available:	

Remarks:

WETLAND DETERMINATION DATA FORM	– Western Mountains, Valleys, and Coast Region 242a wet
Project/Site: Humboldt Wind Energy Project Cit	ty/County: Humboldt Sampling Date: 8/6/18
Applicant/Owner: Humboldt Wind, LLC	State: CA Sampling Point: 40 + 1
Investigator(s): S. CNER, L. MORIS SE	ection, Township, Range:
Landtorm (hillslope, terrace, etc.):	ocal relief (concave, convex, none): Concave Slope (%): 0>
Subregion (LRR): <u>A: Northwest Forests and Coast</u> Lat: -123	3.791270 Long: 40.453091 Datum:
Soil Map Unit Name:	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year	
Are Vegetation, Soil, or Hydrology significantly dis	
Are Vegetation, Soil, or Hydrology naturally proble	
SUMMARY OF FINDINGS – Attach site map showing s	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Remarks: Waily trampled graze by	rattle

## VEGETATION – Use scientific names of plants.

	Absolute	Dominant Indicator	Dominance Test worksheet:		
Tree Stratum         (Plot size:)           1)	<u>% Cover</u>	Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC:	2	(A)
2 3 4			Total Number of Dominant Species Across All Strata:	2	(B)
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		N-944-444-4-44-4-44-4-44-4-4-4-4-4-4-4-4	Total % Cover of:	Multiply by:	_
			OBL species x	1 =	_
3			FACW species x	2 =	<u>.                                    </u>
	<u> </u>		FAC species x		
5			FACU species x		
Herb Stratum (Plot size: Meters Vadius		_= Total Cover	UPL species x		
1. Martha pillegilm	5	NJ ORL	Column Totals: (A		
2. Hulcus lanatus	<u></u>	N FAC	Prevalence Index = B/A =		
3. Eesfira perentil	$\frac{\cdot}{\circ}$	FR	Hydrophytic Vegetation Indica	itors:	
4. Cyperus éragrostik	28	Y FACW	1 - Rapid Test for Hydrophy	tic Vegetation	
5. <u>Cernosurvs cristatus</u>	-t-	- FACW	2 - Dominance Test is >50%		
6. Juncus patens		HACW HACW	3 - Prevalence Index is ≤3.0	1	
7. Ranunculus muricatus	-20_	FAKW	4 - Morphological Adaptatio		porting
	· · · · · ·		data in Remarks or on a	· · · · · ·	
9			5 - Wetland Non-Vascular F		
10	·		Problematic Hydrophytic Ve	•	,
11			<sup>1</sup> Indicators of hydric soil and wet be present, unless disturbed or		nust
Woody Vine Stratum (Plot size:)	73	= Total Cover	be present, unless disturbed or		
1			Hydrophytic		
2			Vegetation		
% Bare Ground in Herb Stratum <u>45</u>		= Total Cover	Present? Yes	No	
Remarks:			• • • • • • • • • • • • • • • • • • •		

SOIL

Sampling Point: QOIW

242a wet

Profile Desc	ription: (Describ	e to the dept			or confirm	the absence of indicators.)
Depth	Matrix			x Features	Loc <sup>2</sup>	Texture Remarks
(inches)	Color (moist)	- <u>%</u> 	Color (moist)	<u>% Type'</u>	<u> </u>	S.Hy day logm
8-10	10404	947	101N -78	6 0		Sthad white
						<u> </u>
<u></u>						
<sup>1</sup> Type: C=Cc	ncentration D=D	enletion RM=	Reduced Matrix, CS	S=Covered or Coate	ed Sand Gra	ains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (App	licable to all	LRRs, unless othe	rwise noted.)	1	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Sandy Redox (			2 cm Muck (A10)
	oipedon (A2)		Stripped Matrix			Red Parent Material (TF2)
Black Hi			Loamy Mucky M	Mineral (F1) (excep	t MLRA 1)	Very Shallow Dark Surface (TF12)
	n Sulfide (A4)		Loamy Gleyed	Matrix (F2)		Other (Explain in Remarks)
	d Below Dark Surf	ace (A11)	Depleted Matrix			31 It - to us of hereins hereits an extension and
	ark Surface (A12)		Kedox Dark Su			<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present,
	lucky Mineral (S1)		Depleted Dark Redox Depress			unless disturbed or problematic.
	Bleyed Matrix (S4)		Redux Depless			
Type:						Hydric Soil Present? Yes No
	ches):					
Remarks:						
HYDROLO	GY					
Wetland Hy	drology Indicato	rs:	<u></u>			
Primary India	cators (minimum c	of one required	d; check all that app	ly)		Secondary Indicators (2 or more required)
Surface	Water (A1)		Water-Sta	ined Leaves (B9) (	except	Water-Stained Leaves (B9) (MLRA 1, 2,
	ater Table (A2)			1, 2, 4A, and 4B)		4A, and 4B)
Saturati			Salt Crust	(B11)		📈 Drainage Patterns (B10)
· —	larks (B1)		Aquatic In	vertebrates (B13)		Dry-Season Water Table (C2)
	nt Deposits (B2)		Hydrogen	Sulfide Odor (C1)		Saturation Visible on Aerial Imagery (C9)
	posits (B3)		Oxidized I	Rhizospheres along	Living Root	ts (C3) 🔀 Geomorphic Position (D2)
	at or Crust (B4)			of Reduced Iron (C		Shallow Aquitard (D3)
	oosits (B5)			on Reduction in Tille		
Surface	Soil Cracks (B6)		Stunted o	r Stressed Plants ([	01) ( <b>LRR A</b> )	
Inundati	on Visible on Aeri	al Imagery (B	7) Other (Ex	plain in Remarks)		Frost-Heave Hummocks (D7)
Sparsely	y Vegetated Conc	ave Surface (	B8)			
Field Obser	vations:	<u></u>				
Surface Wat	er Present?	Yes	No 🔀 Depth (ir	iches):		
Water Table	Present?	Yes	No 🚫 Depth (ir	nches):		$\mathbf{\lambda}$
Saturation P	resent?		No Depth (ir		Wetla	and Hydrology Present? Yes / No
(includes ca	pillary fringe)			*	anostiere) :	if available:
Describe Re	corded Data (stre	am gauge, mo	onitoring well, aerial	photos, previous in	spections), I	ii avaiiabite.
			r.			
Remarks:		DI	regina; c	standin	7 W	ater Further Jourislop
		T	JJ 12 -		I	
	0.000	XND	+ GWCIA	ι Λ		
		Ņ,	1 -10.00	J		

WETLAND DETERMINATION	DATA FORM -	– Western Μοι	ıntains, Valleys, a	nd Coast Region 2	42a up
Project/Site: Humboldt Wind Energy Project	City	//County: Humbo	ldt	Sampling Date: 81	olla
Applicant/Owner: Humboldt Wind, LLC				Sampling Point	2 ' V3
Investigator(s): S. CYCLY, L. V	Mollis se	ction Township Ra	ange:	compg. com42_4	
Landform (hillslope) terrace, etc.):					//.
Subregion (LRR): <u>A: Northwest Forests and Coa</u>					
			NWI class		
Are climatic / hydrologic conditions on the site typical for				,	V
Are Vegetation, Soil, or Hydrology					No <u> </u>
Are Vegetation, Soil, or Hydrology	naturally proble	matic? (If n	eeded, explain any ansv	vers in Remarks.)	
SUMMARY OF FINDINGS – Attach site ma	ip showing sa	mpling point	locations, transec	ts, important featu	res, etc.
Hydrophytic Vegetation Present? Yes					
Hydric Soil Present? Yes		Is the Sample	d Area		
Wetland Hydrology Present? Yes	No <u>×</u>	within a Wetla	na? res	No	
Remarks:					
				м. Т	
EGETATION – Use scientific names of pl	ants.				
Tree Stratum (Plot size:)		ominant Indicator pecies? Status	Dominance Test wo		
1			Number of Dominant That Are OBL, FACW		(A)
2					_ (/)
3			Total Number of Dom Species Across All St	1	(B)
4					_ (-/
	= 1	Fotal Cover	Percent of Dominant That Are OBL, FACW		(A/B)
Sapling/Shrub Stratum (Plot size:)			Prevalence Index w		_ ( /
			Total % Cover of	: Multiply by:	
2			OBL species	x 1 =	
3			FACW species	x 2 =	
5		······		x 3 =	
	= ]	Fotal Cover		× 4 =	
Herb Stratum (Plot size: 1 M radivs	· ·	~ ~ ~ ·		x 5 =	
1. Mentha pulequin		<u></u>	Column Totals:	(A)	(B)
2 Holeys Janatus	_ 10	Y PAC	Prevalence Inde	ex = B/A =	
Bactulis GUMMANTA	<u> </u>		Hydrophytic Vegeta		
1. Lotus borniculatus	- 5-	- HC		r Hydrophytic Vegetation	
- ANOSWUS FOUNATU			2 - Dominance T		
6. NY even sp . w		$\frac{1}{101}$	3 - Prevalence In		
8. HIX DOTABLY S RADICUTO				l Adaptations <sup>1</sup> (Provide si ks or on a separate shee	
BROMUS Novdeoceus		Y EAL	5 - Wetland Non-	•	()
10.				ophytic Vegetation <sup>1</sup> (Exp	lain)
11		· · · · ·		oil and wetland hydrology	
		otal Cover		sturbed or problematic.	
Woody Vine Stratum (Plot size:)	<i>j</i>				
1		······	Hydrophytic	<u> </u>	
2.		<u> </u>	Vegetation Present?	es No	
% Bare Ground in Herb Stratum 30	= T	otal Cover	Flesent?	····	

Sampling Point:

242a up

Profile Description: (Desc	ribe to the d	epth needed t			or confirm	rm the absence of indicators.)
Depth <u>Mat</u>			Redox Fea		Loc <sup>2</sup>	Texture Remarks
(inches) Color (mois	9	<u>Color (m</u>	<u>OIST) 7</u>	<u>6 Type</u>	- THE REAL PROPERTY OF THE REA	£
0-6 NIE	2/ 100				-	sandy clay loan
						Neg/
·						
· ·						
·						
					-	
	<u></u>		·····			
1						Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
<sup>1</sup> Type: C=Concentration, D Hydric Soil Indicators: (A	=Depletion, R	M=Reduced N	ss otherwise	noted.)	eu Sanu G	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	pprioable to		Redox (S5)	,,otoul,		2 cm Muck (A10)
Histic Epipedon (A2)			d Matrix (S6)			Red Parent Material (TF2)
Black Histic (A3)			Mucky Minera	al (F1) ( <mark>exce</mark> p	t MLRA 1	<ol> <li>Very Shallow Dark Surface (TF12)</li> </ol>
Hydrogen Sulfide (A4)			Gleyed Matrix			Other (Explain in Remarks)
Depleted Below Dark S	urface (A11)		ed Matrix (F3)			
Thick Dark Surface (A1			Dark Surface			<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (			ed Dark Surfa			wetland hydrology must be present,
Sandy Gleyed Matrix (S		Redox	Depressions (	(+8)		unless disturbed or problematic.
Restrictive Layer (if prese						
Type: <u>rack</u>	<u> </u>					
Depth (inches):	0					Hydric Soil Present? Yes No
Remarks:					÷	
HYDROLOGY						
Wetland Hydrology Indica						Secondary Indicators (2 or more required)
Primary Indicators (minimu	n of one requ			(DO) (		
Surface Water (A1)		W	/ater-Stained l		except	Water-Stained Leaves (B9) (MLRA 1, 2
High Water Table (A2)		0	MLRA 1, 2,			<b>4A, and 4B)</b> Drainage Patterns (B10)
Saturation (A3)			alt Crust (B11)			Dry-Season Water Table (C2)
Water Marks (B1)			quatic Inverter			Saturation Visible on Aerial Imagery (Cl
Sediment Deposits (B2	.)		ydrogen Sulfic xidized Rhizo:		n Living Po	
Drift Deposits (B3)			resence of Re			Shallow Aquitard (D3)
Algal Mat or Crust (B4)			ecent Iron Re			
Iron Deposits (B5) Surface Soil Cracks (B	6)		tunted or Stree			
Inundation Visible on A			ther (Explain i			Frost-Heave Hummocks (D7)
Sparsely Vegetated Co			anor (Explain i	in romano)		
Field Observations:						
Surface Water Present?	Yes	No [	Depth (inches)	r:		
Water Table Present?		No [				( .
Saturation Present?		No I				etland Hydrology Present? Yes No 📈
(includes capillary fringe)						
Describe Recorded Data (s	tream gauge,	monitoring we	II, aerial photo	os, previous ir	spections)	s), if available:
						· · · · · · · · · · · · · · · · · · ·
Remarks:						
						· · · · · · · · · · · · · · · · · · ·

