#### SECTION 2.0 METHODOLOGY

The three-parameter approach used to identify USACE wetlands is summarized in Sections 2.1 through 2.3; literature reviewed for the preparation of the delineation is outlined in Section 2.4; and the field delineation is outlined in Section 2.5.

# 2.1 VEGETATION

Hydrophytic vegetation (or hydrophytes) is defined as any macrophytic plant that is typically adapted to and subsequently grows within water or that is on a substrate at least periodically deficient in oxygen; this oxygen deficiency can be a result of excessive saturation conditions that range from open water to periodically saturated soils. Specifically, these plant species are specialized and can survive in permanently saturated to periodically saturated soils where oxygen levels are very low or where the soils are anaerobic. The U.S. Fish and Wildlife Service (USFWS) has identified approximately 2,000 plant species of this type within the State of California (i.e., Zone 0) and nearly 5,000 species throughout the U.S. (Reed 1988). The wetland indicator categories reflect the range of estimated probabilities (expressed as a frequency of occurrence) that a species occurs in wetlands versus non-wetlands. Therefore, a frequency of 67 percent to 99 percent means that 67 percent to 99 percent of sample plots containing the species randomly selected across the range of the species would be a wetland. A positive (+) or negative (-) sign is used with the wetland indicator categories to more specifically define the regional frequency of a species' occurrence in wetlands (Reed 1988). The positive sign indicates a frequency toward the higher end of the category (i.e., more frequently found in wetlands), and a negative sign indicates a frequency toward the lower end of the category (less frequently found in wetlands). The positive and negative modifiers are eliminated from the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region when determining if an area meets the hydrophytic plant criterion for a wetland. Species not listed by Reed (1988) are considered to be upland (UPL).

Plant indicator status categories are as follows:

- **Obligate Wetland (OBL):** Plants that occur almost always (estimated probability 99 percent) in wetlands under natural conditions, but which may also occur rarely (estimated probability 1 percent) in non-wetlands (e.g., cattails [*Typha* spp.] or common water hyacinth [*Eichhornia crassipes*]).
- Facultative Wetlands (FACW): Plants that occur usually (estimated probability 67-99 percent) in wetlands, but also occur (estimated probability 1–33 percent) in non-wetlands (e.g., mule fat [Baccharis salicifolia] or arroyo willow [Salix lasiolepis]).
- Facultative (FAC): Plants with similar likelihood (estimated probability 34–66 percent) of occurring in both wetlands and non-wetlands (e.g., California saltbush [Atriplex californica]).
- Facultative Upland (FACU): Plants that occur sometimes (estimated probability 1-33 percent) in wetlands, but occur more often (estimated probability 67–99 percent) in non-wetlands (e.g., giant wild rye [Leymus condensatus]).
- **Obligate Upland (UPL):** Plants that occur rarely (estimated probability 1 percent) in wetlands, but occur almost always (estimated probability 99 percent) in non-wetlands under natural conditions (e.g., coast live oak [Quercus agrifolia]).

The following are three procedures for determining hydrophytic vegetation: Indicator 1, "Dominance Test", using the "50/20 Rule"; Indicator 2, "Prevalence Index"; or Indicator 3, "Morphological Adaptation", as identified in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008b). Hydrophytic vegetation is present if any indicator is satisfied. If none of the indicators are satisfied, then hydrophytic vegetation is absent unless (1) indicators of hydric soils and wetlands hydrology are present and (2) the site meets the requirements for a problematic wetland situation.

**Dominance Test:** Vegetative cover is estimated and is ranked according to its dominance. Dominant species are the most abundant species for each stratum of the community (i.e., tree, sapling/shrub, herb, or woody vine) that individually or collectively amount to 50 percent of the total coverage of vegetation plus any other species that, by itself, accounts for 20 percent of the total vegetation cover (also known as the "50/20 Rule"). These species are recorded on the "Wetland Determination Data Form — Arid West Region" (see Attachment C). The wetlands indicator status of each species is also recorded on the data forms based on the *National List of Plant Species that Occur in Wetlands* (Reed 1988). If greater than 50 percent of the dominant species across all strata are OBL, FACW or FAC species, the criterion for wetland vegetation is considered to be met.

**Prevalence Index:** The prevalence index considers all plant species in a community, not just the dominant ones. The prevalence index is the average of the wetland indicator status of all plant species in a sampling plot. Each indicator status category is given a numeric code (OBL=2, FACW=2, FAC=3, FACU=4, and UPL=5) and is weighted by the species' abundance (percent cover). Hydrophytic vegetation is present if the prevalence index is 3.0 or less.

**Morphological Adaptation:** Morphological adaptations, such as adventitious roots (i.e., roots that take advantage of the wet conditions) and shallow root systems must be observed on more than 50 percent of the individuals of an FACU species for the hydrophytic vegetation wetland criterion to be met.

# 2.2 <u>SOILS</u>

The National Technical Committee for Hydric Soils (NTCHS) defines a hydric soil as a soil that is formed under conditions of saturation, flooding, or ponding that (1) occurs long enough during the growing season to develop anaerobic conditions (or conditions of limited oxygen) at or near the soil surface and (2) favors the establishment of hydrophytic vegetation. Hydric soils created under artificial conditions of flooding and inundation sufficient for the establishment of hydrophytic vegetation would also meet this hydric soils indicator.

The soil conditions are verified through the digging of test pits along each transect to a depth of at least 20 inches (except where noted because of restrictive layers). At some sites, it may be necessary to make exploratory soil test pits up to 40 inches in depth to more accurately document and understand the variability in soil properties and hydrologic relationships on the site. Soil test pit locations are usually dug within the drainage invert or at the edge of a drainage course within vegetated areas. Soil extracted from each soil test pit is then examined for texture and color using the standard plates within the Munsell Soil Color Chart (1994) and recorded on the Data Form. The Munsell Soil Color Chart aids in designating soils by color labels based on gradations of three simple variables: hue, value, and chroma. Any indicators of hydric soils such as redoximorphic features (i.e., areas where iron is reduced under anaerobic conditions and oxidized following a return to aerobic conditions); buried organic matter; organic streaking; reduced soil conditions; gleyed (i.e., soils having a characteristic bluish-gray or greenish-gray color) or low-chroma soils; or sulfuric odor are also recorded on the Data Form. If hydric soils are found, progressive pits are dug along the transect moving laterally away from the active channel area until hydric soil features are no longer present within the top 20 inches of the soil.

# 2.3 HYDROLOGY

Wetlands hydrology is represented by either (1) all the hydrological elements or characteristics of areas permanently or periodically inundated or (2) areas containing soils that are saturated for a sufficient duration of time to create hydric soils suitable for the establishment of plant species that are typically adapted to anaerobic soil conditions. The presence of wetlands hydrology is evaluated at each intersect by recording the extent of observed surface flows, the depth of inundation, the depth to saturated soils, and the depth to free water in soil test pits. In instances where stream flow is divided into multiple channels with intervening sandbars, the entire area between the channels is considered within the OHWM. Therefore, an area containing these features would meet the indicator requirements for wetlands hydrology.

# 2.4 <u>LITERATURE</u>

Prior to conducting the delineation, BonTerra Consulting reviewed the following documents to identify areas that may fall under agency jurisdiction: the USGS Newport Beach 7.5-minute topographic quadrangle; color aerial photography provided by Aerials Express (2008); the Report and General Soil Map, Orange County and Part of Riverside County, California (USDA NRCS 2007); the National Hydric Soils List (USDA NRCS 2009); and the National Wetlands Inventory's Wetland Mapper (USFWS 2009). A description of this literature is provided below.

**USGS Topographic Quadrangle:** USGS quadrangle maps show geological formations and their characteristics; they describe the physical settings of an area through topographic contour lines and other major surface features. These features include lakes, streams, rivers, buildings, roadways, landmarks, and other features that may fall under the jurisdiction of one or more regulatory agencies. In addition, the USGS maps provide topographic information that is useful in determining elevations, latitude and longitude, and Universal Transverse Mercator Grid coordinates for a project site.

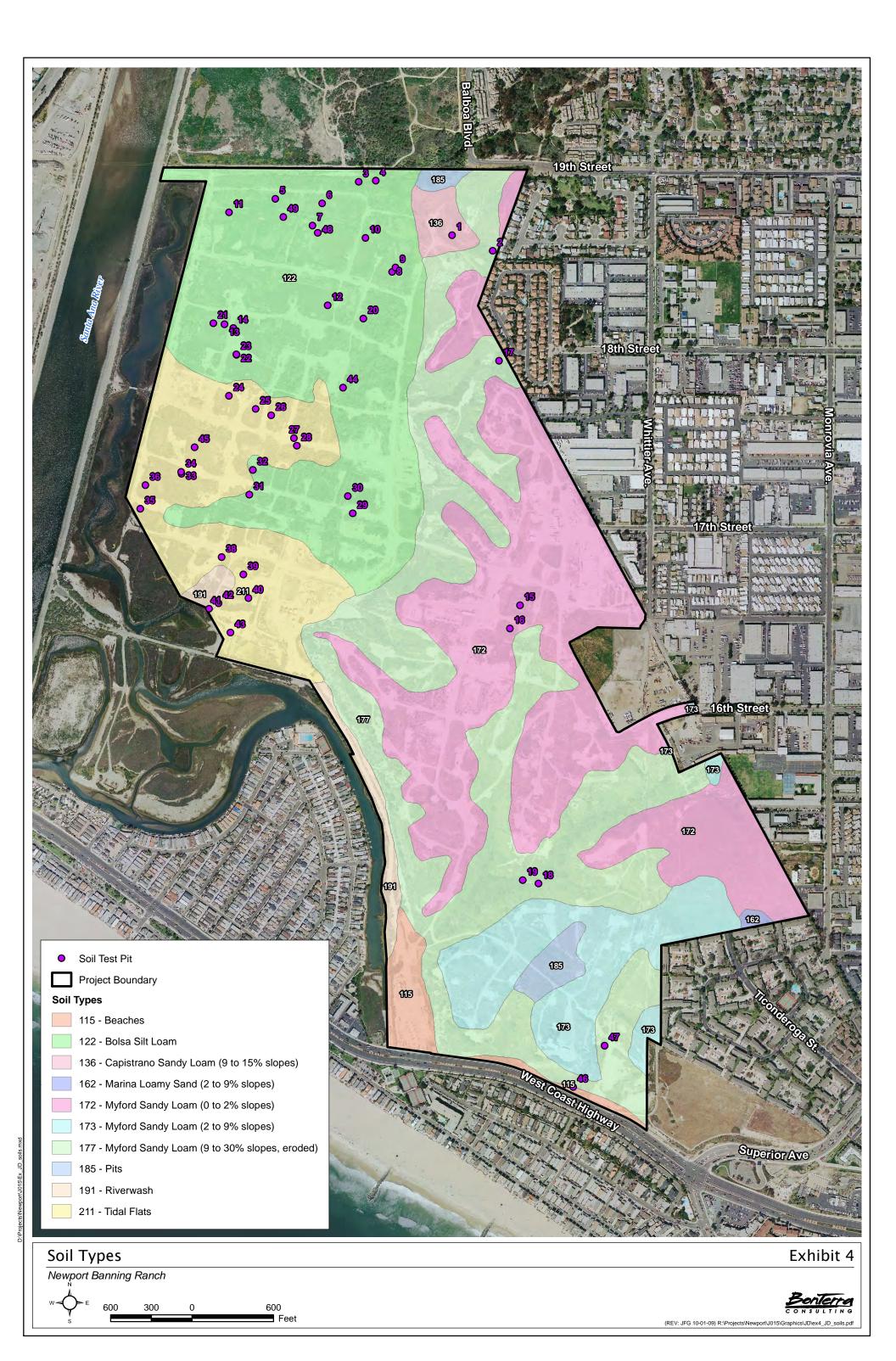
No blueline rivers, streams, or lakes are shown within the Project site boundary on the Newport Beach USGS quadrangle.

**Color Aerial Photography:** BonTerra Consulting reviewed an existing color aerial photograph prior to the initial July 14, 2009, site visit to identify the extent of any drainages and riparian vegetation occurring on the Project site.

Multiple arroyos cross the Project site and appear to contain riparian vegetation. Open water is shown at the southern end of the lowlands and in the adjacent tidal areas.

**U.S. Department of Agriculture, Natural Resources Conservation Service:** The presence of hydric soil is one of the chief indicators of jurisdictional wetlands. BonTerra Consulting reviewed the USDA soil survey data for the survey area and determined that the soils were mapped as beaches, Bolsa silt loam, Capistrano sandy loam (9 to 15 percent slopes), Marina loamy sand (2 to 9 percent slopes), Myford sandy loam (0 to 2 percent slopes, 2 to 9 percent slopes, and 9 to 30 percent slopes, eroded), pits, riverwash, and tidal flats (Exhibit 4). Beaches, Bolsa silt loam, Myford sandy loam (0 to 2 and 2 to 9 percent slopes), pits, riverwash, and tidal flats are considered hydric by the National Hydric Soils List for Orange County and Part of Western Riverside County, California (USDA NRCS 2009). A brief description of the soil series mapped in the survey area is provided in Attachment D of this report.

**U.S. Fish and Wildlife Service, National Wetlands Inventory:** The Wetlands Mapper shows wetland resources available from the Wetlands Spatial Data Layer of the National Spatial Data Infrastructure (USFWS 2009). This resource provides the classification of known wetlands following the Classification of Wetlands and Deepwater Habitats of the United States (Cowardin



et al. 1979). This classification system is arranged in a hierarchy of (1) Systems that share the influence of similar hydrologic, geomorphologic, chemical, or biological factors (i.e., Marine, Estuarine, Riverine, Lacustrine, and Palustrine); (2) Subsystems (i.e., Subtidal and Intertidal; Tidal, Lower Perennial, Upper Perennial, and Intermittent; or Littoral and Limnetic); (3) Classes, which are based on substrate material and flooding regime or on vegetative life form; (4) Subclasses; and (5) Dominance Types, which are named for the dominant plant or wildlife form. In addition, there are modifying terms applied to Classes or Subclasses.

The mapped wetlands resources are included in Exhibit 5 and are summarized as follows. There are no mapped wetland resources in Drainages A, B, or D. Drainage C is mapped as "PFOA". This non-tidal, Palustrine area (P) is dominated by woody vegetation over 20 feet tall (FO) and is temporarily flooded for brief periods during the growing season (A). The northern boundary of the Project site is mapped as PFO/SSC. This Palustrine area (P) contains both woody vegetation taller than 20 feet (FO) and shrubs, saplings, and trees shorter than 20 feet (SS). This area is seasonally flooded for extended periods, especially early in the growing season (C).