rojectiSine Humboldt Wind Energy Project       Citv/Coarty: Humboldt       Sampling Date. []//] Y         ustagtant/Over: Humboldt Wind, LLC       State CA       Sampling Date. []//] Y         vestigativ(5):       Local reliaf (concave, corvex, nore)       Stope (5) ] S         outrogon (LRR) A: Northwest Forests and Coast, Lat. 123.781710       Long: 040.453151       Datum:         outrogon (LRR) A: Northwest Forests and Coast, Lat. 123.781710       Long: 040.453151       Datum:         outrogon (LRR) A: Northwest Forests and Coast, Lat. 123.781710       Long: 040.453151       Datum:         outrogon (LRR) A: Northwest Forests and Coast, Lat. 132.781710       Long: 040.453151       Datum:         outrogon (LRR) A: Northwest Forests and Coast, Lat. 152.78170       Long: 040.453151       Datum:         vestigative (Coast)       Sold (Coast)       Annual (Coast)       No       (Inc. explain in Remarks.)         ves vegetation       Soil (Coast)       ref Hydrology maturally problematic?       (In coast)       No       (Inc. explain in Remarks.)         SUMMARY OF Finding Present?       Ves (No       No       (Inc. explain and teatures, etc.       No       (Inc. explain A: No <t< th=""><th>oject/Site: Humboldt Wind Energy Project</th><th>City/County: Humbolc</th><th>It Sampling Date: 0/0/0/18</th></t<>	oject/Site: Humboldt Wind Energy Project	City/County: Humbolc	It Sampling Date: 0/0/0/18
Section, Townshp, Ronge:	plicant/Owner: HUMDOIdt VVING, LLC		
Indergo militions       Local relia (concave convex. none):		Section, Township, Rar	nge:
binegron (LFR)       A. Northwest Forests and Coast. Lar.		Legal relief (concave (	Slope (76).
ail Map Unit Name: 101ER 0441-101Ebaccell C.227.0424 [S       NWC classification       Index         e dimate/ hydrologic carditions on the site typical for his time of year? Yes       No       (If no explain in Femariks.)         is Vegetation       Soil       or Hydrology       naturally problematic?       (If no explain in Femariks.)         UMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.       No       (If no explain in Femariks.)         UMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.       No       (If no explain in Femariks.)         UMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.       No       (If no explain in Femariks.)         Vestand Hydrology Present?       Yes       No       Is the Sampled Area within a Wetland?       Yes       No         Yes       No       Is the Sampled Area within a Wetland?       Yes       No       (A)         Tree Stratum (Pict size:       X.Cover       Saecose 2.5       Statu       No       (A)         2       Saecose 3.15       IOO       (VB)       Prevalence Index worksheet:       (A)         3       -       -       Total Cover       Total Number of Dominant Species       (DO       (VB)         4       -       -		-123./81/1U	long: 40.453151 Datum
e elimatic / hydrologic conditions on the site typical for this time of year? Yes No (If no. explain in Peramas.) Yes (No (If no. explain in Peramas.) Yes (If no. explain the Peramas.) Yes (If no. explain the Peramas.) Yes (If no. explain the Peramas.) Yes (If no. expl	integration (LINA). <u>The real model of the property</u>	mply 15-30%-Slop	NWI classification: hone
re Vegetation       Soil       or Hydrology       stantificantly disturber?       Are "Normal Circumstances present?       No         umMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.       Hydrochytic vegetation, Present?       No       Is the Sampled Area within a Wetland?       No         Hydrochytic Vegetation Present?       Yes       No       Is the Sampled Area within a Wetland?       No       No         Wetland Hydrology Present?       Yes       No       Is the Sampled Area within a Wetland?       No       No         Remarks:       Absolute       Dominant Indicator Vess       No       No       No       No         2       Absolute       Dominant Indicator Vess       No       No       No       No         2       Absolute       Dominant Indicator Vess       No       No       No       No         3       Accourt Species Status       No       Prevalence Index worksheet:       No       Ant Are OBL, FACW, or FAC:       (A)         3       Accourt Species Accos All Strata       (B)       Prevalence Index worksheet:       No       Ant Are OBL, FACW, or FAC:       (A)         4       Species Accos All Strata       (B)       Prevalence Index worksheet:       No       Ant Are OBL, FACW, or FAC:       (A) </td <td>Sin Map Unit Name. <u>TO PARTON TO CONCERNE A</u></td> <td>this time of year? Yes No</td> <td>(If no, explain in Remarks.)</td>	Sin Map Unit Name. <u>TO PARTON TO CONCERNE A</u>	this time of year? Yes No	(If no, explain in Remarks.)
e vegetation	re climatic / hydrologic conditions on the site typical of	significantly disturbed? Are "	Normal Circumstances" present? Yes No
Interview of the state of t	re Vegetation, Soil, or Hydrology		
Hydrophytic Vegetation Present?       Yes       No       Is the Sampled Area within a Wetland?       Yes       No         Hydrophytic Vegetation Present?       Yes       No       Is the Sampled Area within a Wetland?       Yes       No         Wetland Hydrology Present?       Yes       No       Is the Sampled Area within a Wetland?       Yes       No         Remarks       Absolute       Dominant Indicator       Momance Test worksheet:       Number of Dominant Species.       (A)         1       Sappling/Shrub Stratum       (Plot size:       (A)       Total Number of Dominant Species.       (A)         1       Sappling/Shrub Stratum       (Plot size:       (A)       (AB)       Percent of Dominant Species.       (AB)         2       Sappling/Shrub Stratum       (Plot size:       (A)       (AB)       Percent of Dominant Species.       (A)         1       Sappling/Shrub Stratum       (Plot size:       (A)       (AB)       Percent of Dominant Species.       (AB)         2       Sappling/Shrub Stratum       (Plot size:       (A)       (A)       (B)       Percent of Dominant Species.       (A)       (A)         3       Total Cover       FACU Species       X 4 =       (A)       (A)       (B)         2       Mark OSL (VA) </td <td>re Vegetation, Soil, or Hydrology</td> <td> natorially prostruction</td> <td></td>	re Vegetation, Soil, or Hydrology	natorially prostruction	
No	UMMARY OF FINDINGS – Attach site ma	ap showing sampling point is	ocations, transects, important routeres, inter
Hydric Soli Present?       Yes       No       within a Wetland?       Yes       No         Remarks:       No       within a Wetland?       Yes       No       No         Remarks:       No       within a Wetland?       Yes       No       No         Remarks:       Absolute       Dominant Indicator       Number of Dominant Species       Q (A)         1       % Cover       Species?       Status       (A)         2       Sabino/Shrub Stratum       (Plot size:       (Plot size: <td< td=""><td></td><td>le the Sampled</td><td>Area</td></td<>		le the Sampled	Area
Remarks:         ///////////////////////////////////		within a Wetlar	
VEGETATION – Use scientific names of plants.         Tree Stratum (Plot size:		NO	
Absolute       Dominant Indicator       Dominant Perturbation         1.       Species?       Status       Number of Dominant Species       (A)         2.       Total Number of Dominant Species       (A)       Total Number of Dominant Species       (A)         3.	Remarks		
Absolute       Dominant Indicator         1.       % Cover       Species?       Status         1.       % Cover       Species?       Status         1.			
Absolute       Dominant Indicator         1.       % Cover       Species?       Status         1.	FGETATION – Use scientific names of p	lants.	
The observed       That Are OBL, FACW, or FAC:       (A)         1       Total Number of Dominant       2         3		Absolute Dominant Indicator	Dominance Test worksheet:
1			Number of Dominant Species
3.	1		
3.			Total Number of Dominant
Sapling/Shrub Stratum       (Plot size:)       That Are OBL, FACW, or FAC: (APB)         1.        Total Cover       That Are OBL, FACW, or FAC: (APB)         1.        Total % Cover of:       Multiply by:	3		1
Saping/Shrub Stratum (Plot size:)       Prevalence Index worksheet:         1.       Total % Cover of: Multiply by:         2.       OBL species         3.       Total % Cover of: Multiply by:         9.       FACW species         1.       Total % Cover of: Multiply by:         0BL species       X =	4		Percent of Dominant Species 100 (A/B)
1.       Total % Cover of:       Multiply by:         2.	Sapling/Shrub Stratum (Plot size:)		
2.       OBL species       x 1 =         3.       Statum       Pace Stratum       Pace Stratum         4.       Statum       For a dius       FACW species       x 2 =         5.       FAC species       x 3 =       FAC species       x 3 =         7.       FAC Species       FAC Species       x 4 =       Image: Species       Image:	1.		
3.	2.		-
4.	3		
Image: Stratum (Plot size: Image: Addited by Stratum (Plot size) (Plot si	4		FAC species x 3 =
Herb Stratum (Plot size:       M radius         1.       Image: Stratum (Plot size:       (A)         2.       Member (A)       (B)         2.       Member (A)       (A)       (B)         2.       Member (A)       (A)       (B)         3.       Marashs (A)       (A)       (B)         4.       CMANSKAS (A)       (A)       (B)         5.       Marashs (A)       (A)       (B)         6.       FACU       (A)       (B)         7.       (A)       (A)       (B)         8.       (A)       (A)       (B)         9.       (A)       (A)       (C)         10.       (A)       (A)       (C)         11.       (A)       (A)       (C)         12.       (A)       (A)       (A)       (B)         13.       (A)       (A)       (A)       (B)         14.       (A)       (A)       (A)       (B)         14.       (A)       (A)       (A)       (B)         15.       (A)       (A)       (A)       (A)         16.       (A)       (A)       (A)       (A)	5		
1. $\square MOS partons$ $\square MOS$ 2. $\square MOS partons$ $\square MOS$ 3. $\square ansths exactors$ $\square MOS$ 4. $\square NOS urus e contratus s       \square MOS         5.       \square NOS urus e contratus s       \square Partons urus e contratus s         6.       \square nos urus e contratus s       \square Partons urus e contratus s         7.       \square nos urus e contratus s       \square nos urus e contratus s         8.       \square nos urus e contratus s       \square nos urus e contratus s         9.       \square nos urus e contratus s       \square nos urus e contratus s         10.       \square nos urus e contratus s       \square nos urus e contratus s         11.       \square nos urus e contratus s       \square nos urus e contratus s         10.       \square nos urus e contratus e contratus s       \square nos urus e contratus e$	Chip in a los in a dillo		
2.       Memtha       Dulleging       20       OBL       Prevalence Index = B/A =	Herb Stratum (Piot Size: 1 WY 101-14	50 × FACU	Column Totals: (A) (B)
3.       Aarostis Gracada       I.O       IArostis Gracada         4.       CMNUSURUS CONSTANCE       S       UPL         5.       CUROSURUS CONSTANCE       S       IArostis Facu         6.       Facu       S       IArostis Solution         7.       Image: Solution of the second se		20 × OBL	Prevalence Index = B/A =
4.	2 Der Barra Cullyw	- 1.0 FACW	
5.       Gamma Chnis       FAC       3 - Prevalence Index is ≤3.01         6.       FAC       - 3 - Prevalence Index is ≤3.01         7.       - 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)         9.       - 5 - Wetland Non-Vascular Plants <sup>1</sup> 10.       - Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)         11.       - 00 = Total Cover         Woody Vine Stratum       Plot size:         1.	4 CAROSURUS COMMAN		
6.       Fractional periodicity       10.       3 - Prevalence Index is ≤3.0°         9.       4 - Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet)         10.       5 - Wetland Non-Vascular Plants1         11.       Problematic Hydrophytic Vegetation1 (Explain)         11.       11.         2.	5. CINDOLIVIS OVISTATIC		
A.			
9.	7		data in Remarks or on a separate sheet)
10.        Problematic Hydrophyter ogetation (crypt y)         11.        Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.         Woody Vine Stratum       Plot size:          1.			5 - Wetland Non-Vascular Plants'
11.     Implementation of the stratum       Woody Vine Stratum     Plot size:       1.     Implementation       2.     Implementation       Implementation     Implementation <tr< td=""><td>9:</td><td></td><td>Problematic Hydrophytic Vegetation' (Explain)</td></tr<>	9:		Problematic Hydrophytic Vegetation' (Explain)
Woody Vine Stratum     Plot size:			<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.
1.	· · · · · · · · · · · · · · · · · · ·	O 0 = Total Cover	De present, uniess distance of problemate.
1.			
2 = Total Cover Present? Yes No			
	2		
		= lotal Cover	

## SOIL

Sampling Point:  $\underline{910W}$ 

244 wet

Profile Description: (Describe to the Depth Matrix			,
<u>(inches)</u> <u>Color (moist)</u> %	<u>Redox Features</u>	Loc <sup>2</sup> Tex	
D-11 104R3/2	$\frac{1}{12} + \frac{1}{12} = \frac{1}{12} + \frac{1}{12} $	$\underline{Loc^2}$ $\underline{Tex}$	<u>Remarks</u>
		M SAM	and crand to what
<u></u>	-101N04-5-1	[i	
*********************************			
· · · · · · · · · · · · · · · · · · ·			
,		······································	······································
······			
	·		
Type: C=Concentration, D=Depletion,	RM=Reduced Matrix, CS=Covered or Coated	Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
lydric Soli Indicators: (Applicable to	all LRRs, unless otherwise noted.)		dicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)		_ 2 cm Muck (A10)
Histic Epipedon (A2)	Stripped Matrix (S6)		Red Parent Material (TF2)
_ Black Histic (A3)	Loamy Mucky Mineral (F1) (except M	LRA 1)	Very Shallow Dark Surface (TF12)
_ Hydrogen Sulfide (A4) . _ Depleted Below Dark Surface (A11)	Loamy Gleyed Matrix (F2)	·	_ Other (Explain in Remarks)
Depleted Below Dark Sufface (A11) Thick Dark Surface (A12)	( /	· .	
Sandy Mucky Mineral (S1)	Redox Dark Surface (F6) Depleted Dark Surface (F7)	³lr	idicators of hydrophytic vegetation and
Sandy Gleyed Matrix (S4)	$\mathbf{X}$ Redox Depressions (F8)		wetland hydrology must be present,
estrictive Layer (if present):			unless disturbed or problematic.
Туре:			
Depth (inches):			
emarks:	•	Hyari	c Soil Present? Yes 📈 No
<b>'DROLOGY</b> /etland Hydrology Indicators: rimary Indicators (minimum of one requ	ired: check all that apply)		
etland Hydrology Indicators: rimary Indicators (minimum of one requ			Secondary Indicators (2 or more required)
fetland Hydrology Indicators: rimary Indicators (minimum of one requ _ Surface Water (A1)	Water-Stained Leaves (B9) (exce		Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2,
etland Hydrology Indicators: imary Indicators (minimum of one requ _ Surface Water (A1) _ High Water Table (A2)	Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B)		Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<b>etland Hydrology Indicators:</b> rimary Indicators (minimum of one requ _ Surface Water (A1) _ High Water Table (A2) _ Saturation (A3)	Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B) Salt Crust (B11) <sup>▶</sup>	pt	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> </ul>
etland Hydrology Indicators: imary Indicators (minimum of one requ _ Surface Water (A1) _ High Water Table (A2) _ Saturation (A3) _ Water Marks (B1)	Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B) Salt Crust (B11) * Aquatic Invertebrates (B13)	pt	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> </ul>
etland Hydrology Indicators: imary Indicators (minimum of one requ _ Surface Water (A1) _ High Water Table (A2) _ Saturation (A3) _ Water Marks (B1) _ Sediment Deposits (B2)	<ul> <li>Water-Stained Leaves (B9) (exce</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11) *</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> </ul>	pt	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> </ul>
etland Hydrology Indicators: imary Indicators (minimum of one requ _ Surface Water (A1) _ High Water Table (A2) _ Saturation (A3) _ Water Marks (B1) _ Sediment Deposits (B2) _ Drift Deposits (B3)	<ul> <li>Water-Stained Leaves (B9) (exce</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11) *</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Livir</li> </ul>	pt	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Drý-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> </ul>
etland Hydrology Indicators: imary Indicators (minimum of one requ _ Surface Water (A1) _ High Water Table (A2) _ Saturation (A3) _ Water Marks (B1) _ Sediment Deposits (B2) _ Drift Deposits (B3) _ Algal Mat or Crust (B4)	<ul> <li>Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11) *</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Livir</li> <li>Presence of Reduced Iron (C4)</li> </ul>	pt	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> </ul>
retland Hydrology Indicators:         rimary Indicators (minimum of one requ         _ Surface Water (A1)         _ High Water Table (A2)         _ Saturation (A3)         _ Water Marks (B1)         _ Sediment Deposits (B2)         _ Drift Deposits (B3)         _ Algal Mat or Crust (B4)         _ Iron Deposits (B5)	<ul> <li>Water-Stained Leaves (B9) (excendent constraints)</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Livin</li> <li>Presence of Reduced Iron (C4)</li> <li>Recent Iron Reduction in Tilled So</li> </ul>	pt	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> </ul>
retland Hydrology Indicators:         rimary Indicators (minimum of one requ         Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Surface Soil Cracks (B6)	<ul> <li>Water-Stained Leaves (B9) (excendent constraints)</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11) *</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Livin</li> <li>Presence of Reduced Iron (C4)</li> <li>Recent Iron Reduction in Tilled So</li> <li>Stunted or Stressed Plants (D1) (L</li> </ul>	pt	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> </ul>
retland Hydrology Indicators:         rimary Indicators (minimum of one requestion of the sequence)         Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Surface Soil Cracks (B6)         Inundation Visible on Aerial Imagery	Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Oxidized Rhizospheres along Livir Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L (B7) Other (Explain in Remarks)	pt	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> </ul>
retland Hydrology Indicators:         rimary Indicators (minimum of one requestion of the sequence)         Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Surface Soil Cracks (B6)         Inundation Visible on Aerial Imagery of the second seco	Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Oxidized Rhizospheres along Livir Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L (B7) Other (Explain in Remarks)	pt	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> </ul>
retland Hydrology Indicators:         rimary Indicators (minimum of one requination of the requination of the requination of the reduination of the reduinatio of the reduination of the reduination of the	<ul> <li>Water-Stained Leaves (B9) (excell</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11) *</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Livir</li> <li>Presence of Reduced Iron (C4)</li> <li>Recent Iron Reduction in Tilled So</li> <li>Stunted or Stressed Plants (D1) (L</li> <li>(B7)</li> <li>Other (Explain in Remarks)</li> </ul>	pt	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> </ul>
retland Hydrology Indicators:         rimary Indicators (minimum of one requination of the requination of the requination of the reduination of the reduinatin of the reduinatin of the reduination of the reduination of the	Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L (B7) Other (Explain in Remarks) (B8) No Depth (inches):	pt	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> </ul>
detland Hydrology Indicators:         rimary Indicators (minimum of one requination of the requination of th	Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L (B7) Other (Explain in Remarks) (B8) No Depth (inches): Depth (inches):	pt	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Vetland Hydrology Indicators:         rimary Indicators (minimum of one requination of the requirement of th	Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L (B7) Other (Explain in Remarks) (B8) No Depth (inches): Depth (inches):	pt	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> </ul>
detland Hydrology Indicators:         rimary Indicators (minimum of one requination of the requirement of th	Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B)     Salt Crust (B11)     Aquatic Invertebrates (B13)     Hydrogen Sulfide Odor (C1)     Oxidized Rhizospheres along Livir     Presence of Reduced Iron (C4)     Recent Iron Reduction in Tilled So     Stunted or Stressed Plants (D1) (L (B7)     Other (Explain in Remarks)     (B8)     Depth (inches):     Depth (inches):     Depth (inches):     Depth (inches):	pt 	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> <li>Frost-Heave Hummocks (D7)</li> </ul>
detland Hydrology Indicators:         rimary Indicators (minimum of one requination of the requirement of th	Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L (B7) Other (Explain in Remarks) (B8) No Depth (inches): Depth (inches):	pt 	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> <li>Frost-Heave Hummocks (D7)</li> </ul>
detland Hydrology Indicators:         rimary Indicators (minimum of one requination of the required of the	Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B)     Salt Crust (B11)     Aquatic Invertebrates (B13)     Hydrogen Sulfide Odor (C1)     Oxidized Rhizospheres along Livir     Presence of Reduced Iron (C4)     Recent Iron Reduction in Tilled So     Stunted or Stressed Plants (D1) (L (B7) Other (Explain in Remarks) e (B8)     No Depth (inches):     D	pt 	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> <li>Frost-Heave Hummocks (D7)</li> </ul>
detland Hydrology Indicators:         rimary Indicators (minimum of one requination of the required of the	Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B)     Salt Crust (B11) *     Aquatic Invertebrates (B13)     Hydrogen Sulfide Odor (C1)     Oxidized Rhizospheres along Livir     Presence of Reduced Iron (C4)     Recent Iron Reduction in Tilled So     Stunted or Stressed Plants (D1) (L (B7) Other (Explain in Remarks) e (B8)     No Depth (inches):	pt 	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> <li>Frost-Heave Hummocks (D7)</li> </ul>
detland Hydrology Indicators:         rimary Indicators (minimum of one requination of the required of the	Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B)     Salt Crust (B11)     Aquatic Invertebrates (B13)     Hydrogen Sulfide Odor (C1)     Oxidized Rhizospheres along Livir     Presence of Reduced Iron (C4)     Recent Iron Reduction in Tilled So     Stunted or Stressed Plants (D1) (L (B7)     Other (Explain in Remarks)     (B8)     Depth (inches):     Depth (inches):     Depth (inches):     Depth (inches):	pt 	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> <li>Frost-Heave Hummocks (D7)</li> </ul>