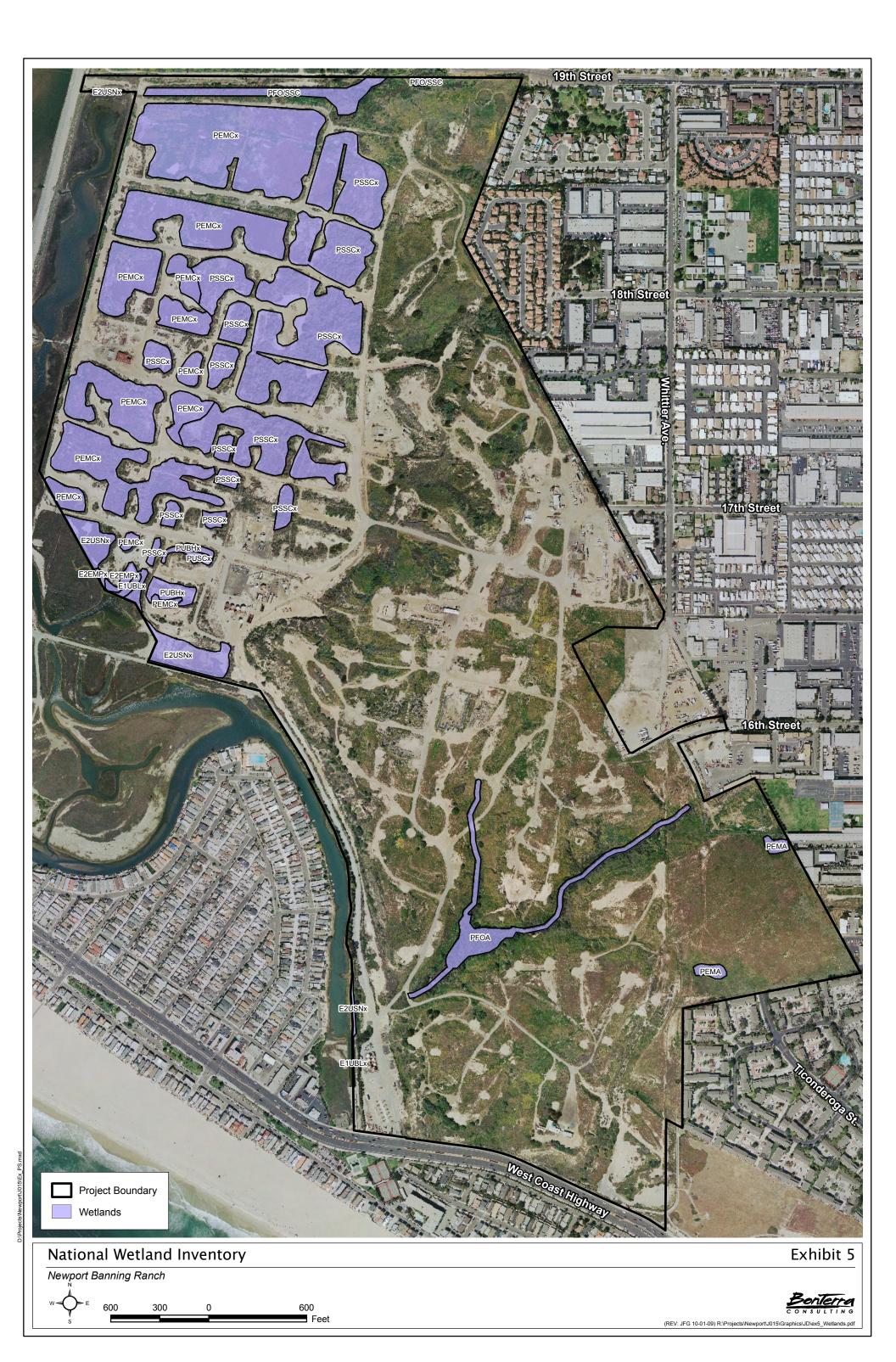
The lowlands contain a variety of mapped wetlands: PEMCx, PSSCx, E2USNx, E2EMPx, E1UBLx, PUBHx, and PUSCx. These areas have all been excavated by man (x). The northern portion of the lowlands is seasonally flooded (C) and either dominated by emergent hydrophytes (EM) to the west or by woody shrubs, saplings, and trees shorter than 20 feet tall (SS) to the east. The southern portion of the lowlands is primarily estuarine (E). Portions are intertidal (2) while other portions are subtidal (1). These areas are either regularly flooded (N) or irregularly flooded (P). Some areas have an unconsolidated shore (US). An area of open water is mapped "E1UBLx". This Estuarine area (E) is subtidal (1) and permanently flooded (L) with an unconsolidated bottom (UB). Another area containing open water is mapped "PUBHx". This Palustrine pond (P) has an unconsolidated bottom (UB) and is permanently flooded throughout the year (H). An adjoining area (PUSCx) is similar, but seasonally flooded (C) with an unconsolidated shore (US). At the southern end of the project site below the bluffs there are areas mapped "E2USNx" and "E1UBLx". These intertidal (1) or subtidal (2) Estuarine areas (E) have an unconsolidated shore (US) or unconsolidated bottom (UB), are either regularly flooded (N) or permanently flooded (L), and are excavated by man (x).

Two mapped wetlands (PEMA) are shown on the mesa; however, these areas do not presently exhibit wetland characteristics.

# 2.5 JURISDICTIONAL DELINEATION

In September 2008, the USACE issued the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region.* This regional supplement is designed for use with the *1987 Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987). Both the 1987 Wetlands Manual and the Arid West Supplement to the manual provide technical methods and guidelines for determining the presence of "Waters of the U.S." and wetland resources. A three-parameter approach is used to identify wetlands and requires evidence of wetlands hydrology, hydrophytic vegetation, and hydric soils. Wetlands generally include swamps, marshes, bogs, and similar areas. In order to be considered a wetland, an area must exhibit at least minimal hydric characteristics within the three parameters. However, problem areas may periodically or permanently lack certain indicators due to seasonal or annual variability of the nature of the soils or plant species on site. Atypical wetlands lack certain indicators due to recent human activities or natural events. Guidance for determining the presence of wetlands in these situations is presented in the regional supplement. Non-wetland "Waters of the U.S." are delineated based on the limits of the OHWM, which can be determined by a number of factors including erosion, the deposition of vegetation or debris, and changes in vegetation.

It should be noted that the RWQCB shares the USACE jurisdiction unless isolated conditions are present. If isolated waters conditions are present, the RWQCB takes jurisdiction using the



USACE's definition of the OHWM and/or the three-parameter wetlands methodology pursuant to the 1987 Wetlands Manual. The CDFG's jurisdiction is defined as the top of the bank of the stream, channel, or basin or the outer limit of riparian vegetation located within or immediately adjacent to the river, stream, creek, pond, or lake.

The analysis contained in this report uses data collected during four field surveys, three conducted by Mr. Gary Medeiros and Ms. Allison Rudalevige on July 14, 15, and 16, 2009, and one conducted by Ms. Rudalevige and Lindsay Messett on July 22, 2009. In addition, Mr. Medeiros and Ms. Rudalevige conducted a review of portions of the site with GLA on September 30, 2009. The field surveys included the collection of vegetation, soils, and hydrologic data at the project site. This information was recorded on a 1 inch equals 250 feet (1" = 250') scale color aerial photograph and on Wetland Determination Data Forms (Attachment C). Photographs of the Project site are included in Attachment B.

#### SECTION 3.0 RESULTS

Newport Banning Ranch encompasses four distinct topographic features: a gently sloping coastal plain forming the western edge of Newport Mesa over the eastern portion of the Project site (Uplands); bluffs along the western edge of the mesa, drainages and arroyos; and Lowlands that were historically tidal marsh associated with Semeniuk Slough. The Lowlands were separated from Semeniuk Slough by a levee and have lost their tidal influence; tidal influence is currently limited to 4.8 acres at the southwestern corner of the Lowlands. Also, a 92-acre USACE salt marsh restoration site is located to the west of the Project site and separates the project site from the Santa Ana River.

# 3.1 **SAMPLING POINTS**

Vegetation was formally analyzed at 49 sampling points on the Project site. The analysis covers sampling points within Drainages A, B, C, and D; the Northern Boundary Lowlands; the Northwest Lowlands; the Northeast Lowlands; the Southern Lowlands; Vernal Pools; and the Southern Boundary Uplands. A summary of the vegetation found at each sampling point and the wetlands indicator status for each plant species; the results of the dominance test and prevalence test; and satisfaction of criteria for hydric soils and wetlands hydrology is described below and shown in Table 1.

Soil Test Pit	Location	Plant species	Common Name	Absolute Percent Cover	Wetland Indicator Status <sup>a</sup>	Passed Dominance Test	Passed Prevalence Test	Meets Hydrophytic Vegetation Criteria	Meets Hydric Soils Criteria	Meets Wetlands hydrology Criteria
		Baccharis salicifolia (viminea)	Mule Fat	50	FACW					
1	Drainage A	Encelia californica	Bush Sunflower	15	UPL	No	No	No	No	Yes
		Cortaderia selloana	Sellow's Pampas Grass	50	UPL					
		Salix gooddingii	Black Willow	90	OBL					
2	Drainage A	Ricinus communis	Castor Bean	5	FACU	Yes	Yes	Yes	Yes	Yes
	Dialilage A	Solanum americanum	White Nightshade	<1	FAC	165	165	165	163	165
		Veronica anagallis-aquatica	Great Water Speedwell	<1	OBL					
		Salix lasiolepis	Arroyo Willow	85	FACW				Yes	
3	Northern Boundary	Salix gooddingii	Black Willow	20	OBL	Yes	Yes	Yes		Yes
3	Lowlands	Baccharis salicifolia (viminea)	Mule Fat	20	FACW	165	165			165
		Cortaderia selloana	Sellow's Pampas Grass	1	UPL					
	Northern	Salix gooddingii	Black Willow	60	OBL					
4	Boundary	Salix lasiolepis	Arroyo Willow	40	FACW	Yes	Yes	Yes	Yes	Yes
	Lowlands	Cortaderia selloana	Sellow's Pampas Grass	10	UPL					
5	Northwest	Conium maculatum	Poison Hemlock	100	FACW	Yes	Yes	Yes	No	No
5	Lowlands	Heliotropium curassavicum	Alkali Heliotrope	2	OBL	165	165	165	INO	INU
	NI a atla a a t	Salicornia virginica	Common Woody Pickleweed	99	OBL					
6	Northwest Lowlands	Heliotropium curassavicum	Alkali Heliotrope	10	OBL	Yes	Yes	Yes	No	No
	2011.61.60	Frankenia salina	Alkali Heath	5	FACW					
7	Northwest	Salicornia virginica	Common Woody Pickleweed	20	OBL	Yes	Yes	Yes	Yes	Yes
,	Lowlands	Frankenia salina	Alkali Heath	15	FACW	163	163	163	163	163
8	Northeast	Salicornia virginica	Common Woody Pickleweed	100	OBL	Yes	Yes	Yes	No	No
0	Lowlands	Malva parviflora	Cheeseweed	<1	UPL	163	163	169	INO	INO
	Nowtheast	Salix gooddingii	Black Willow	40	OBL					
9	Northeast Lowlands	Malva parviflora	Cheeseweed	70	UPL	Yes	Yes	Yes	Yes	No
	Luwiaiius	Salicornia virginica	Common Woody Pickleweed	50	OBL					

Soil Test Pit	Location	Plant species	Common Name	Absolute Percent Cover	Wetland Indicator Status <sup>a</sup>	Passed Dominance Test	Passed Prevalence Test	Meets Hydrophytic Vegetation Criteria	Meets Hydric Soils Criteria	Meets Wetlands hydrology Criteria
		Conium maculatum	Poison Hemlock	20	FACW					
	Modback	Frankenia salina	Alkali Heath	15	FACW					
10	Northeast Lowlands	Salicornia virginica	Common Woody Pickleweed	15	OBL	Yes	Yes	Yes	Yes	No
	Lowiando	Malva parviflora	Cheeseweed	2	UPL					
		Heliotropium curassavicum	Alkali Heliotrope	1	OBL					
11	Northwest	Conium maculatum	Poison Hemlock	100	FACW	Yes	Yes	Yes	No	No
11	Lowlands	Salicornia virginica	Woody Pickleweed	2	OBL	165	165	165	INO	INO
12	Northwest	Frankenia salina	Alkali Heath	50	FACW	Yes	Yes	Yes	No	No
12	Lowlands	Salicornia virginica	Common Woody Pickleweed	60	OBL	165	165			
13	Northwest	Salicornia virginica	Common Woody Pickleweed	99	OBL	Yes	Yes	Yes	Yes	No
13	Lowlands	Conium maculatum	Poison Hemlock	5	FACW	162	165	165	165	INU
14	Northwest	Salicornia virginica	Common Woody Pickleweed	95	OBL	Yes	Yes	Yes	Yes	No
14	Lowlands	Frankenia salina	Alkali Heath	5	FACW	163	103	163	163	INO
		Baccharis salicifolia (viminea)	Mule Fat	10	FACW				Yes	
		Distichlis spicata	Salt Grass	90	FACW					
15	Vernal Pool	Eremocarpus setigerus	Turkey Mullein	<1	UPL	Yes	Yes	Yes		Yes
		Polypogon monspeliensis	Annual Beard Grass	<1	FACW					
		Heliotropium curassavicum	Salt Heliotrope	<1	OBL					
		Baccharis salicifolia (viminea)	Mule Fat	5	FACW					
		Frankenia salina	Alkali Heath	80	FACW					Yes
16	Vernal Pool	Rumex crispus	Curly Dock	<1	FACW	Yes	Yes	Yes	Yes	
		Hemizonia fasciculata	Fascicled Tarweed	2	UPL	1				
		Polypogon monspeliensis	Annual Beard Grass	<1	FACW					
		Salix lasiolepis	Arroyo Willow	75	FACW					
17	Drainage B	Schinus terebinthifolius	Brazilian Pepper Tree	25	UPL	Yes	Yes	Yes	N/A	Yes
	-	Baccharis salicifolia (viminea)	Mule Fat	5	FACW					