ject/Site: Humboldt Wind Energy Project		City/County: <u>Humbo</u>	Idt Sampling Date: 0/8/18
licant/Owner: Humboldt Wind, LLC			State: CA Sampling Point: 910 4
estigator(s): $54.5($		Section, Township, Ra	ange:
dform (hillslope, terrace, etc.):	·	Local relief (concave,	, convex, none): Slope (%):
region (LRR): A: Northwest Forests and C	Coast_Lat: -12	3.781686	Long: <b>40.453143</b> Datum:
Map Unit Name: Y know th thitherel	1 Compto	18-30%. 51.	DPC NWI classification:Nhe
climatic / hydrologic conditions on the site typical	for this time of ve	ar? Yes 🗡 No	(If no, explain in Remarks.)
Vegetation N Soil N or Hydrology	significantly	disturbed? Are	"Normal Circumstances" present? Yes No
Vegetation N, Soil N, or Hydrology	. 1		needed, explain any answers in Remarks.)
• <u> </u>			
		sampling point	locations, transects, important features, etc.
/drophytic Vegetation Present? Yes		Is the Sample	d Area
			and? Yes No
etland Hydrology Present? Yes			
GETATION – Use scientific names of	plants.		
		Dominant Indicator	Dominance Test worksheet:
e <u>Stratum</u> (Plot size:)		Species? Status	- Number of Dominant Species
			That Are OBL, FACW, or FAC: (A)
			Total Number of Dominant Species Across All Strata: (B)
	<u></u>		-5-77
	Ø	= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:
pling/Shrub Stratum (Plot size:	_)		Prevalence Index worksheet:
			Total % Cover of: <u>Multiply by:</u>
			OBL species x 1 =
			FACW species x 2 =
			FAC species x 3 =
		= Total Cover	FACU species x 4 =
rb Stratum (Plot size:			UPL species x 5 =
A. Artua	35	UPL	_ Column Totals: (A) (B)
8. hordeaceous	25	FACU	Prevalence Index = B/A =
Linum bienne	10		Hydrophytic Vegetation Indicators:
R. Jan COD lata			1 - Rapid Test for Hydrophytic Vegetation
V. Annulia sa			2 - Dominance Test is >50%
P. aquilinum			$3 - Prevalence Index is \leq 3.0^1$
E. medusae 2 caput			4 - Morphological Adaptations <sup>1</sup> (Provide supporting
E. medusae 2 caput			
E. medusae 2 caput			data in Remarks or on a separate sheet)
E. medusae 2 caput			
E. medusae Zcaput			data in Remarks or on a separate sheet)5 - Wetland Non-Vascular Plants <sup>1</sup> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)1Indicators of hydric soil and wetland hydrology must
E. medusae <u>Ecaput</u>			data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants <sup>1</sup> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
E. medusae 2 caput			data in Remarks or on a separate sheet)5 - Wetland Non-Vascular Plants <sup>1</sup> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)1Indicators of hydric soil and wetland hydrology must
	VO O		data in Remarks or on a separate sheet)         5 - Wetland Non-Vascular Plants <sup>1</sup> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.         Hydrophytic
oody Vine Stratum (Plot size:)	VO O		data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants <sup>1</sup> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

#### SOIL

18. J.

Sampling Point: 9 10 upland

244 up

Depth (inches)	Color (moist)	%	Redox Features Color (moist) % Typ	e <sup>1</sup> Loc <sup>2</sup> Te	Dem. I
$1 \wedge$	10 YR 3/2				exture Remarks
210	10 10 12	100		Scloam	
·····					
				·····	
	1-1-1-1-1-1				
	s			······	
					· · · · · · · · · · · · · · · · · · ·
			Reduced Matrix, CS=Covered or C		<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
		cable to all	LRRs, unless otherwise noted.)	<b>4</b>	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol	· ,		Sandy Redox (S5)		2 cm Muck (A10)
	ipedon (A2)		Stripped Matrix (S6)		Red Parent Material (TF2)
Black His			Loamy Mucky Mineral (F1) (exc		Very Shallow Dark Surface (TF12)
	n Sulfide (A4) Below Dark Surfa	oo (A11)	Loamy Gleyed Matrix (F2)		Other (Explain in Remarks)
	rk Surface (A12)	UC (ATT)	Depleted Matrix (F3) Redox Dark Surface (F6)		<sup>3</sup> Indicators of hydrophytic vegetation and
	ucky Mineral (S1)		Depleted Dark Surface (F7)		wetland hydrology must be present,
	leyed Matrix (S4)		Redox Depressions (F8)		unless disturbed or problematic.
	ayer (if present):				
Туре:					
Depth (inc	hes):			Hvo	dric Soil Present? Yes No
emarks:					
	GY				
'DROLO( /etland Hyd	rology Indicators				
(DROLOC	rology Indicators		; check all that apply)		Secondary Indicators (2 or more required)
<b>'DROLO</b> /etland Hyd rimary Indica	rology Indicators		<u>; check all that apply)</u> Water-Stained Leaves (B9		<u>Secondary Indicators (2 or more required)</u> Water-Stained Leaves (B9) ( <b>MLRA 1, 2</b>
<b>DROLOO</b> (etland Hyd rimary Indica Surface V	rology Indicators ators (minimum of			) (except	
<b>DROLOC</b> etland Hyd imary Indica _ Surface V _ High Wat	rology Indicators ators (minimum of Water (A1) er Table (A2)		Water-Stained Leaves (B9	) (except	Water-Stained Leaves (B9) (MLRA 1, 2
PROLOC /etland Hyd rimary Indica Surface V High Wat Saturatio Water Ma	irology Indicators ators (minimum of Water (A1) er Table (A2) n (A3) arks (B1)		Water-Stained Leaves (B9 MLRA 1, 2, 4A, and 4E	) (except 3)	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
PROLOC /etland Hyd rimary Indica Surface V High Wat Saturatio Water Ma	<b>rology Indicators</b> ators (minimum of Water (A1) er Table (A2) n (A3)		Water-Stained Leaves (B9 MLRA 1, 2, 4A, and 4E Salt Crust (B11)	) (except 3)	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2</li> <li>4A, and 4B)</li> <li>Drainage Patterns (B10)</li> </ul>
<b>PROLOC</b> /etland Hyd rimary Indica Surface V High Wat Saturatio Water Ma	rology Indicators ators (minimum of Water (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2)		Water-Stained Leaves (B9 MLRA 1, 2, 4A, and 4E Salt Crust (B11) Aquatic Invertebrates (B13)	) (except 3) 1)	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (CS)</li> </ul>
<b>/DROLOC</b> /etland Hyd rimary Indica Surface V High Wat Saturatio Water Ma Sediment Drift Dep	rology Indicators ators (minimum of Water (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2)		<ul> <li>Water-Stained Leaves (B9</li> <li>MLRA 1, 2, 4A, and 4E</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13</li> <li>Hydrogen Sulfide Odor (C</li> </ul>	) (except 3) 1) ng Living Roots (C3	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (CS)</li> </ul>
<b>'DROLOC</b> <b>retland Hyd</b> <b>rimary Indica</b> Surface V High Wat Saturatio Water Ma Sediment Drift Depu Algal Mat Iron Depu	ators (minimum of Nater (A1) ver Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) c or Crust (B4) psits (B5)		<ul> <li>Water-Stained Leaves (B9</li> <li>MLRA 1, 2, 4A, and 4E</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13</li> <li>Hydrogen Sulfide Odor (C<sup>1</sup>)</li> <li>Oxidized Rhizospheres ald</li> <li>Presence of Reduced Iron</li> <li>Recent Iron Reduction in T</li> </ul>	) (except 3) 1) 1) (C4) illed Soils (C6)	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (CS)</li> <li>Geomorphic Position (D2)</li> </ul>
<b>(DROLOC</b> <b>/etland Hyd</b> <u>rimary Indica</u> Surface V High Wat Saturatio Water Ma Sediment Drift Depu Algal Mat Iron Depu Surface S	rology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) c or Crust (B4) osits (B5) Goil Cracks (B6)	<u>one required</u>	Water-Stained Leaves (B9     MLRA 1, 2, 4A, and 4E     Salt Crust (B11)     Aquatic Invertebrates (B13     Hydrogen Sulfide Odor (C     Oxidized Rhizospheres alc     Presence of Reduced Iron     Recent Iron Reduction in T     Stunted or Stressed Plants	) (except 3) 1) 1) (C4) illed Soils (C6)	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> </ul>
<b>(DROLOC</b> <b>/etland Hyd</b> <u>rimary Indica</u> Surface V High Wat Saturatio Water Ma Sediment Drift Depu Algal Mat Iron Depu Surface S	ators (minimum of Nater (A1) ver Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) c or Crust (B4) psits (B5)	<u>one required</u>	Water-Stained Leaves (B9     MLRA 1, 2, 4A, and 4E     Salt Crust (B11)     Aquatic Invertebrates (B13     Hydrogen Sulfide Odor (C     Oxidized Rhizospheres alc     Presence of Reduced Iron     Recent Iron Reduction in T     Stunted or Stressed Plants	) (except 3) 1) 1) (C4) iilled Soils (C6) 5 (D1) (LRR A)	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> </ul>
<b>/DROLOC</b> /etland Hyd rimary Indica Surface V High Wat Saturatio Vater Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundatio Sparsely	rology Indicators ators (minimum of Water (A1) eer Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) c or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial Vegetated Concav	<u>one required</u> Imagery (B7	<ul> <li>Water-Stained Leaves (B9</li> <li>MLRA 1, 2, 4A, and 4E</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C<sup>-1</sup>)</li> <li>Oxidized Rhizospheres ald</li> <li>Presence of Reduced Iron</li> <li>Recent Iron Reduction in T</li> <li>Stunted or Stressed Plants</li> <li>Other (Explain in Remarks)</li> </ul>	) (except 3) 1) 1) (C4) iilled Soils (C6) 5 (D1) (LRR A)	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> </ul>
<b>/DROLOC</b> /etland Hyd rimary Indica Surface V High Wat Saturatio Vater Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundatio Sparsely	rology Indicators ators (minimum of Water (A1) eer Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) c or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial Vegetated Concav	<u>one required</u> Imagery (B7	<ul> <li>Water-Stained Leaves (B9</li> <li>MLRA 1, 2, 4A, and 4E</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C<sup>-1</sup>)</li> <li>Oxidized Rhizospheres ald</li> <li>Presence of Reduced Iron</li> <li>Recent Iron Reduction in T</li> <li>Stunted or Stressed Plants</li> <li>Other (Explain in Remarks)</li> </ul>	) (except 3) 1) 1) (C4) iilled Soils (C6) 5 (D1) (LRR A)	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> </ul>
<b>'DROLOC</b> <b>'etland Hyd</b> <b>imary Indica</b> Surface V High Wat Saturatio Water Ma Sediment Drift Depr Algal Mat Iron Depr Surface S Inundatio Sparsely <b>eld Observ</b>	rology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) c or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial Vegetated Concav ations: r Present?	one required Imagery (B7 re Surface (E Yes N	Water-Stained Leaves (B9     MLRA 1, 2, 4A, and 4E     Salt Crust (B11)     Aquatic Invertebrates (B13     Hydrogen Sulfide Odor (C     Oxidized Rhizospheres alc     Presence of Reduced Iron     Recent Iron Reduction in T     Stunted or Stressed Plants ) Other (Explain in Remarks 88)	) (except 3) 1) 1) (C4) (C4) (C4) (D1) (LRR A) )	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> </ul>
<b>/DROLOC</b> /etland Hyd rimary Indica Surface V High Wat Saturatio Water Ma Sediment Drift Depo Algal Mat Iron Depo Iron Depo Inundatio Sparsely eld Observ urface Wate	rology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) c or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial Vegetated Concav ations: r Present?	one required Imagery (B7 re Surface (E Yes N	<ul> <li>Water-Stained Leaves (B9</li> <li>MLRA 1, 2, 4A, and 4E</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13</li> <li>Hydrogen Sulfide Odor (C<sup>1</sup></li> <li>Oxidized Rhizospheres ald</li> <li>Presence of Reduced Iron</li> <li>Recent Iron Reduction in T</li> <li>Stunted or Stressed Plants</li> <li>Other (Explain in Remarks</li> </ul>	) (except 3) 1) 1) (C4) (C4) (C4) (D1) (LRR A) )	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (CS)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> <li>Frost-Heave Hummocks (D7)</li> </ul>
YDROLOC Vetland Hyd Irimary Indica Surface V High Wat Saturatio Water Ma Sediment Orift Depo Algal Mat Iron Depo Surface S Inundatio Sparsely ield Observ urface Wate Vater Table F aturation Pre	rology Indicators ators (minimum of Nater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) c or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial Vegetated Concav ations: r Present?	one required Imagery (B7 re Surface (E res N res N	Water-Stained Leaves (B9     MLRA 1, 2, 4A, and 4E     Salt Crust (B11)     Aquatic Invertebrates (B13     Hydrogen Sulfide Odor (C     Oxidized Rhizospheres alc     Presence of Reduced Iron     Recent Iron Reduction in T     Stunted or Stressed Plants ) Other (Explain in Remarks 88)	) (except 3) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1)	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> </ul>
Primary Indica Surface V High Wat Saturatio Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundatio Sparsely ield Observ Surface Wate Vater Table F saturation Pre ncludes capi	Irology Indicators ators (minimum of Nater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) c or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial Vegetated Concav ations: r Present?	Imagery (B7 re Surface (E res N res N res N	Water-Stained Leaves (B9     MLRA 1, 2, 4A, and 4E     Salt Crust (B11)     Aquatic Invertebrates (B13     Hydrogen Sulfide Odor (C     Oxidized Rhizospheres ald     Presence of Reduced Iron     Recent Iron Reduction in T     Stunted or Stressed Plants ) Other (Explain in Remarks 88)	) (except 3) i) 1) ing Living Roots (C3 (C4) illed Soils (C6) 5 (D1) (LRR A) ) 	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLOO Vetland Hyd Primary Indica Surface V High Wat Saturatio Water Ma Sediment Sediment Algal Mat Iron Depo Surface S Inundatio Sparsely ield Observ Surface Wate Vater Table F aturation Pre ncludes capi	Irology Indicators ators (minimum of Nater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) c or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial Vegetated Concav ations: r Present?	Imagery (B7 re Surface (E res N res N res N	Water-Stained Leaves (B9     MLRA 1, 2, 4A, and 4E     Salt Crust (B11)     Aquatic Invertebrates (B13     Hydrogen Sulfide Odor (C     Oxidized Rhizospheres alc     Presence of Reduced Iron     Recent Iron Reduction in T     Stunted or Stressed Plants ) Other (Explain in Remarks 88)  Io Depth (inches): Io Depth (inches):	) (except 3) i) 1) ing Living Roots (C3 (C4) illed Soils (C6) 5 (D1) (LRR A) ) 	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLOO Vetland Hyd Primary Indica Surface V High Wat Saturatio Water Ma Sediment Orift Depu Algal Mat Iron Depo Surface S Inundatio Sparsely ield Observ Surface Wate Vater Table F eaturation Pre ncludes capi Describe Rec	Irology Indicators ators (minimum of Nater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) c or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial Vegetated Concav ations: r Present?	Imagery (B7 re Surface (E res N res N res N	Water-Stained Leaves (B9     MLRA 1, 2, 4A, and 4E     Salt Crust (B11)     Aquatic Invertebrates (B13     Hydrogen Sulfide Odor (C     Oxidized Rhizospheres ald     Presence of Reduced Iron     Recent Iron Reduction in T     Stunted or Stressed Plants ) Other (Explain in Remarks 88)	) (except 3) i) 1) ing Living Roots (C3 (C4) illed Soils (C6) 5 (D1) (LRR A) ) 	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLOO Vetland Hyd Primary Indica Surface V High Wat Saturatio Water Ma Sediment Sediment Algal Mat Iron Depo Surface S Inundatio Sparsely ield Observ Surface Wate Vater Table F aturation Pre ncludes capi	Irology Indicators ators (minimum of Nater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) c or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial Vegetated Concav ations: r Present?	Imagery (B7 re Surface (E res N res N res N	Water-Stained Leaves (B9     MLRA 1, 2, 4A, and 4E     Salt Crust (B11)     Aquatic Invertebrates (B13     Hydrogen Sulfide Odor (C     Oxidized Rhizospheres ald     Presence of Reduced Iron     Recent Iron Reduction in T     Stunted or Stressed Plants ) Other (Explain in Remarks 88)	) (except 3) i) 1) ing Living Roots (C3 (C4) illed Soils (C6) 5 (D1) (LRR A) ) 	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLOO Vetland Hyd Primary Indica Surface V High Wat Saturatio Water Ma Sediment Orift Depu Algal Mat Iron Depo Surface S Inundatio Sparsely ield Observ Surface Wate Vater Table F eaturation Pre ncludes capi Describe Rec	Irology Indicators ators (minimum of Nater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) c or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial Vegetated Concav ations: r Present?	Imagery (B7 re Surface (E res N res N res N	Water-Stained Leaves (B9     MLRA 1, 2, 4A, and 4E     Salt Crust (B11)     Aquatic Invertebrates (B13     Hydrogen Sulfide Odor (C     Oxidized Rhizospheres ald     Presence of Reduced Iron     Recent Iron Reduction in T     Stunted or Stressed Plants ) Other (Explain in Remarks 88)	) (except 3) i) 1) ing Living Roots (C3 (C4) illed Soils (C6) 5 (D1) (LRR A) ) 	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

## WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Humboldt Wind Energy Project	City/County: Humboldt Sampling Date: 10/3/15
Applicant/Owner: Humboldt Wind, LLC	State: CA Sampling Point: 30
Investigator(s): S-Crear J. Holson	Section, Township, Range: SQ, TOAN, ROIW
Landform (hillslope, terrace, etc.); roadside the diam	Local relief (concave) convex, none): Slope (%): 2
Subregion (LRR): A: Northwest Forests and Coast Lat: 4(	1.59 0342 Long:-124.157051 Datum:
Soil Map Unit Name: 1010: Urban LAWd - Friendlycite	
Are climatic / hydrologic conditions on the site typical for this time of ye	ar? Yes No (If no, explain in Remarks )
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, SoilV, or Hydrology naturally pro	
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes No	Is the Sampled Area
Wetland Hydrology Present? Yes No X	within a Wetland? Yes No
Remarks not a wetland, no	criteria met

## VEGETATION – Use scientific names of plants.

Sabind/Shrub Stratum (Plot size:	1.           2.			Dominance Test worksheet:         Number of Dominant Species         That Are OBL, FACW, or FAC:         Total Number of Dominant
3	4		_ = Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: 50. (A/B) Prevalence Index worksheet: 
10.	3 4 5 Herb Stratum (Plot size: I'M rad i&S 1. Festive a rundinaces 2. Ital (US anatics 3 2. Ital (US anatics 3 3 4 5 5 5 5 6 8 8	minu-in CS	= Total Cover N N N N N N N N N N N N N	FACW species $40$ x 2 = $3$ FAC species $40$ x 3 = $120$ FACU species $4 = 4$ UPL species $67$ x 5 = $335$ Column Totals: $108$ (A) $459$ (B) Prevalence Index = $B/A = 47,25$ Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is $\leq 3.0^1$ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
2.     Pubus     Partyphone       % Bare Ground in Herb Stratum     26       Total Cover     Yes       No	10 11 <u>Woody Vine Stratum</u> (Plot size:) 1 2PUBUS <u>ParviPbrus</u> % Bare Ground in Herb Stratum <u>'20</u>	82	= Total Cover <u>Y</u> <u>FAC</u> N <u>FAC</u>	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic

### SOIL

		0 . 1	í.
Sampling	Point:	201	

Profile Description: (Describe to the depth needed to document	the indicator or confirm the absence of indicators.)
Depth Matrix Redox Fea	tures
(inches) Color (moist) % Color (moist) (	6 Type <sup>1</sup> Loc <sup>2</sup> Texture Remarks
0-1 101R 12 120	
2-14 10-1R/ 99 51R-161	C M day bam
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Co	vered or Coated Sand Grains <sup>2</sup> Location: PL=Pore Lining, M=Matrix
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise	
Histosol (A1) Sandy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2) Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3) Loamy Mucky Miner	al (F1) (except MLRA 1) Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4) Loamy Gleyed Matri	
Depleted Below Dark Surface (A11) Depleted Matrix (F3	
Thick Dark Surface (A12) Redox Dark Surface	
Sandy Mucky Mineral (S1) Depleted Dark Surfa	
Sandy Gleyed Matrix (S4) Redox Depressions Restrictive Layer (if present):	
Type: Depth (inches)	Hydric Soil Present? Yes No X
D	
Remarks Small amount 1%	reday not enough to
	redox, not enough to
indicate hydric a	
	2011
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required, check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1) Water-Stained	Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2) MLRA 1, 2,	4A, and 4B) 4A, and 4B)
Saturation (A3) Salt Crust (B1	) Drainage Patterns (B10)
Water Marks (B1) Aquatic Invertee	
Sediment Deposits (B2) Hydrogen Sulf	de Odor (C1) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Oxidized Rhize	spheres along Living Roots (C3) Geomorphic Position (D2)
	educed Iron (C4) Shallow Aquitard (D3)
Iron Deposits (B5) Recent Iron Re	duction in Tilled Soils (C6) FAC-Neutral Test (D5)
Surface Soil Cracks (B6) Stunted or Stre	essed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Aerial Imagery (B7) Other (Explain	in Remarks) Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface (B8)	
Field Observations:	
Surface Water Present? Yes No X Depth (inches	
Water Table Present? Yes No Depth (inches	):
Saturation Present? Yes No 🔀 Depth (inches	): Wetland Hydrology Present? Yes No X
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial phot	
Describe Recorded Data (stream gauge, monitoring weil, aenar priot	
Domeskei	
Remarks:	

## WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Humboldt Wind Energy Project	City/County: Humboldt	Sampling Date: 10/3/18
Applicant/Owner: Humboldt Wind, LLC	State: CA	Sampling Point 301
Investigator(s): S. Creev, J. Holson	Section, Township, Range: SI7, T031	, ROIW
Landform (hillslope) terrace, etc.):	Local relief (concave, convex, none):	
Subregion (LRR): A: Northwest Forests and Coast Lat: 4	10-642225 Long: -124.20	159 6_ Datum:
Subregion (LRR): A: Northwest Forests and Coast Lat: 4 Soil Map Unit Name: 230: 1706 Fon-Tablebluff	comder, 2-917 NWI classifi	cation: <u>NONE</u>
Are climatic / hydrologic conditions on the site typical for this time of ye		
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Normal Circumstances"	present? Yes No
Are Vegetation, Soil, or Hydrology naturally pro		ers in Remarks )

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No X No X	Is the Sampled Area within a Wetland? Yes No
Remarks: DA bowvelet	by or	nramp +	they 101 all Fill

#### **VEGETATION** – Use scientific names of plants.

1

kan har and har	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum         (Plot size:)           1        )	% Cover	Species?	<u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant 5 (B)
Sapling/Shrub Stratum (Plot size: 1 Mrad)		= Total Co	ver	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
1. Bacchans Pil	01	Y	NL	Prevalence Index worksheet:
- sacenans pi	10			Total % Cover of:Multiply by:
2				OBL species Q x 1 = Q
3				FACW species X 2 = X
4				FAC species $(00 \times 3 = 180)$
5				FACU species $27$ x4 = $108$
A	10	= Total Co	ver	
Herb Stratum (Plot size: 1m rad) 1, 1		» I		UPL species $35$ x 5 = $125$
1. Plantago lancevator	2	N	FACU	Column Totals: 112 (A) 538 (B)
2. CONCARTNERMUM VUGARE	15	4	FACU	Prevalence Index = $B/A = 4.8$
3. Anthuxanthan Waratum	01-10	X	FACI	Hydrophytic Vegetation Indicators:
		4	NL	
	-10-			1 - Rapid Test for Hydrophytic Vegetation
5		<del></del>		2 - Dominance Test is >50%
6		(		3 - Prevalence Index is ≤3 0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants <sup>1</sup>
10			_	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
	42	= Total Cov	lor	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: M radius	10	- 10(a) 000		
1. Publis armentary	60	FAC	y.	
				Hydrophytic Vegetation
2	42			Present? Yes No
% Bare Ground in Herb Stratum		= Total Cov	/er	
Remarks: 50% = 22				
302.8				

US Army Corps of Engineers

SOIL

Sampling Point: 304

Profile Description: (Desc Depth Mat		Redox Features	· · · · · · · · · · · · · · · · · · ·
(inches) Color (mois	and the second s		Loc <sup>2</sup> Texture Remarks
7-12 107127	2 45		Claur FILL
IND Y	0 45		
	1 16		
10 TK	19 10		
			· · · · · ·
Type: C=Concentration D	=Depletion_RM	=Reduced Matrix, CS=Covered or Coated 3	Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
		LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils3:
Histosol (A1)		Sandy Redox (S5)	2.cm Muck (A10)
Histic Epipedon (A2)		Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3)		Loamy Mucky Mineral (F1) (except M	MLRA 1) Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark S	urface (A11)	Depleted Matrix (F3)	
Thick Dark Surface (A1	2)	Redox Dark Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (		Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S		Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if prese	nt):		
Туре:		1	
Depth (inches):			Hydric Soil Present? Yes No
YDROLOGY		THO WANTING	Und
Wetland Hydrology Indica	tors:		
Primary Indicators (minimur	n of one require	d; check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1)		Water-Stained Leaves (B9) (exc	cept Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)		MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3)		Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1)		Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2	)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)		Oxidized Rhizospheres along Liv	iving Roots (C3) Geomorphic Position (D2)
Algal Mat or Crust (B4)		Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5)		Recent Iron Reduction in Tilled S	Soils (C6) FAC-Neutral Test (D5)
Surface Soil Cracks (B6	3)	Stunted or Stressed Plants (D1)	) (LRR A) Raised Ant Mounds (D6) (LRR A)
Inundation Visible on A	erial Imagery (B	87) Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Co	ncave Surface (	(B8)	
		No Depth (inches):	
Field Observations:	Yes	No Deptil (illelies)	
Field Observations: Surface Water Present?		No Depth (inches);	
Field Observations: Surface Water Present? Water Table Present?	Yes	No Depth (inches);	
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes Yes	No         Depth (inches):           No         Depth (inches):	Wetland Hydrology Present? Yes No
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes Yes	No Depth (inches);	Wetland Hydrology Present? Yes No
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (st	Yes Yes	No         Depth (inches):           No         Depth (inches):	Wetland Hydrology Present? Yes No
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes Yes	No         Depth (inches):           No         Depth (inches):	Wetland Hydrology Present? Yes No
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (st	Yes Yes	No         Depth (inches):           No         Depth (inches):	Wetland Hydrology Present? Yes No
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (st	Yes Yes	No         Depth (inches):           No         Depth (inches):	Wetland Hydrology Present? Yes No

## WETLAND DETERMINATION DATA FORM -- Western Mountains, Valleys, and Coast Region

Project/Site: Humboldt Wind Energy Project	City/County Humbold	
Applicant/Owner: Humboldt Wind, LLC		State: CA Sampling Point 312 4 (M)
Investigator(s): S. Creer, J. Hulson	Section, Township, Ran	ge 55, TO3N, KOIW
Landform (hillslope, terrace, etc.):	Local relief (concave, c	convex, none): hone Slope (%):
Subregion (LRR): A: Northwest Forests and Coast Lat:	40.671997	Long -124. 202872 Datum:
Soil Map Unit Name: 110: Weath, 0-27. Slope		NWI classification: PEMIC
Are climatic / hydrologic conditions on the site typical for this time of	of year? Yes No	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significa	antly disturbed? Are "N	Normal Circumstances" present? Yes $X$ No
Are Vegetation N, Soil N, or Hydrology N natural		eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	/ing sampling point lo	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	_	
Hydric Soil Present? Yes Ves No	Is the Sampled	Vi
Wetland Hydrology Present? Yes <u>Yes</u> No	within a Wetland	
Remarks: Associated with 1	NL 306	
VEGETATION – Use scientific names of plants.		
Tree Stratum (Plot size: 1m radius 4bso % Co	and the second	Dominance Test worksheet:
1. Alous Mombifolia 10	Diver Species? Status	Number of Dominant Species
2 Pseudotsuga menziesii	N FACU	That Are OBL, FACW, or FAC (A)
3		Total Number of Dominant Species Across All Strata:(B)
4		
1 - 21/15	= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:
Sapling/Shrub Stratum (Plot size: m radius 4	A Y PAC	Prevalence Index worksheet:
1 Longera involverata 9	0	Total % Cover of: Multiply by:
2 Barcharis pilularis 3	N NL	OBL species x 1 =
3 Dosa nutkana 5	P IN FAC	FACW species x 2 =
4		FAC species x 3 =
48	= Total Cover	FACU species x 4 =
Herb Stratum (Plot size: 1 M Y CIQIVS		UPL species x 5 =
1. Equisetim arvense 20		Column Totals: (A) (B)
2. Nosturtum afficingle 1	J Y OBL	Prevalence Index = B/A =
3. Lantadeschicaethiopica	3 N OBL	Hydrophytic Vegetation Indicators:
4. Symphysthachum sp.	<u>&gt; N</u>	1 - Rapid Test for Hydrophytic Vegetation
5. Anthoxan hum doratum	S N FACU	2 - Dominance Test is >50%
6,		3 - Prevalence Index is ≤3 0 <sup>1</sup>
7		4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
8		5 - Wetland Non-Vascular Plants <sup>1</sup>
9		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plotsize: M radius) 43	3 = Total Cover	be present, unless disturbed or problematic
Woody Vine Stratum (Plot size: 1 m + vice)	NI NI	
1 Rubu Ursinus 47	FACU FACU	Hydrophytic V
2 Lubus armeniaus 1	- FAC	Vegetation / Present? Yes No
% Bare Ground in Herb Stratum	= Total Cover	
Remarks:		

1 .

## SOIL

Color modell       %       Color modell       %       Type       Loc       Texture       Remarks         On Low       I STR 9/4       94       STR 9/4       Str       Yea       Autor	Depth Matrix	e depth needed to document the indicator or co Redox Features	infirm the absence of indicators.)
Ype:       C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains,       *Location: PL=Pore Lining, M=Matrix, PMore Solie Science, Sand Sand Grains,         Type:       C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains,       *Location: PL=Pore Lining, M=Matrix, PMore Solie Science, Sand Sand Sand Sand Sand Sand Sand Sand			c <sup>2</sup> Texture Remarks
Ype:       Co-Concentration, Di-Depletion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains,       *Location: PL=Pre Lining, M=Matrix         'Type:       Sandy Redux (S5)       Indicators for Problematic Hydric Soils*:         Histo Epipetion (A2)       Strapped Matrix (S6)       2 or Muck (A10)         Histo Epipetion (A2)       Sandy Redux (S5)       2 or Muck (A10)         Histo Epipetion (A2)       Loamy Mucky Mineral (F1) (except MLRA 1)       Very Shallow Dark Surface (TF2)         Hydrog Suifde (A4)       Loamy Mucky Mineral (F6)       *Indicators of hydrophylic vegatation and wetland hydrology music b present, unless disturbed or problematic.         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       unless disturbed or problematic.         Restrictive Larger (If present):       Type:       Deptied Matrix (F3)       *Indicators of hydrophylic vegatation and wetland hydrology music b present, unless disturbed or problematic.         Restrictive Larger (If present):       Type:       Deptied Matrix (F3)       *Verter-Stained Leaves (B9) (except       4A, and 49)         Saturation (A3)       Sati Crust (B11)       Saturation Visible on Aerial Imagery (C9)       Saturation Visible on Aerial Imagery (C9)       Saturation Visible on Aerial Imagery (C9)         Saturation (A3)       Sati Crust (B11)       Presence of Reduced Inin (C1)       Saturation Visible on Aerial Imagery (C9)         Saturation Visible on Aerial Imagery (B7) <td>0-6 107R 44 0</td> <td></td> <td>1 day loan</td>	0-6 107R 44 0		1 day loan
hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils*:         Histosol (A1)       Sandy Redox (S5)       Red Parent Material (TF2)         Histosol (A1)       Loamy Mucky Mineral (F1) (except MLRA 1)       Very Shallow Dark Surface (TF12)         Hydrogen Sufface (A4)       Loamy Gleyed Matrix (F3)       Indicators for Problematic Hydric Soils*:         Trick Dark Surface (A11)       Depleted Matrix (F3)       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1)       Depleted Matrix (F3)       Indicators for Problematic Hydric Soil Present?         Type:       Depleted Matrix (S4)       Redox Depressions (F6)       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (If present):       Type:       Depth (inches):       Hydric Soil Present? Yes No       No         Surface Water (A1)       Water-Stained Leaves (B9) (except       Water-Stained Leaves (B9) (MLRA 1, 2, 4, and 4B)       Saturation (A3)       Salt Crust (B11)       Dirainage Patterns (B10)       Water-Stained Leaves (B9) (MLRA 1, 2, 4, 4, and 4B)         Suface Water (A3)       Salt Crust (B11)       Dirainage Patterns (B10)	6-14 127244	Nong concentra	
hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils*:         Histosol (A1)       Sandy Redox (S5)       Red Parent Material (TF2)         Histosol (A1)       Loamy Mucky Mineral (F1) (except MLRA 1)       Very Shallow Dark Surface (TF12)         Hydrogen Sufface (A4)       Loamy Gleyed Matrix (F3)       Indicators for Problematic Hydric Soils*:         Trick Dark Surface (A11)       Depleted Matrix (F3)       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1)       Depleted Matrix (F3)       Indicators for Problematic Hydric Soil Present?         Type:       Depleted Matrix (S4)       Redox Depressions (F6)       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (If present):       Type:       Depth (inches):       Hydric Soil Present? Yes No       No         Surface Water (A1)       Water-Stained Leaves (B9) (except       Water-Stained Leaves (B9) (MLRA 1, 2, 4, and 4B)       Saturation (A3)       Salt Crust (B11)       Dirainage Patterns (B10)       Water-Stained Leaves (B9) (MLRA 1, 2, 4, 4, and 4B)         Suface Water (A3)       Salt Crust (B11)       Dirainage Patterns (B10)		DM=Dadward Matrix, CS=Covered or Costed So	nd Graine <sup>21</sup> acation: PI = Pare Lining M=Matrix
Histosol (A1)			
Histic Epipedon (A2)       Stripped Matrix (S6)       Red Parent Material (TF2)         Black Histic (A3)       Loamy Mucky Mineral (F1) (except MLRA 1)       Very Shallow Dark Surface (TF12)         Depleted Below Dark Surface (A11)       Depleted Matrix (F2)       Other (Explain in Remarks)         Depleted Below Dark Surface (A12)       Redox Dark Surface (F6) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if present):       Type:			
Black Histic (A3)       Loamy Mucky Mineral (F1) (except MLRA 1)       Very Shallow Dark Surface (TF12)         Hydrogen Sulfde (A4)       Loamy Gleyed Matrix (F2)       Other (Explain in Remarks)         Depleted Below Dark Surface (A12)       Depleted Matrix (F3)       **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Cleyed Matrix (S4)       Redox Depressions (F8)       wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if present):       Type:			
Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Other (Explain in Remarks)         Depleted Below Dark Surface (A1)       Depleted Matrix (F3)       *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Gleyed Matrix (S4)       Redox Depressions (F8)       unless disturbed or problematic.         Restrictive Layer (if present):       Type:			
Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       wetland hydrology must be present, unless disturbed or problematic         Restrictive Layer (if present):       Type:			
	Thick Dark Surface (A12)		
Restrictive Layer (If present):			
Type:		X Redox Depressions (F8)	unless disturbed or problematic
Depth (inches):       Hydric Soil Present?       Yes       No         Remarks:         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required: check all that apply)       Secondary Indicators (2 or more required)	Restrictive Layer (if present):		
Remarks:         AYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required: check all that apply)         Surface Water (A1)       Water-Stained Leaves (B9) (except       Water-Stained Leaves (B9) (MLRA 1, 2, 4, and 4B)         High Water Table (A2)       MLRA 1, 2, 4A, and 4B)       4A, and 4B)         Saturation (A3)			
AYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required: check all that apply)	Depth (inches):		Hydric Soil Present? Yes Y No
Primary Indicators (minimum of one required: check all that apply)       Secondary Indicators (2 or more required)	HYDROLOGY		
Surface Water (A1)   Water-Stained Leaves (B9) (except   High Water Table (A2)   Saturation (A3)   Saturation (A3)   Water Marks (B1)   Aquatic Invertebrates (B13)   Drift Deposits (B2)   Drift Deposits (B3)   Oxidized Rhizospheres along Living Roots (C3)   Kecent Iron Reduction in Tilled Soils (C6)   Surface Soil Cracks (B6)   Surface Soil Cracks (B6)   Inundation Visible on Aerial Imagery (B7)   Other (Explain in Remarks)   Field Observations:   Surface Water Present?   Yes   No   Depth (inches):   Depth (inches):   Depth (inches):   Depth (inches):			
High Water Table (A2)       MLRA 1, 2, 4A, and 4B)       4A, and 4B)         Saturation (A3)       Salt Crust (B11)       Drainage Patterns (B10)         Water Marks (B1)       Aquatic Invertebrates (B13)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Oxidized Rhizospheres along Living Roots (C3)       X Geomorphic Position (D2)         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)       Shallow Aquitard (D3)         Iron Deposits (B5)       Recent Iron Reduction in Tilled Soils (C6)       FAC-Neutral Test (D5)         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)       Raised Ant Mounds (D6) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       Frost-Heave Hummocks (D7)         Sparsely Vegetated Concave Surface (B8)       Depth (inches):       Depth (inches):       No         Field Observations:       Saturation Present?       Yes       No       Depth (inches):       No         Saturation Present?       Yes       No       Depth (inches):       Wetland Hydrology Present?       Yes       No			
Saturation (A3)			
Water Marks (B1)       Aquatic Invertebrates (B13)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Oxidized Rhizospheres along Living Roots (C3)       Geomorphic Position (D2)         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)       Shallow Aquitard (D3)         Iron Deposits (B5)       Recent Iron Reduction in Tilled Soils (C6)       FAC-Neutral Test (D5)         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)       Raised Ant Mounds (D6) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       Frost-Heave Hummocks (D7)         Sparsely Vegetated Concave Surface (B8)       Depth (inches):       Depth (inches):       No         Water Table Present?       Yes       No       Depth (inches):       No         Saturation Present?       Yes       No       Depth (inches):       No         Saturation Present?       Yes       No       Depth (inches):       No       No			
Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Oxidized Rhizospheres along Living Roots (C3)       Geomorphic Position (D2)         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)       Shallow Aquitard (D3)         Iron Deposits (B5)       Recent Iron Reduction in Tilled Soils (C6)       FAC-Neutral Test (D5)         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)       Raised Ant Mounds (D6) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       Frost-Heave Hummocks (D7)         Sparsely Vegetated Concave Surface (B8)       Depth (inches):       Depth (inches):       No         Water Table Present?       Yes       No       Depth (inches):       No       No         Saturation Present?       Yes       No       Depth (inches):       No       <			
<ul> <li>Drift Deposits (B3)</li> <li>Oxidized Rhizospheres along Living Roots (C3)</li> <li>Algal Mat or Crust (B4)</li> <li>Presence of Reduced Iron (C4)</li> <li>Shallow Aquitard (D3)</li> <li>Iron Deposits (B5)</li> <li>Recent Iron Reduction in Tilled Soils (C6)</li> <li>FAC-Neutral Test (D5)</li> <li>Stunted or Stressed Plants (D1) (LRR A)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Other (Explain in Remarks)</li> <li>Frost-Heave Hummocks (D7)</li> <li>Sparsely Vegetated Concave Surface (B8)</li> </ul> Field Observations:           Surface Water Present?         Yes         No         Depth (inches):         Depth (inches):         No           Saturation Present?         Yes         No         Depth (inches):         Wetland Hydrology Present? Yes         No			
Algal Mat or Crust (B4)   Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3)   Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) FAC-Neutral Test (D5)   Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)   Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7)   Sparsely Vegetated Concave Surface (B8) Depth (inches): Depth (inches):   Field Observations: Depth (inches): Depth (inches):   Saturation Present? Yes No Depth (inches):   Saturation Present? Yes No Depth (inches):			
Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) FAC-Neutral Test (D5) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Raised Vegetated Concave Surface (B8)          Field Observations:       No Depth (inches): No Depth (inches): Depth (inches): No			
Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Depth (inches): Depth (inches): Saturation Present? Yes No Depth (inches): Seturation Present? Yes No </td <td></td> <td></td> <td></td>			
Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)Frost-Heave Hummocks (D7)Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? YesNoDepth (inches): Water Table Present? YesNoDepth (inches): Saturation Present? YesNoDepth (inches): Wetland Hydrology Present? YesNo Indext of the present in the pr			
Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Wetland Hydrology Present? Yes No			
Field Observations:         Surface Water Present?       Yes No Depth (inches):         Water Table Present?       Yes No Depth (inches):         Saturation Present?       Yes No Depth (inches):         (includes capillary fringe)       Wetland Hydrology Present? Yes No			
Surface Water Present?       Yes No Depth (inches):         Water Table Present?       Yes No Depth (inches):         Saturation Present?       Yes No Depth (inches):         (includes capillary fringe)       Wetland Hydrology Present? Yes No			
Water Table Present?       Yes No Depth (inches):         Saturation Present?       Yes No Depth (inches):         (includes capillary fringe)       Wetland Hydrology Present? Yes No		No. A Donth (inchos):	
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No			1.1.1
(includes capillary fringe)			Wotland Hydrology Procent? Voc
Describe Described Date (stream neuron membrane until essiel shates, previous increations) if available	(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available	Describe Recorded Data (stream gaug	je, monitoring wen, aenai protos, previous inspect	ions), ii availadie
Descala	Description		
Remarks:	Remarks:		

## WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Humboldt Wind Energy Project Applicant/Owner: Humboldt Wind, LLC Investigator(s): <u>S. Creux</u> , J. Halsak Landform (hillslope, terrace, etc.): <u>Slape</u> Subregion (LRR): <u>A: Northwest Forests and Coast</u> Soil Map Unit Name: <u>10'. Labett</u> , <u>a-a'</u> . <u>Slape</u> Are climatic / hydrologic conditions on the site typical for this Are Vegetation <u>Y</u> , Soil <u>Y</u> , or Hydrology <u>Y</u> si Are Végetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> na SUMMARY OF FINDINGS – Attach site map s [Hydrophytic Vegetation Present? Yes <u>N</u>	Lat: 10 time of yea gnificantly aturally pro	Section, Township, Ra Local relief (concave, a )-(2)-153 b ar? Yes No disturbed? Are " blematic? (If ne	State: <u>CA</u> nge: <u>S5</u> , <u>t03N</u> , convex, none): <u>100</u> , Long: <u>124</u> , <u>203</u> NWI classific (If no, explain in Re Normal Circumstances" p peeded, explain any answer	Sampling Point: 3126 (Up POILO Slope (%): 3 Datum: ation: PEMIC emarks.) resent? Yes No rs in Remarks.)
Hydric Soil Present? Yes No	X	Is the Sampled within a Wetlar		No
Wetland Hydrology Present? Yes No	<u>x</u>	within a wetar	iu? tes	
Associated	WH	th WL	306	
VEGETATION – Use scientific names of plant	s.			
1	_	Dominant Indicator Species? Status	Dominance Test works Number of Dominant Sp That Are OBL, FACW, o Total Number of Domina	or FAC: (A)
3			Species Across All Strat	a: (B)
Sapling/Shrub Stratum (Plot size:)		= Total Cover	Percent of Dominant Sp That Are OBL, FACW, c	
1 1 2 3 4 5 Herb Stratum (Plot size: M radivs 1 4 5 1 1 1 Herb Stratum (Plot size:) 1	Were the total and the second	Total Cover V V V V V V V V V V V V V	FACU species UPL species Column Totals: <u>40</u> Prevalence Index Hydrophytic Vegetatio 	Multiply by: $x 1 = 3$ $x 2 = 4$ $x 3 = 18$ $x 3 = 166$ $x 3 = 106$ $x 4 = 444$ $x 5 = 106$ $(A) 165$ (B) $= B/A = 4.1$ In Indicators: ydrophytic Vegetation is >50% x is <3.0 <sup>1</sup> daptations <sup>1</sup> (Provide supporting or on a separate sheet) scular Plants <sup>1</sup> hytic Vegetation <sup>1</sup> (Explain) and wetland hydrology must
% Bare Ground in Herb Stratum 6		= Total Cover		No

.