Soil Test Pit	Location	Plant species	Common Name	Absolute Percent Cover	Wetland Indicator Status <sup>a</sup>	Passed Dominance Test	Passed Prevalence Test	Meets Hydrophytic Vegetation Criteria	Meets Hydric Soils Criteria	Meets Wetlands hydrology Criteria
		Eucalyptus sp.	Gum Tree	45	UPL					
18	Drainage C	Schinus terebinthifolius	Brazilian Pepper Tree	20	UPL	No	No	No	No	Yes
10	Drainage C	Baccharis pilularis	Coyote Brush	40	UPL	INO	INO	INO	INO	res
		Baccharis salicifolia (viminea)	Mule Fat	20	FACW					
		Salix lasiolepis	Arroyo Willow	100	FACW					
19	Drainage C	Bromus madritensis ssp. rubens	Foxtail Chess	10	NI	No	Yes	Yes	No	Yes
		Conium maculatum	Poison Hemlock	<1	FACW					
		Salix lasiolepis	Arroyo Willow	50	FACW					
		Baccharis salicifolia (viminea)	Mule Fat	30	FACW					
20	Northeast Lowlands	Malvella leprosa	Alkali Mallow	20	FAC	Yes	Yes	Yes	Yes	No
		Salicornia virginica	Common Woody Pickleweed	2	OBL					
		Heliotropium curassavicum	Alkali Heliotrope	10	OBL					
21	Northwest	Frankenia salina	Alkali Heath	80	FACW	Yes	Yes	Yes	No	No
21	Lowlands	Salicornia virginica	Common Woody Pickleweed	60	OBL	165		169		INO
	NI - d	Frankenia salina	Alkali Heath	75	FACW		Yes		Yes	
22	Northwest Lowlands	Salicornia virginica	Common Woody Pickleweed	50	OBL	Yes		Yes		No
	Lowiands	Malvella leprosa	Alkali Mallow	5	FAC					
	NI - d	Frankenia salina	Alkali Heath	50	FACW					
23	Northwest Lowlands	Salicornia virginica	Common Woody Pickleweed	50	OBL	Yes	Yes	Yes	Yes	No
	Lowidings	Malvella leprosa	Alkali Mallow	5	FAC					
		Baccharis salicifolia (viminea)	Mule Fat	5	FACW					
	Moderat	Baccharis pilularis	Coyote Brush	1	UPL					
24	Northwest Lowlands	Frankenia salina	Alkali Heath	70	FACW	Yes	Yes Yes	Yes	Yes	No
	LOWIGINGS	Salicornia virginica	Common Woody Pickleweed	30	OBL					
		Cortaderia selloana	Sellow's Pampas Grass	2	UPL					

Soil Test Pit	Location	Plant species	Common Name	Absolute Percent Cover	Wetland Indicator Status <sup>a</sup>	Passed Dominance Test	Passed Prevalence Test	Meets Hydrophytic Vegetation Criteria	Meets Hydric Soils Criteria	Meets Wetlands hydrology Criteria
		Baccharis salicifolia (viminea)	Mule Fat	2	FACW				V	
		Frankenia salina	Alkali Heath	60	FACW					
25	Northwest	Salicornia virginica	Common Woody Pickleweed	40	OBL	Yes	Yes	Yes		Yes
25	Lowlands	Pulicaria paludosa	Spanish Sunflower	<1	UPL	res	res	res	Yes	res
		Malvella leprosa	Alkali Mallow	5	FAC					
		Cirsium vulgare	Bull Thistle	10	FACU					
		Baccharis salicifolia (viminea)	Mule Fat	20	FACW					
	No otlo o o ot	Juncus sp.	Rush	50	FACW				Yes	
26	Northeast Lowlands	Heliotropium curassavicum	Alkali Heliotrope	30	OBL	Yes	Yes	Yes		Yes
	Lowidia	Malvella leprosa	Alkali Mallow	10	FAC					
		Pulicaria paludosa	Spanish Sunflower	<1	UPL					
		Salix gooddingii	Black Willow	95	OBL					
27	Northeast	Baccharis salicifolia (viminea)	Mule Fat	20	FACW	Yes	Yes	Yes	Yes	Yes
21	Lowlands	Cortaderia selloana	Sellow's Pampas Grass	5	UPL		103	103	103	103
		Malvella leprosa	Alkali Mallow	<1	FAC					
	Northeast	Salix gooddingii	Black Willow	95	OBL				Yes	No
28	Lowlands	Salix lasiolepis	Arroyo Willow	5	FACW	No	Yes	Yes		
		Cortaderia selloana	Sellow's Pampas Grass	90	UPL					
		Baccharis salicifolia (viminea)	Mule Fat	20	FACW					
		Bassia hyssopifolia	Five-Hook Bassia	15	FAC					No
29	Northeast	Distichlis spicata	Salt Grass	65	FACW	Yes	Yes	Yes	No	
2.5	Lowlands	Heliotropium curassavicum	Alkali Heliotrope	5	OBL	163	163	163	140	INO
		Frankenia salina	Alkali Heath	10	FACW					
		Malvella leprosa	Alkali Mallow	2	FAC					
30	Northeast Lowlands	Salix gooddingii	Black Willow	90	OBL	Yes	Yes	Yes	Yes	No
31	Northwest	Salicornia virginica	Common Woody Pickleweed	85	OBL	Yes	Yes	Yes	Yes	Yes
JI	Lowlands	Frankenia salina	Alkali Heath	2	FACW	169	169	169	1 69	169

Soil Test Pit	Location	Plant species	Common Name	Absolute Percent Cover	Wetland Indicator Status <sup>a</sup>	Passed Dominance Test	Passed Prevalence Test	Meets Hydrophytic Vegetation Criteria	Meets Hydric Soils Criteria	Meets Wetlands hydrology Criteria
		Salix gooddingii	Black Willow	10	OBL				No	
	NI di	Baccharis salicifolia (viminea)	Mule Fat	40	FACW			Yes		
32	Northwest Lowlands	Salicornia virginica	Common Woody Pickleweed	35	OBL	Yes	Yes			No
	Lowiando	Frankenia salina	Alkali Heath	30	FACW					
		Euthamia occidentalis	Western Goldenrod	30	OBL					
33	Northwest	Salicornia virginica	Common Woody Pickleweed	40	OBL	Yes	Yes	Yes	No	No
33	Lowlands	Frankenia salina	Alkali Heath	60	FACW	163	163	163	NO	INO
34	Northwest	Salicornia virginica	Common Woody Pickleweed	40	OBL	Yes	Yes	Yes	No	No
34	Lowlands	Frankenia salina	Alkali Heath	60	FACW	165	165	165		
35	Northwest	Salicornia virginica	Common Woody Pickleweed	80	OBL	Yes	Yes	Yes	No	No
33	Lowlands	Frankenia salina	Alkali Heath	30	FACW	165		165	NO	INO
36	Northwest	Salicornia virginica	Common Woody Pickleweed	70	OBL	Yes	Yes	Yes	No	No
30	Lowlands	Frankenia salina	Alkali Heath	30	FACW	165	103	165	NO	INO
	Nambarrant	Baccharis salicifolia (viminea)	Mule Fat	40	FACW			Yes	Yes	
37	Northwest Lowlands	Frankenia salina	Alkali Heath	70	FACW	Yes	Yes Yes			No
	Lowiando	Salicornia virginica	Common Woody Pickleweed	30	OBL					
	No other and	Salicornia virginica	Common Woody Pickleweed	60	OBL					
38	Northeast Lowlands	Frankenia salina	Alkali Heath	5	FACW	Yes	Yes	Yes	No	No
	Lowiando	Mesembryanthemum crystallium	Crystalline Iceplant	2	UPL					
39	Northeast	Salicornia virginica	Common Woody Pickleweed	40	OBL	Yes	Yes	Yes	No	Yes
39	Lowlands	Batis maritima	Saltwort	5	OBL	165	165	165	NO	168
40	Northeast	Salicornia virginica	Common Woody Pickleweed	40	OBL	Yes	Yes	Yes	No	Yes
40	Lowlands	Batis maritima	Saltwort	5	OBL	165	162	165	INU	169
	0	Salicornia virginica	Common Woody Pickleweed	25	OBL				Yes	
41	Southern Lowlands	Frankenia salina	Alkali Heath	5	FACW	Yes	Yes	Yes		Yes
	LOWIGINGS	Batis Maritima	Saltwort	85	OBL					