#### SOIL

	cription: (Describe	to the dept				or commi	the abachice of	indicators.)
Depth (inches)	Color (moist)	%	Color (moist)	x Feature %	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
(inches)					<u> </u>		TEATORE	Kemerka
5-6	104641	100	~					
		-		-				
Type: C=C	oncentration, D=Dep	letion, RM=	Reduced Matrix, CS		d or Coate	d Sand Gr	ains²Locatio	on: PL=Pore Lining, M=Matrix.
	Indicators: (Applic							for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1) Sandy Redox (S5)				2 cm Muck (A10)				
Histic Epipedon (A2) Stripped Matrix (S6)				Red Parent Material (TF2)				
Black H	Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1)		Very Shallow Dark Surface (TF12)					
Hydrog	en Sulfide (A4)		Loamy Gleyed'			'	Other (	Explain in Remarks)
Deplete	d Below Dark Surfac	e (A11)	Depleted Matrix	(F3)				
Thick Dark Surface (A12)			Redox Dark Su	Redox Dark Surface (F6)			<sup>3</sup> Indicators	of hydrophytic vegetation and

\_ Redox Dark Surface (F6) \_\_\_\_ Depleted Dark Surface (F7) Redox Depressions (F8)

Type:

\_\_\_\_ Thick Dark Surface (A12) \_\_\_\_ Sandy Mucky Mineral (S1)

Restrictive Layer (if present):

Sandy Gleyed Matrix (S4)

Depth (inches): @ The laincher

layer, gravel/fill Remarks: restrictive

#### **HYDROLOGY**

Wetland Hydrology Indicat	ors:						
Primary Indicators (minimum of one required; check all that apply)					Secondary Indicators (2 or more required)		
Surface Water (A1)			Water-Stained Leaves (B9) (excep MLRA 1, 2, 4A, and 4B)	pt	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)		
Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)		<ul> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living Roots (C3)</li> <li>Presence of Reduced Iron (C4)</li> </ul>		<ul> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> </ul>			
		_ Recent Iron Reduction in Tilled Soils (C6) _ Stunted or Stressed Plants (D1) (LRR A) _ Other (Explain in Remarks)		Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)			
Field Observations:							
Surface Water Present? Water Table Present?			Depth (inches): Depth (inches):		X		
Saturation Present? (includes capillary fringe)			Depth (inches):	Wetland Hy	drology Present? Yes No		
Describe Recorded Data (str	eam gauge	, monitorir	ng well, aerial photos, previous inspect	tions), if availa	ble:		
Remarks:							

wetland hydrology must be present, unless disturbed or problematic.

Yes

No

Hydric Soil Present?

.

# Appendix C PHOTO LOG



Photo 1. Wetland (W-) 100



Photo 2. W-101



Photo 3. Sample Point (SP-) 101 upland (u)



Photo 4. SP-101 wetland (w)



Photo 5. W-102



Photo 6. W-103





Photo 7. W-104



Photo 8. W-105



Photo 9. W-106



Photo 10. SP-106w



Photo 11. W-107



Photo 12. SP-108u









Photo 14. SP-109w



Photo 15. W-110



Photo 16. W-111



Photo 17. W-112



Photo 18. W-113





Photo 19. SP-113w



Photo 20. W-115



Photo 21. W-116



Photo 22. W-118

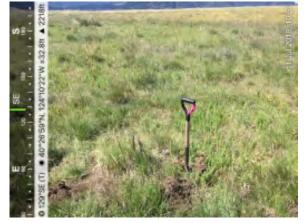


Photo 23. SP-118u



Photo 24. W-119





Photo 25. W-120



Photo 26. W-122



Photo 27. W-122



Photo 28. W-124

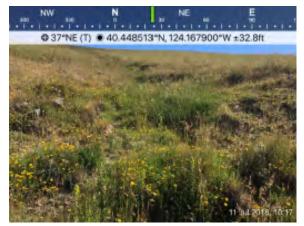


Photo 29. W-126



Photo 30. W-128







Photo 31. W-129

Photo 32. W-130



Photo 33. W-131



Photo 34. W-135



Photo 35. W-136



Photo 36. W-138



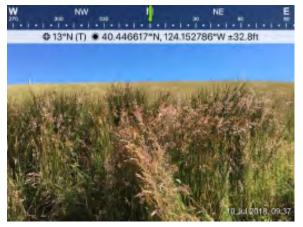




Photo 37. W-139

Photo 38. SP-139u



Photo 39. SP-139w



Photo 40. W-140



Photo 41. SP-140u



Photo 42. SP-140w



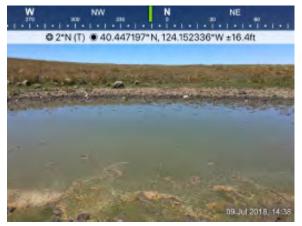




Photo 43. W-141

Photo 44. W-143, SP-143w



Photo 45. W-144



Photo 46. W-145



Photo 47. W-152



Photo 48. W-154





Photo 49. W-155



Photo 50. W-156



Photo 51. W-158



Photo 52. W-158



Photo 53. SP-158u



Photo 54. W-159







Photo 55. SP-159u

Photo 56. SP-159w



Photo 57. W-160



Photo 58. W-161



Photo 59. SP-161w



Photo 60. W-163









Photo 62. SP-165u



Photo 63. SP-165w



Photo 64. SP-170u



Photo 65. SP-170w



Photo 66. W-173





Photo 67. SP-174u



Photo 68. W-180, W-181, W-182



Photo 69. W-183



Photo 70. SP-183u



Photo 71. SP-183w



Photo 72. W-185







Photo 73. SP-185w

Photo 74. W-186



Photo 75. W-193



Photo 76. SP-193u



Photo 77. SP-193w



Photo 78. W-195





Photo 79. W-198



Photo 80. W-200



Photo 81. SP-200w



Photo 82. W-202



Photo 83. W-210



Photo 84. W-211





Photo 85. SP-211w



Photo 86. W-213



Photo 87. W-215



Photo 88. W-217



Photo 89. W-218



Photo 90. W-219





Photo 91. W-221



Photo 92. W-222



Photo 93. W-223

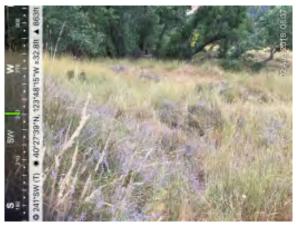


Photo 94. W-224



Photo 95. W-225



Photo 96. W-226





Photo 97. W-228c



Photo 98. W-229



Photo 99. SP-229w



Photo 100. W-231



Photo 101. W-232



Photo 102. W-235





Photo 103. W-236



Photo 104. W-238a



Photo 105. W-238b



Photo 106. W-239



Photo 107. SP-239u



Photo 108. SP-242w



Appendix C Photo Log



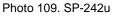




Photo 110. W-243



Photo 111. W-244

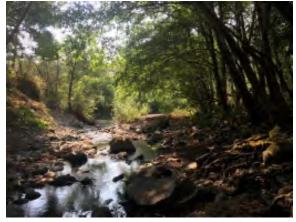


Photo 112. W-252



Photo 113. W-253



Photo 114. W-302







Photo 115. W-306

Photo 116. W-<u>311</u>



Appendix C Photo Log



Photo 117. Drainage (D-) 114



Photo 118. D-123



Photo 119. D-127



Photo 120. D-132



Photo 121. D-134



Photo 122. D-142





Photo 123. D-149



Photo 124. D-150



Photo 125. D-151



Photo 126. D-153a



Photo 127. D-157



Photo 128. D-162



Appendix C Photo Log



Photo 129. D-167a



Photo 130. D-167b



Photo 131. D-168a



Photo 132. D-168b



Photo 133. D-171b



Photo 134. D-171c





Photo 135. D-172



Photo 136. D-176



Photo 137. D-179a



Photo 138. D-179c



Photo 139. D-184



Photo 140. D-187a



Appendix C Photo Log



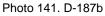




Photo 142. D-187e



Photo 143. D-188



Photo 144. D-189



Photo 145. D-194



Photo 146. D-197





Photo 147. D-207a



Photo 148. D-207b



Photo 149. D-207c



Photo 150. D-208d

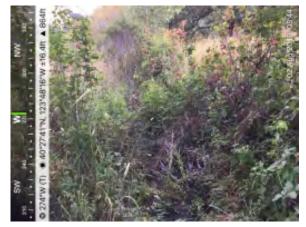


Photo 151. D-208e



Photo 152. D-209



Appendix C Photo Log



Photo 153. D-212



Photo 154. D-214



Photo 155. D-216



Photo 156. D-227a



Photo 157. D-227b



Photo 158. D-228b





Photo 159. D-233



Photo 160. D-236



Photo 161. D-237



Photo 162. D-238a



Photo 163. D-238b



Photo 164. D-238c



Appendix C Photo Log



Photo 165. D-238d



Photo 166. D-238e



Photo 167. D-240



Photo 168. D-241



Photo 169. D-245



Photo 170. D-246





Photo 171. D-247



Photo 172. D-250



Photo 173. D-251



Photo 174. D-254



# Appendix D AQUATIC RESOURCE SURVEY RESULTS

# Table D-2. Wetlands and Open Water

Feature ID	Vegetation Community	Cowardin Classification <sup>1</sup>	USACE/ RWQCB Area (acres)	CDFW Area (acres)	CCC Area (acres)	Feature Description
^100	soft rush ( <i>Juncus effusus</i> ) marsh	PEM	0.3467			Spring-fed wetland; used as a source for livestock water trough. Likely shares a subsurface connection to a tributary to the southeast that drains to Bear River.
^101	common velvet grass ( <i>Holcus lanatus</i> ) meadow	PEM	0.2105			Seasonal wetland; likely headwaters of a drainage to the south that drains to Bear River.
102	soft rush marsh	PEM	0.0564			Seasonal wetland; likely shares a subsurface connection with wetland-(W-)103.
103	soft rush marsh	PEM	0.3824			Seasonal wetland; likely drains to the northeast to a tributary to Howe Creek that then drains to the Eel River.
104	soft rush marsh	PEM	0.1600			Spring-fed wetland; likely shares a subsurface connection to a drainage to the south that drains to Bear River.
105	soft rush marsh	PEM	0.0037			Seasonal wetland; likely shares a subsurface connection W-105.
^106	perennial rye grass ( <i>Festuca perennis</i> [ <i>Lolium</i> <i>perenne</i> ]) field	PEM	0.0053			Seasonal wetland; likely shares a subsurface connection to a drainage to the southwest that drains to Bear River.
107	soft rush marsh	PEM	0.0128			Spring-fed wetland; drains to the southwest to a tributary to Bear River.
^109	*toad rush ( <i>Juncus bufonius</i> ) marsh	PEM	0.0809			Seasonal wetland; likely shares a subsurface connection to W-107.
110	*slender juncus ( <i>Juncus occidentalis</i> ) marsh	PEM	0.2628			Spring-fed wetland; likely drains to the north to Howe Creek, a tributary to the Eel River.
111	*slender juncus marsh	PEM	0.0801			Seasonal wetland; likely drains to WL-110 via sheet flow north across Bear River Ridge Road.
112	*Bolander's rush ( <i>Juncus bolanderi</i> ) marsh	PEM	0.1514			Roadside swale; drains north across Bear River Ridge Road via culvert drainage-(D-)114 and connects to W- 113.

Feature ID	Vegetation Community	Cowardin Classification <sup>1</sup>	USACE/ RWQCB Area (acres)	CDFW Area (acres)	CCC Area (acres)	Feature Description
^113	*pennyroyal ( <i>Mentha pulegium</i> ) marsh	PEM	0.2817			Seasonal swale; fed by W-112 and drains to the north to a tributary that connects downstream to a tributary of Howe Creek, which empties into the Eel River.
115	soft rush marsh	PEM	0.0450			Seasonal swale; drains to the southeast to a tributary to Bear River.
116	*pennyroyal marsh	PEM	0.2776			Seasonal wetland; likely shares a sub-surface connection to W-118 and W-117.
117	*pennyroyal marsh	PEM	0.0225			Seasonal wetland; fed by W-116 and drains to the north. Likely drains to a tributary that empties into another tributary to Howe Creek, which empties into the Eel River.
^118	*pennyroyal marsh	PEM	0.2037			Seasonal wetland; likely shares a sub-surface connection to W-116.
119	soft rush marsh	PEM	0.0036			Spring-fed wetland; used as a water source for ranching activities. Likely drains to a tributary that empties into another tributary to Howe Creek, which empties into the Eel River.
120	Kentucky blue grass ( <i>Poa pratensis</i> ) turf	PEM	0.0356			Seasonal swale; drains south across Bear River Ridge Road to W-122 via culvert D-121. Likely headwaters to a drainage that flows into a tributary that connects downstream to Bear River.
122	Kentucky blue grass turf	PEM	0.0564			Seasonal swale; fed by W-120. Likely connects to a drainage that flows into a tributary that connects downstream to Bear River.
124	*Bolander's rush marsh	PEM	0.0399			Roadside swale; drains south across Bear River Ridge Road via culvert D-125 and connects to W-126.
^126	western rush ( <i>Juncus patens)</i> marsh	PEM	0.0976			Seasonal swale; drains to the south D-127, which likely connects to a drainage that flows into a tributary that connects downstream to Bear River.
128	*slender juncus marsh	PEM	0.1713			Seasonal swale; likely connects to a tributary to the south that empties into Bear River.