Soil Test Pit	Location	Plant species	Common Name	Absolute Percent Cover	Wetland Indicator Status <sup>a</sup>	Passed Dominance Test	Passed Prevalence Test	Meets Hydrophytic Vegetation Criteria	Meets Hydric Soils Criteria	Meets Wetlands hydrology Criteria
		Salicornia virginica	Common Woody Pickleweed	70	OBL				Yes	
42	Southern Lowlands	Frankenia salina	Alkali Heath	5	FACW	Yes	Yes	Yes		Yes
	Lowiands	Batis Maritima	Saltwort	10	OBL					
43	Southern	Batis maritima	Saltwort	40	OBL	Yes	V	Yes	Yes	Yes
43	Lowlands	Salicornia virginica	Common Woody Pickleweed	45	OBL	res	Yes	res	res	res
		Salix gooddingii	Black Willow	60	OBL					
44	Northeast Lowlands	Baccharis salicifolia (viminea)	Mule Fat	50	FACW	Yes	Yes	Yes	No	No
	Lowiands	Cortaderia selloana	Sellow's Pampas Grass	50	UPL					
		Salicornia virginica	Common Woody Pickleweed	60	OBL					
45	Northwest Lowlands	Frankenia salina	Alkali Heath	40	FACW	Yes	Yes	Yes	Yes	No
	Lowiands	Conium maculatum	Poison Hemlock	5	FACW					
		Isocoma menziesii	Goldenbush	5	UPL					
		Distichlis spicata	Salt Grass	70	FACW					
46	Southern Boundary Upland	Carpobrotus edulis	Hottentot Fig	20	UPL	Yes	Yes	Yes	Yes	Yes
	Bourlaary Opiaria	Melitotus sp.	Sweet Clover	15	FAC					
		Bromus madritensis ssp. rubens	Foxtail Chess	1	NI					
47	Drainaga D	Salix lasiolepis	Arroyo Willow	90	FACW	Yes	Yes	Yes	No	Yes
47	Drainage D	Carpobrotus edulis	Hottentot Fig	20	UPL	res	res	res	INO	res
48	Northwest	Frankenia salina	Alkali Heath	90	FACW	Voc	Voo	Vaa	No	No
40	Lowlands	Salicornia virginica	Common Woody Pickleweed	5	OBL	Yes	Yes	Yes	No	INO
49	Northwest Lowlands	Salicornia virginica	Common Woody Pickleweed	95	OBL	Yes	Yes	Yes	Yes	Yes

FACW: facultative wetlands; UPL: obligate upland; OBL: obligate wetland; FACU: facultative upland; FAC: facultative; NI: no indicator.

#### 3.1.1 DRAINAGE A

This area includes a drainage area that flows northwest from the mesa area to a drainage feature located along the northern Project boundary and into the Semeniuk Slough (Exhibit 6A).

#### 3.1.1.1. SITE 1

This sampling point is dominated by mule fat (*Baccharis salicifolia* [*viminea*]), which is an FACW indicator species; it also includes Sellow's pampas grass (*Cortaderia selloana*) and bush sunflower (*Encelia californica*), which are UPL species. The site did not pass the Dominance or the Prevalence Test for hydrophytic vegetation. Also, the soils at this sample site consist of sand or silty sand. No indicators of hydric soil were observed. Therefore, the hydric soil criterion for wetlands was not met. This sampling point has indicators of wetlands hydrology. The drainage would therefore be considered "Waters of the U.S.".

#### 3.1.1.2. SITE 2

This sampling point is dominated by black willow (*Salix gooddingii*) with small amounts great water speedwell (*Veronica anagallis-aquatica*), which are OBL indicator species; it also includes a small amount of castor bean (*Ricinus communis*), which is an FACU indicator species. This sampling point passed the Prevalence test, and therefore met the criteria for hydrophytic vegetation. Soils within this portion of the site consist of clay and silty clay. Indicators of hydric soil in the form of hydrogen sulfide (Hydric Soils Indicator A4) were detected. Therefore, the hydric soil criterion for wetlands was met for this area. Surface water, an indicator of wetlands hydrology, is present in this area. Based on the presence of hydrophytic vegetation, hydric soils and wetlands hydrology, this portion of Drainage A would be considered a jurisdictional wetland.

#### 3.1.2 DRAINAGE B

The area is a drainage feature that carries storm flows to the west where it then sheet flows onto the lowland areas.

# 3.1.2.1. SITE 17

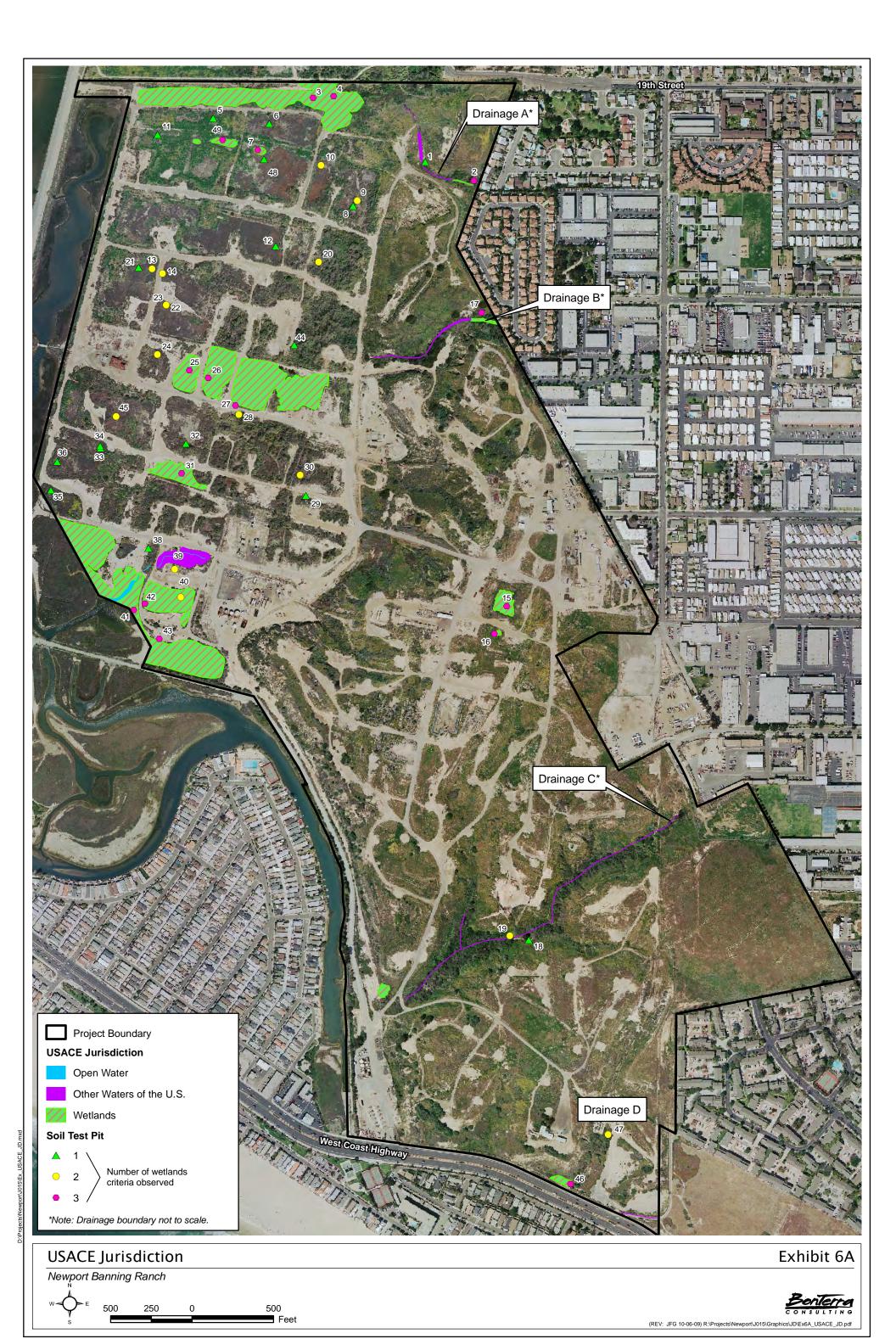
The upper portion of the drainage contains arroyo willow (*Salix lasiolepis*), which is an FACW indicator species; Brazilian pepper (*Schinus terebinthifolius*), a UPL species, and a small patch of mule fat, an FACW indicator species, are also present on Site 17. A large patch of giant reed (*Arundo donax*), an FACW species, is located to the west of this sampling point. The site passed the Dominance and Prevalence tests and therefore met the hydrophytic vegetation criteria. The stream channel is extremely steep and inaccessible, which prohibited digging a soil test pit. However, given the presence of extensive hydrophytic vegetation, the areas in the most upstream portion of the site likely contain hydric soils within the drainage course. Based on the presence of hydrophytic vegetation and wetlands hydrology and the assumption of hydric soils, the site would be considered jurisdictional wetlands.

#### 3.1.3 DRAINAGE C

This drainage feature carries storm flows southwesterly to the southwestern Project boundary and into the Semeniuk Slough.

#### 3.1.3.1. SITE 18

Although the site contains mule fat, an FACW indicator species, the area also contains a very high percent of absolute cover of non-native and native UPL plant species, and therefore did not



pass the Dominance or Prevalence tests for hydrophytic plants. Soils at this site consist of sand. No evidence of hydric soils was observed. Therefore, this sampling point does not meet the hydric soils criterion for wetlands. Based on the presence of wetlands hydrology, the site would be considered jurisdictional "Waters of the U.S.".

#### 3.1.3.2. SITE 19

The site is dominated by arroyo willow, an FACW indicator species, and passed the Prevalence test for hydrophytic vegetation. Soils at this site consist of sand. No evidence of hydric soils was observed. Therefore, this sampling point does not meet the hydric soils criterion for wetlands. Based on the presence of wetlands hydrology and hydrophytic vegetation, the site would be considered jurisdictional "Waters of the U.S.".

#### 3.1.4 DRAINAGE D

This site is located in a drainage area in the southeastern portion of the Project site.

#### 3.1.4.1. SITE 47

The site contains arroyo willow, an FACW indicator species, and Hottentot fig (Carpobrotus edulis), a UPL indicator species. Although the site passed the Prevalence test and met the criteria for hydrophytic vegetation, the majority of the overall drainage area is dominated by upland plant species. No indicators of hydric soils were observed at Site 47. Therefore, the hydric soil criterion for wetlands was not met for this area. Based on the prevalence of upland plant species, the site would not be considered "Waters of the U.S.".

# 3.1.5 NORTHERN BOUNDARY LOWLANDS

This area consists of a drainage area along the northern boundary of the Project site that flows west into the Semeniuk Slough.

#### 3.1.5.1. SITE 3

The drainage area is dominated by arroyo willow and mule fat, which are both FACW indicator species; also present are black willow, an OBL indicator species, and small amounts of Sellow's pampas grass, a UPL indicator species. The site passed the Dominance and Prevalence tests, and therefore meets the criteria for hydrophytic vegetation. Soils at this sampling point consist of silty clay and sand. The soils from zero to eight inches exhibit prominent mottles of "Redox Dark Surface" (Hydric Soils Indicator F6). Therefore, the sample site meets the hydric soils criterion for wetlands. This sampling point contained indicators of wetlands hydrology. Based on the presence of hydrophytic vegetation, hydric soils, and wetlands hydrology, the site would be considered jurisdictional wetlands.

#### 3.1.5.2. SITE 4

The drainage area is dominated by arroyo willow, an FACW indicator species, and black willow, an OBL indicator species, with small amounts pampas grass, a UPL indicator species. The site passed the Dominance and Prevalence tests. Therefore, the site meets the hydrophytic vegetation criteria. Soils within this sampling point consist of silty clay and sand. The soils from zero to eight inches exhibit prominent mottles in a "Redox Depression" (Hydric Soils Indicator F8), and therefore meet the hydric soils criterion for wetlands. This sampling point contains indicators of wetlands hydrology. Based on the presence of hydrophytic vegetation, hydric soils, and wetlands hydrology, the site would be considered jurisdictional wetlands.

#### 3.1.6 NORTHWEST LOWLANDS

The Northwest Lowlands consist of closed depressions surrounded by earthen berms and dirt access roads.

# 3.1.6.1. SITE 5

This area is relatively flat with no wetlands hydrology. The area is dominated by poison hemlock (*Conium maculatum*), an FACW indicator species, and a small amount of alkali heliotrope (*Heliotropium curassavicum*), an OBL indicator species. This site passed the Dominance and Prevalence tests, and therefore meets the hydrophytic vegetation criteria. Soils within this sampling point consist of sandy loam (0 to 20 inches). No evidence of hydric soils was observed. Therefore, this sample site does not meet the hydric soils criterion for wetlands. Based on the absence of wetlands hydrology, the site would not be considered "Waters of the U.S.".

#### 3.1.6.2. SITE 6

This area is relatively flat with no wetlands hydrology. The site is dominated by common woody pickleweed (*Salicornia virginica*), an OBL indicator species, and small amounts of alkali heliotrope, an OBL indicator species, and alkali heath (*Frankenia salina*), an FACW indicator species. The site passed the Dominance and Prevalence tests, and therefore meets the hydrophytic vegetation criteria. Soils within this sampling point consist of silty clay. However, no hydric soils were observed. Therefore, this sample site does not meet the hydric soils criterion for wetlands. Based on the absence of wetlands hydrology, the site would not be considered "Waters of the U.S.".

#### 3.1.6.3. SITE 7

This sampling point is located in a depressional feature within the overall flat area. The site contains common woody pickleweed, an OBL indicator species, and alkali heath, an FACW indicator species. The site passed the Dominance and Prevalence tests, and therefore meets the hydrophytic vegetation criteria. The site also meets the hydric soils and wetlands hydrology criteria. Therefore, the site would be considered a jurisdictional wetland.