Feature ID	Vegetation Community	Cowardin Classification <sup>1</sup>	USACE/ RWQCB Area (acres)	CDFW Area (acres)	CCC Area (acres)	Feature Description
129	*pennyroyal marsh	PEM	0.0965			Seasonal swale; likely shares a sub-surface connection with W-130.
130	soft rush marsh	PEM	0.0696			Seasonal swale; drains to the northeast; headwaters of Atwell Creek, a tributary to the Eel River.
^131	* foxtail ( <i>Alopecurus</i> saccatus) meadow	PEM	0.0136			Seasonal swale; likely connects to a tributary to the south that empties into Bear River.
135	soft rush marsh	PEM	0.5581		-	Seasonal wetland; drains to the northeast into a tributary to Atwell Creek, a tributary to the Eel River.
136	soft rush marsh	PEM	0.5850			Spring-fed swale; drains to the south east, where it abuts W-137.
137	common velvet grass meadow	PEM	0.2101			Spring-fed swale; drains to the southeast to a tributary that connects downstream to a tributary that empties into another drainage that flows to the Eel River.
138	*low bulrush ( <i>Isolepis</i> <i>cernua</i> ) marsh	PEM	0.0521			Seasonal wetland; likely shares a sub-surface connection to W-139 and W-137.
^139	soft rush marsh	PEM	0.0143			Seasonal wetland; likely shares a sub-surface connection to W-138 and W-140.
^140	*pennyroyal marsh	PEM	0.5316			Seasonal wetland; wetland fringe associated with W-141.
141	open water		0.1384			Stock pond; carrying ponded water at the time of the field surveys.
143	*pennyroyal marsh	PEM	0.0038			Seasonal swale; associated with D-142.
144	soft rush marsh	PEM	0.1065			Seasonal wetland; drains to the south and likely connects to a tributary that flows into a drainage that empties into Bear River.
145	*pennyroyal marsh	PEM	0.1311			Seasonal wetland; likely shares a subsurface connection to W-144.
152	*pennyroyal marsh	PEM	0.0128			Seasonal wetland; drains to the south and likely connects to Brushy Creek, a tributary to Bear River.
154	perennial rye grass field	PEM	0.0293			Seasonal wetland; drains to the south and likely shares a subsurface connection to D-153a.

Feature ID	Vegetation Community	Cowardin Classification <sup>1</sup>	USACE/ RWQCB Area (acres)	CDFW Area (acres)	CCC Area (acres)	Feature Description
155	*pennyroyal marsh	PEM	0.0134			Seasonal swale; likely shares a sub-surface connection to D-157.
156	soft rush marsh	PEM	0.2197			Spring-fed swale; drains to the southwest into D-157.
^158	*pennyroyal marsh	PEM	0.2388			Spring-fed wetland; drains to the south to a tributary to Brushy Creek, a tributary to Bear River.
^159	soft rush marsh	PEM	0.0228			Seasonal wetland; confined to a depression on a hillslope, heavily trampled by livestock.
160	soft rush marsh	PEM	0.0540			Spring-fed wetland; modified to accommodate a water trough for livestock, heavily trampled. Likely shares a sub-surface connection to the headwaters of Pullen Creek, which drains into Bear River.
^161	*watercress ( <i>Nasturtium</i> officinale) seep	PEM	0.0066			Spring-fed wetland; fed by a hillside seep across the access road, connected via culvert.
163	*Bolander's sedge ( <i>Carex bolanderi</i> ) seep	PEM	0.0481			Spring-fed swale, sourced upslope and pools on the road. Likely shares a sub-surface connection with Twin Creek, a tributary to the Eel River.
164	soft rush marsh	PEM	0.0072			Spring-fed swale, sourced upslope and pools on the road. Likely shares a sub-surface connection with Twin Creek, a tributary to the Eel River.
169	soft rush marsh	PEM	0.0009			Spring-fed wetland, sourced upslope and pools across and on either side of the road.
^170	soft rush marsh	PEM	0.0015			Spring-fed wetland, sourced upslope and pools across and on either side of the road.
173	red alder <i>(Alnus rubra</i> ) forest	PFO	0.6898	0.6898		Forested riparian wetland; associated with Greenlow Creek, a tributary to the Eel River.
^174	*giant horsetail ( <i>Equisetum telmateia ssp.</i> <i>braunii</i> ) marsh	PEM	0.4927			Seasonal wetland; water sourced from runoff and pools at the toe of a slope, likely due to grading and filling.
^180	Sitka willow (Salix sitchensis)	PFO	0.3534	0.3534		Forested wetland; water sourced from D-179. Location has been heavily altered, with access roads and work
181	Sitka willow thicket	PFO	0.4975	0.4975		areas cut and graded.

Feature ID	Vegetation Community	Cowardin Classification <sup>1</sup>	USACE/ RWQCB Area (acres)	CDFW Area (acres)	CCC Area (acres)	Feature Description
182	Sitka willow thicket	PFO	0.1151	0.1151		
^183	*pennyroyal marsh	PEM	0.0074			Seasonal wetland; roadside and likely fed by runoff.
^185	western rush marsh	PEM	0.0463			Seasonal wetland; located in a depression on a hillslope.
186	western rush marsh	PEM	0.0372			Seasonal wetland; located in abandoned roadcut, fed by runoff.
190	red alder forest	PFO	0.6893	0.6893		Forested in stick wetlend, associated with the Fol Diver
192	red alder forest	PFO	0.7020	0.7020		Forested riparian wetland; associated with the Eel River.
^193	*slender juncus marsh	PEM	0.0054			Seasonal wetland; located in abandoned roadcut, fed by runoff and flow restricted by a water bar.
195	Sitka willow thicket	PSS	0.4730	0.4730		Scrub-shrub riparian wetland; associated with Stitz Creek.
^198	*tall cyperus ( <i>Cyperus eragrostis</i> ) seep	PEM	0.0038			Spring-fed swale; adjacent to roadcut.
^200	coastal dune willow (Salix hookeriana) thicket	PSS	0.0085	0.0085		Scrub-shrub riparian wetland.
^202	soft rush marsh	PEM	0.0212			Seasonal wetland; adjacent to roadcut.
210	*pennyroyal marsh	PEM	0.0018			Seasonal swale; fed by W-218 and drains to D-209, which eventually connects to Hoagland Creek, a tributary to the Van Duzen River.
^211	* foxtail meadow	PEM	0.0541			Seasonal swale; fed by D-209, D-212, and D-214 and drains to D-208, which eventually connects to Hoagland Creek, a tributary to the Van Duzen River.
213	*field sedge ( <i>Carex</i> praegracilis) meadow	PEM	0.0116			Seasonal wetland; fed by D-212, eventually drains to D-208, which connects to Hoagland Creek, a tributary to the Van Duzen River.
215	*pennyroyal marsh	PEM	0.0240			Seasonal swale; fed by D-216 and drains to D-208, which eventually connects to Hoagland Creek, a tributary to the Van Duzen River.

Feature ID	Vegetation Community	Cowardin Classification <sup>1</sup>	USACE/ RWQCB Area (acres)	CDFW Area (acres)	CCC Area (acres)	Feature Description
217	*pennyroyal marsh	PEM	0.0068			Seasonal swale; fed by W-218 and drains to D-216, which eventually connects to Hoagland Creek, a tributary to the Van Duzen River.
218	*pennyroyal marsh	PEM	0.0033			Seasonal wetland; drains to W-217, which eventually connects to Hoagland Creek, a tributary to the Van Duzen River.
219	*pennyroyal marsh	PEM	0.0046			Seasonal swale; drains to D-212, which eventually connects to Hoagland Creek, a tributary to the Van Duzen River.
221	*pennyroyal marsh	PEM	0.0048			Seasonal swale; drains to W-219, which eventually connects to Hoagland Creek, a tributary to the Van Duzen River.
222	*pennyroyal marsh	PEM	0.0013			Seasonal swale; drains to W-221, which eventually connects to Hoagland Creek, a tributary to the Van Duzen River.
223	*pennyroyal marsh	PEM	0.0068			Seasonal wetland; fed by W-224; likely shares a subsurface connection to downslope seasonal wetlands.
^224	*pennyroyal marsh	PEM	0.0126			Seasonal swale; drains to W-223.
225	*pennyroyal marsh	PEM	0.0328			Seasonal wetland; likely shares a sub-surface connection to WL-222.
226	*pennyroyal marsh	PEM	0.0209			Seasonal wetland; likely shares a sub-surface connection to WL-225.
^229	*western lady fern ( <i>Athyrium filix-femina</i> var. <i>cyclosorum</i> ) seep	PEM	0.0309			Spring-fed wetland; drains to D-228, which likely drains to Hoagland Creek, a tributary to the Van Duzen River.
230	*tall cyperus seep	PEM	0.0044			Seasonal swale; drains to W-231, which likely drains to Hoagland Creek, a tributary to the Van Duzen River.
231	*tall cyperus seep	PEM	0.0239			Seasonal wetland; likely drains to Hoagland Creek, a tributary to the Van Duzen River.
232	hairgrass ( <i>Deschampsia</i> <i>elongata</i> ) meadow	PEM	0.0038			Seasonal wetland; likely shares a subsurface connection to D-233, which drains to Hoagland Creek, a tributary to the Van Duzen River.

Feature ID	Vegetation Community	Cowardin Classification <sup>1</sup>	USACE/ RWQCB Area (acres)	CDFW Area (acres)	CCC Area (acres)	Feature Description	
235	*pennyroyal marsh	PEM	0.0093			Seasonal swale; drains to D-234, which likely drains to Hoagland Creek, a tributary to the Van Duzen River.	
236	*pennyroyal marsh	PEM	0.0054			Seasonal swale; drains to D-234, which likely drains to Hoagland Creek, a tributary to the Van Duzen River.	
239	soft rush marsh	PEM	0.1153			Seasonal wetland; fed by an upstream seep (W-242) and drains to D-238, which eventually drains to Hoagland Creek, a tributary to the Van Duzen River.	
^242	*tall cyperus seep	PEM	0.0998			Spring-fed wetland; drains to W-239 and eventually connects to Hoagland Creek, a tributary to the Van Duzen River.	
243	*pennyroyal marsh	PEM	0.0177			Seasonal wetland; likely connected to D-247, which drains into Hoagland Creek, a tributary to the Eel River.	
^244	*pennyroyal marsh	PEM	0.0323			Seasonal wetland; likely connected to D-247, which drains into Hoagland Creek, a tributary to the Eel River.	
158a	*pennyroyal marsh	PEM	0.0220			Wetland swale; likely connected to the south to a tributary to Brushy Creek, a tributary to Bear River.	
228c	common velvet grass meadow	PEM	0.0078			Vegetated ditch; fed by D-228 and likely drains to Hoagland Creek, a tributary to the Van Duzen River.	
248a	western rush marsh	PEM	0.0220			Seasonal wetland; fed by W-248b via culvert.	
248b	western rush marsh	PEM	0.0184			Seasonal wetland; connected to W-248b via culvert.	
252a	red alder forest	PFO	1.5433	1.5433		Forested riparian wetland; associated with Little Larabee	
252b	red alder forest	PFO	0.3321	0.3321		Creek.	
253a	black cottonwood forest	PFO	0.1402	0.1402		Forested riparian wetland; associated with the Van	
253b	black cottonwood forest	PFO	1.3708	1.3708		Duzen River.	
302	arroyo willow ( <i>Salix lasiolepis</i> ) thickets	PSS	0.1962	0.1962	0.1962	Forested riparian wetland; associated with an unnamed ditch located outside the survey area.	
^306	arroyo willow thickets	PSS	0.1181	0.1181	0.1181	Forested riparian wetland; associated with an unnamed ditch (D-305) in a median bounded by Highway 101 and a frontage road.	

Feature ID	Vegetation Community	Cowardin Classification <sup>1</sup>	USACE/ RWQCB Area (acres)	CDFW Area (acres)	CCC Area (acres)	Feature Description
311	*pennyroyal marsh	PEM	0.1820		0.1181	Seasonal swale connected to D-305 to the south and D- 310 to the north; located in a median bounded by Highway 101 and a frontage road.
Total			14.7774	7.2293	0.4963	

<sup>1</sup> PEM = palustrine emergent, PSS = palustrine scrub-shrub, PFO = palustrine forested. Codes based on Cowardin, L. M., V. Carter, F. C. Golet, and E. T. LaRoe. 1979.

Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service Report No. FWS/OBS/-79/31.Washington, D.C.

^ sample upland and wetland points were established for this feature.

Appendix D Aquatic Resource Survey Results

## Table D-1. Drainages

Feature	Hydrological		USACE	E/RWQCB			CE	DFW		Feature
ID	Regime	Average OHWM Width (feet)	Average OHWM Depth (feet)	Area (acres)	Linear Feet	Average TOB Width (feet)	Average TOB Depth (feet)	Area (acres)	Linear Feet	Description
114	ephemeral/ culvert	1.00	1.00	0.0004	17.05	1.00	1.00	0.0004	17.05	Culvert under Bear River Ridge Road that connects wetland-(W-)112 and W-113.
121	ephemeral/ culvert	1.50	1.50	0.0015	44.13	1.50	1.50	0.0015	44.13	Culvert under Bear River Ridge Road that connects W-120 and W-122.
123	ephemeral	2.00	1.00	0.0076	164.76	3.00	1.50	0.0113	164.76	Unnamed tributary to an unnamed tributary that is a tributary to Bear River.
125	ephemeral/ culvert	1.50	1.50	0.0010	30.08	1.50	1.50	0.0010	30.08	Culvert under Bear River Ridge Road that connects W-124 to W-126.
127	ephemeral	1.00	0.50	0.0048	207.33	1.00	0.50	0.0048	207.33	Unnamed tributary fed by W-126 and W-124. Connects to an unnamed tributary that empties into Bear River.
132	ephemeral/ ditch	1.00	0.50	0.0033	143.64	1.00	0.50	0.0033	143.64	Roadside ditch that conveys water from drainage- (D-)134; likely shares a sub- surface connection to W-131.

Feature	Hydrological		USACE	E/RWQCB			C	DFW		Feature
ID	Regime	Average OHWM Width (feet)	Average OHWM Depth (feet)	Area (acres)	Linear Feet	Average TOB Width (feet)	Average TOB Depth (feet)	Area (acres)	Linear Feet	Description
133	ephemeral/ culvert	2.00	2.00	0.0018	40.21	2.00	2.00	0.0018	40.21	Culvert under Bear River Ridge Road that connects D-132 to D-134.
134	ephemeral/ ditch	1.00	0.50	0.0025	108.48	1.00	0.50	0.0025	108.48	Roadside ditch; likely fed by W-135 via subsurface connection and conveys water to D-132.
142	ephemeral/ ditch	3.00	0.33	0.0079	115.27	5.00	2.00	0.0132	115.27	Roadside ditch that conveys water to W-140 and W- 141.
147	intermittent	2.00	0.50	0.0021	44.85	2.00	0.50	0.0021	44.85	Unnamed tributary to drainage that empties into Bear River.
148	intermittent	2.00	0.50	0.0032	70.21	2.00	0.50	0.0032	70.21	Headwaters of Monument Creek, which is a tributary to the Eel River
149	ephemeral	3.00	0.60	0.0212	307.95	3.00	0.60	0.0212	307.95	Spring-sourced unnamed tributary to a drainage that empties into Bear River.
150	ephemeral	2.00	0.50	0.0062	135.45	2.00	0.50	0.0062	135.45	Unnamed tributary to an unnamed drainage that empties into Bear River.

Feature	Hydrological		USACE	E/RWQCB			C	DFW		Feature
ID	Regime	Average OHWM Width (feet)	Average OHWM Depth (feet)	Area (acres)	Linear Feet	Average TOB Width (feet)	Average TOB Depth (feet)	Area (acres)	Linear Feet	Description
151	perennial/ ditch	2.00	0.67	0.0106	230.25	2.00	0.67	0.0106	230.25	Roadside ditch; likely spring-fed and a tributary to Brushy Creek, which is a tributary to Bear River. Carrying water at time of survey.
153a	perennial	6.00	2.00	0.0155	112.46	6.00	2.00	0.0155	112.46	Spring-fed unnamed drainage segment connected downstream to segment D-153b. Standing water present at time of field survey.
153b	perennial	7.00	2.00	0.0312	194.27	7.00	1.00	0.0312	194.27	Spring-fed unnamed tributary to Brushy Creek, which empties into Bear River. Standing water present at time of field survey.
157	perennial	4.00	1.00	0.0091	98.68	5.00	3.00	0.0113	98.68	Spring-fed unnamed tributary (W-156) to Brushy Creek, which empties into Bear River. Carrying water at time of survey.
162	perennial/ culvert	2.00	2.00	0.0010	21.68	2.00	2.00	0.0010	21.68	Culvert under access road; fed

Feature	Hydrological		USACE	E/RWQCB			C	DFW		Feature
ID	Regime	Average OHWM Width (feet)	Average OHWM Depth (feet)	Area (acres)	Linear Feet	Average TOB Width (feet)	Average TOB Depth (feet)	Area (acres)	Linear Feet	Description
										by W-161. Likely a tributary to Jordan Creek, which empties into the Eel River.
167a	perennial	3.00	0.17	0.0340	493.30	3.00	0.50	0.0340	493.30	Upper segment of an unnamed tributary to Jordan Creek, which empties into the Eel River.
167b	perennial	1.50	1.50	0.0013	37.78	1.50	1.50	0.0013	37.78	Culverted segment of an unnamed tributary to Jordan Creek, which empties into the Eel River.
167c	perennial	3.00	0.17	0.0278	403.31	3.00	0.50	0.0278	403.31	Lower segment of an unnamed tributary to Jordan Creek, which empties into the Eel River.
168a	intermittent	1.00	0.33	0.0005	23.03	2.00	0.83	0.0011	23.03	Unnamed tributary; likely connects to drainage that empties into Bear River.
168b	intermittent/ culvert	2.00	2.00	0.0010	21.93	2.00	2.00	0.0010	21.93	Culvert under access road; connected to D-168a.

Feature	Hydrological		USACE			C		Feature		
ID	Regime	Average OHWM Width (feet)	Average OHWM Depth (feet)	Area (acres)	Linear Feet	Average TOB Width (feet)	Average TOB Depth (feet)	Area (acres)	Linear Feet	Description
171b	intermittent/ culvert	3.00	3.00	0.0057	82.88	3.00	3.00	0.0057	82.88	Culverted segment of an unnamed tributary to Greenlow Creek, which empties into the Eel River.
171c	intermittent	3.00	0.50	0.0318	461.06	5.00	2.00	0.0529	461.06	Upper segment of an unnamed tributary to Greenlow Creek, which empties into the Eel River.
172	perennial	8.00	1.00	0.0639	347.8498	35.00	8.00	0.2795	347.8498	Segment of Greenlow Creek, tributary to the Eel River. Associated with riparian wetland W-173.
176	ephemeral	1.00	0.25	0.0041	179.66	2.00	1.00	0.0082	179.66	Unnamed ephemeral drainage; likely shares a sub- surface connection to W-175 and W-174.
179a	ephemeral	2.00	0.50	0.0045	97.09	2.00	1.00	0.0045	97.09	Lower segment of an unnamed drainage that terminates in sheet flow; likely connects to W-180.
179b	ephemeral/ culvert	2.00	2.00	0.0006	12.11	2.00	2.00	0.0006	12.11	Culverted segment of an unnamed drainage that

Feature	Hydrological		USACE	E/RWQCB			C	DFW		Feature	
ID	Regime	Average OHWM Width (feet)	Average OHWM Depth (feet)	Area (acres)	Linear Feet	Average TOB Width (feet)	Average TOB Depth (feet)	Area (acres)	Linear Feet	Description	
										terminates in sheet flow; likely connects to W-180.	
179c	ephemeral	1.50	2.00	0.0210	610.74	3.00	3.00	0.0421	610.74	Upper segment of an unnamed drainage that terminates in sheet flow; likely connects to W-180.	
184	ephemeral	2.00	1.00	0.0049	107.12	6.00	3.00	0.0148	107.12	Unnamed tributary to the Eel River.	
187a	ephemeral/ ditch	2.00	0.50	0.0095	207.73	5.00	2.00	0.0238	207.73	Roadside ditch connected to D-187e; likely connects to the Eel River.	
187b	ephemeral/ culvert	2.00	2.00	0.0023	50.71	2.00	2.00	0.0023	50.71	Culverted segment of an unnamed tributary to the Eel River.	
187e	ephemeral	1.00	0.50	0.0014	61.66	4.00	1.00	0.0057	61.66	Lower segment of an unnamed tributary to the Eel River.	
188	ephemeral	1.00	0.67	0.0030	128.73	2.00	1.50	0.0059	128.73	Unnamed tributary to the Eel River. Most likely fed by roadside runoff.	
189	ephemeral	6.00	2.00	0.0245	177.62	10.00	5.00	0.0408	177.62	Unnamed tributary to the Eel River. Most likely fed by roadside runoff.	

Feature	Hydrological		USACE			C		Feature		
ID	Regime	Average OHWM Width (feet)	Average OHWM Depth (feet)	Area (acres)	Linear Feet	Average TOB Width (feet)	Average TOB Depth (feet)	Area (acres)	Linear Feet	Description
191 (Eel River)	perennial	N/A	N/A	0.0022	200.00	N/A	N/A	1.2120	200.00	Segment of the Eel River, which flows to the northwest and terminates in the Pacific Ocean. Associated with riparian wetlands W-190 and W-192
194 (Stitz Creek)	perennial	12.00	2.00	0.0556	201.90	30.00	8.00	0.1391	201.90	Segment of Stitz Creek, a tributary to the Eel River. Associated with riparian wetland W-195.
196	ephemeral/ culvert	1.50	1.50	0.0012	35.72	1.50	1.50	0.0012	35.72	Culvert fed by roadside ditch D-197. No indicator of OHWM downstream of the culvert. However, a subsurface connection likely exists with the unnamed intermittent tributary (to the Eel River) located 450 ft downslope.
197	ephemeral/ ditch	1.00	0.40	0.0022	96.84	1.50	0.70	0.0033	96.84	Roadside ditch connected to D- 196.
201	intermittent	2.00	2.00	0.0011	24.30	2.00	2.00	0.0011	24.30	Culvert under Shiveley Ridge Road. Likely

Feature	Hydrological		USACE	E/RWQCB			C	DFW		Feature
ID	Regime	Average OHWM Width (feet)	Average OHWM Depth (feet)	Area (acres)	Linear Feet	Average TOB Width (feet)	Average TOB Depth (feet)	Area (acres)	Linear Feet	Description
										connects to the headwaters of Shively Creek, a tributary to the Eel River
203	intermittent	5.00	1.00	0.0878	765.30	8.00	3.00	0.1406	765.30	Unnamed tributary to Fish Creek, which empties into the Van Duzen River, a tributary to the Eel River.
204 (Fish Creek)	perennial	12.00	2.00	0.0689	250.08	30.00	8.00	0.1722	250.08	Segment of Fish Creek, a tributary to the Van Duzen River.
205	intermittent	5.00	1.00	0.0235	204.76	8.00	3.00	0.0376	204.76	Unnamed tributary to the Van Duzen River.
206 (Hoagland Creek)	perennial	12.00	2.00	0.0582	211.23	30.00	8.00	0.1455	211.23	Segment of Hoagland Creek, a tributary to the Van Duzen River.
207a	ephemeral	1.50	0.50	0.0043	124.49	2.50	1.00	0.0071	124.49	Upper segment of an unnamed ephemeral drainage that connects to D-207b; likely connects to Hoagland Creek, a tributary to the Van Duzen River.
207b	ephemeral/ culvert	1.50	1.50	0.0030	87.44	1.50	1.50	0.0030	87.44	Culvert fed by roadside ditch

Feature	Hydrological		USACE	E/RWQCB			CD	DFW		Feature
ID	Regime	Average OHWM Width (feet)	Average OHWM Depth (feet)	Area (acres)	Linear Feet	Average TOB Width (feet)	Average TOB Depth (feet)	Area (acres)	Linear Feet	Description
										D <sup>-</sup> 207c and D-207a; likely connects to Hoagland Creek, a tributary to the Van Duzen River.
207c	ephemeral/ ditch	1.00	0.17	0.0037	162.37	1.00	0.25	0.0037	162.37	Roadside ditch that connects to D-207b; likely connects to Hoagland Creek, a tributary to the Van Duzen River.

			USACE	E/RWQCB			CE			
Feature ID	Hydrological Regime	Average OHWM Width (feet)	Average OHWM Depth (feet)	Area (acres)	Linear Feet	Average TOB Width (feet)	Average TOB Depth (feet)	Area (acres)	Linear Feet	Feature Description
208a	ephemeral/ culvert	2.50	2.50	0.0030	52.79	2.50	2.50	0.0030	52.79	Drainage system D-208 is fed by
208c	intermittent	4.00	0.25	0.0066	71.59	10.00	1.00	0.0164	71.59	upland runoff and W-211 and W-215. D-208e and D-208d are
208d	intermittent	6.00	0.25	0.0119	86.65	6.00	1.00	0.0119	86.65	
208e	intermittent	2.00	0.50	0.0052	112.47	3.00	1.50	0.0077	112.47	connected stream segments and likely share a subsurface connection downstream to D-208c and D-208b. All drainage segments connect downstream to culvert D-208a (under Alderpoint Road), which likely connects to Hoagland Creek, a tributary to the Van Duzen River.
209	ephemeral	1.00	0.33	0.0030	129.45	1.00	1.00	0.0030	129.45	Unnamed ephemeral drainage fed by W-210, W-218, and W-211. Connects to drainage system D-208.

			USACE	E/RWQCB			CE			
Feature ID	Hydrological Regime	Average OHWM Width (feet)	Average OHWM Depth (feet)	Area (acres)	Linear Feet	Average TOB Width (feet)	Average TOB Depth (feet)	Area (acres)	Linear Feet	Feature Description
212	intermittent	2.00	0.50	0.0048	103.59	2.00	1.00	0.0048	103.59	Unnamed intermittent drainage fed by upland runoff and tributary to W-213 and W-211.
214	ephemeral/ ditch	1.00	0.17	0.0087	380.01	1.00	0.25	0.0087	380.01	Roadside ditch fed by W-211; likely connects to Hoagland Creek.
216	ephemeral	1.50	0.25	0.0019	56.57	2.00	0.33	0.0026	56.57	Ephemeral drainage connecting W-215 and W-217.
227a	intermittent	2.00	0.33	0.0033	70.80	2.00	0.50	0.0033	70.80	Drainage system
227b	intermittent	5.00	1.00	0.0142	123.41	5.00	3.00	0.0142	123.41	D-227 is fed by upland runoff and
227c	intermittent	1.50	0.50	0.0003	9.53	1.50	1.50	0.0003	9.53	originates with
227d	intermittent	6.00	0.33	0.0084	60.86	6.00	1.00	0.0084	60.86	segments D-227a, D-227b, and
227e	ephemeral/ ditch	2.00	0.17	0.0066	143.83	2.00	0.50	0.0066	143.83	D-227c, which flow into segment
227f	intermittent/ culvert	2.50	2.50	0.0028	49.39	2.50	2.50	0.0028	49.39	D-227d. D-227d connects to segment D-227f, a culvert under Alderpoint Road that likely connects to Hoagland Creek, a tributary to Van Duzen River. D-227e is a roadside ditch that terminates in segment D-227f.

			USACE	E/RWQCB			C	FW		
Feature ID	Hydrological Regime	Average OHWM Width (feet)	Average OHWM Depth (feet)	Area (acres)	Linear Feet	Average TOB Width (feet)	Average TOB Depth (feet)	Area (acres)	Linear Feet	Feature Description
228a	intermittent	1.00	0.25	0.0021	89.55	1.00	0.33	0.0021	89.55	Drainage system
228b	intermittent	1.00	1.00	0.0002	7.24	1.00	1.00	0.0002	7.24	D-228 is fed by W-229 and flows outside the project area to a culvert under Alderpoint Road that connects to Hoagland Creek.
233	intermittent	2.00	0.33	0.0035	77.08	2.00	2.00	0.0035	77.08	Unnamed drainage likely a tributary to Hoagland Creek; likely shares subsurface connection with W-232.
234	intermittent	1.50	0.33	0.0048	138.43	2.00	1.50	0.0064	138.43	Unnamed drainage likely a tributary to Hoagland Creek; likely shares subsurface connection with W-235 and W-236.
236	ephemeral	1.50	0.17	0.0077	222.32	2.00	0.33	0.0102	222.32	Unnamed drainage likely a tributary to Hoagland Creek.
237	intermittent	5.00	1.00	0.0243	211.65	6.00	2.00	0.0292	211.65	Unnamed drainage likely a tributary to Hoagland Creek.

			USAG	E/RWQCB			C	DFW		
Feature ID	Hydrological Regime	Average OHWM Width (feet)	Average OHWM Depth (feet)	Area (acres)	Linear Feet	Average TOB Width (feet)	Average TOB Depth (feet)	Area (acres)	Linear Feet	Feature Description
238a	intermittent	4.00	3.00	0.0961	1046.10	6.00	5.00	0.1441	1,046.10	The main
238b	intermittent	7.00	0.50	0.0222	138.41	8.00	1.00	0.0254	138.41	drainage within drainage system
238c	ephemeral	3.00	2.00	0.0026	38.46	4.00	3.00	0.0035	38.46	D-238 is
238d	ephemeral	2.00	2.00	0.0190	414.56	6.00	4.00	0.0571	414.56	mapped as upper (D-238e)
238e	intermittent	1.00	0.50	0.0003	11.78	3.00	2.00	0.0008	11.78	and lower (D- 238a) connected segments. It is fed by W-239 and W-242 to the east and several ephemeral tributaries (D-238b, D- 238c, D-238d) along both segments. All segments culminate into D-238a, which is a tributary to Hoagland Creek.
240	ephemeral	1.00	1.00	0.0060	263.00	2.00	2.00	0.0121	263.00	Unnamed ephemeral drainage that is a tributary to W- 239.
241	intermittent	2.50	1.00	0.0108	188.50	6.00	4.00	0.0260	188.50	Unnamed spring-fed drainage that drains W-242 and feeds W- 239. Carrying

			USA	CE/RWQCB						
Feature ID	Hydrological Regime	Average OHWM Width (feet)	Average OHWM Depth (feet)	Area (acres)	Linear Feet	Average TOB Width (feet)	Average TOB Depth (feet)	Area (acres)	Linear Feet	Feature Description
										water at the time of the field survey.
245	ephemeral	3.00	0.50	0.0124	179.77	4.00	1.00	0.0165	179.77	Unnamed drainage likely connected downstream D-246, a tributary to Hoagland Creek.
246	perennial	5.00	1.00	0.0310	270.49	8.00	3.00	0.0497	270.49	Unnamed tributary to Hoagland Creek
247	ephemeral	3.00	0.30	0.0198	287.95	6.00	3.00	0.0397	287.95	Unnamed tributary to D- 246.
249	ephemeral/ culvert	1.00	1.00	0.0004	19.00	1.00	1.00	0.0004	19.00	culvert under an access road that connects W- 248b to W-248a.
250	intermittent	4.00	0.30	0.0288	313.25	5.00	2.00	0.0360	313.25	Unnamed tributary to the Van Duzen River.
251 (Little Larabee Creek)	perennial	25.00	4.00	0.6173	90.00	35.00	6.00	0.8642	1,075.50	Segment of Little Larabee Creek, a tributary to the Van Duzen River. Associated with riparian wetland

			USA	CE/RWQCB			C	DFW		
Feature ID	Hydrological Regime	Average OHWM Width (feet)	Average OHWM Depth (feet)	Area (acres)	Linear Feet	Average TOB Width (feet)	Average TOB Depth (feet)	Area (acres)	Linear Feet	Feature Description
										W-252a and W-252b.
254 (Van Duzen River)	perennial	N/A	N/A	0.0022	100	N/A	N/A	1.2120	1,502.80	Segment of the Van Duzen River, a tributary to the Eel River. Associated with riparian wetland W-253a and W-253b
Total				2.8550	14,499.5031			6.8607	15,902.3031	