#### 3.1.6.4. SITE 11

The site is dominated by poison hemlock, an FACW indicated species, with small patches of common woody pickleweed, an OBL indicator species. Site 11 passed the Dominance and Prevalence tests for hydrophytic vegetation. Therefore, the criterion for hydrophytic vegetation is met. Soils at this site consist of silty clay that exhibits faint mottles at a depth of 18 inches. Therefore, the sample site does not meet the hydric soils criterion for wetlands. Based on the absence of wetlands hydrology, the site would not be considered "Waters of the U.S.".

#### 3.1.6.5. SITE 12

The site is a relatively flat lowland area with no evidence of wetlands hydrology. Therefore, the site does not meet the criteria for wetlands hydrology. The sampling point is dominated by alkali heath, an FACW indicator species, and common woody pickleweed, an OBL indicator species. The site passed the Dominance and Prevalence tests, and therefore meets the hydrophytic vegetation criteria. Soils at this sampling point consist of silty clay and clay. The soils at a depth of 18 inches exhibit faint mottles. Therefore, the sample site does not meet the hydric soils criterion for wetlands. Based on the absence of wetlands hydrology, the site would not be considered "Waters of the U.S.".

#### 3.1.6.6. SITE 13

The site is a closed depression surrounded by earthen berms with no evidence of wetlands hydrology. The site is dominated by common woody pickleweed, an OBL indicator species, with small patches of poison hemlock, an FACW indicator species. The site passed the Dominance and Prevalence tests, and therefore meets the hydrophytic vegetation criteria. Soils at this site consist of silty clay and clay and exhibit prominent mottles of "Redox Dark Surface" (Hydric Soils Indicator F6) and "Redox Depressions" (Hydric Soils Indicator F8). Therefore, the sample site meets the hydric soils criterion for wetlands. Based on the absence of wetlands hydrology, the site would not be considered "Waters of the U.S.".

#### 3.1.6.7. SITE 14

The site is a relatively flat lowland area with no evidence of wetlands hydrology. The site is dominated by common woody pickleweed, an OBL indicator species, with smaller amounts of alkali heath, an FACW indicator species. The site passed the Dominance and Prevalence tests and therefore meets the hydrophytic vegetation criteria. Soils at this site consist of silty clay and clay and exhibit faint and prominent mottles of "Redox Dark Surface" (Hydric Soils Indicator F6) and "Redox Depressions" (Hydric Soils Indicator F8). Therefore, the sample site meets the hydric soils criterion for wetlands. Based on the absence of wetlands hydrology, the site would not be considered "Waters of the U.S.".

# 3.1.6.8. SITE 21

This site is located in a relatively flat lowland area with no evidence of wetlands hydrology. The site is dominated by alkali heath, an FACW indicator species, and common woody pickleweed, an OBL indicator species; the site passed the Dominance and Prevalence tests for hydrophytic vegetation. The soils between two and three inches exhibit distinct mottles. However, the mottles do not meet the thickness requirement pursuant to the Arid West Supplement. Therefore, the site does not meet the hydric soils criterion for wetlands. Based on the absence of wetlands hydrology, the site would not be considered "Waters of the U.S.".

# 3.1.6.9. SITE 22

This site is located in a relatively flat lowland area with no evidence of wetlands hydrology. The site is dominated by alkali heath, an FACW indicator species and common woody pickleweed, an OBL indicator species; the site passed the Dominance and Prevalence tests for hydrophytic vegetation. Soils at this site consist of silt and silty clay with a restrictive layer (hardpan at ten inches). The soils at four inches exhibit prominent mottles meeting the indicator of "Redox Depressions" (Hydric Soils Indicator F8). Therefore, the sample site meets the hydric soils criterion for wetlands. Based on the absence of wetlands hydrology, the site would not be considered "Waters of the U.S.".

#### 3.1.6.10. SITE 23

The site is located in a relatively flat lowland area with no evidence of wetlands hydrology. The site is dominated by alkali heath, an FACW indicator species, and common woody pickleweed, an OBL indicator species; the site passed the Dominance and Prevalence tests for hydrophytic vegetation. Soils at this site consist of silt and silty clay with a restrictive layer (hardpan at ten inches). The soils at four inches exhibit distinct mottles meeting the indicator of "Redox Depressions" (Hydric Soils Indicator F8). Therefore, the sample site meets the hydric soils criterion for wetlands. Based on the absence of wetlands hydrology, the site would not be considered "Waters of the U.S.".

#### 3.1.6.11. SITE 24

The site is located in a relatively flat lowland area with no evidence of wetlands hydrology. The site is dominated by alkali heath, an FACW indicator species, and common woody pickleweed, an OBL indicator species; the site passed the Dominance and Prevalence tests, and therefore meets the criteria for hydrophytic vegetation. Soils at this sampling point consist of silty clay. The soils below an organic layer exhibit prominent mottles meeting the indicator of "Redox Depressions" (Hydric Soils Indicator F8). Therefore, the sample site meets the hydric soils criterion for wetlands. Based on the absence of wetlands hydrology, the site would not be considered "Waters of the U.S.".

### 3.1.6.12. SITE 25

The site is located in a relatively flat lowland area with evidence of wetlands hydrology. The site is dominated by alkali heath, an FACW indicator species, and common woody pickleweed, an OBL indicator species; additionally, it passed the Dominance and Prevalence tests. Therefore the sampling point meets the criteria for hydrophytic vegetation. Soils at this site consist of silty clay. The soils between three and six inches exhibit prominent mottles meeting the indicator of "Redox Depressions" (Hydric Soils Indicator F8). Therefore, the sample site meets the hydric soils criterion for wetlands. Based on the presence of wetlands hydrology, hydrophytic vegetation, and hydric soils, the site would be considered a jurisdictional wetland.

# 3.1.6.13. SITE 31

This site is located in a relatively flat lowland area with evidence of wetlands hydrology. The site is dominated by common woody pickleweed, an OBL indicator species, with small amounts of alkali heath, an FACW indicator species; additionally, it passed the Dominance and Prevalence tests and therefore meets the criteria for hydrophytic vegetation. Soils at this site consist of clay. The soils from zero to five inches exhibit prominent mottles meeting the indicator of "Redox Depressions" (Hydric Soils Indicator F8). Therefore, the sample site meets the hydric soils criterion for wetlands. Based on the presence of wetlands hydrology, hydrophytic vegetation, and hydric soils, the site would be considered a jurisdictional wetland.

#### 3.1.6.14. SITE 32

This site is located in a relatively flat, poorly drained lowland area, with no evidence of wetlands hydrology. The site is dominated by black willow, common woody pickleweed, and western goldenrod (*Euthamia occidentalis*), which are all OBL indicator species; and mule fat and alkali heath, FACW indicator species, are also present. The site passed the Dominance and Prevalence tests and meets the criterion for hydrophytic vegetation. Soils at this site consist of clay. The soils exhibit faint mottles. Distinct or prominent mottles are required to identify as hydric soils under "Redox Depressions" (Hydric Soils Indicator F8), pursuant to the Arid West Supplement. Therefore, the sample site does not meet the hydric soils criterion for wetlands. Based on the absence of wetlands hydrology, the site would not be considered "Waters of the U.S.".

# 3.1.6.15. SITE 33

This site is located in a relatively flat, poorly drained lowland area with no evidence of wetlands hydrology. The site is dominated by alkali heath, an FACW indicator species, and common woody pickleweed, an OBL indicator species. The site passed the Dominance and Prevalence tests, and therefore meets the criteria for hydrophytic vegetation. Soils at this site consist of clay. The soils within one inch of the surface exhibit faint mottles. Distinct or prominent mottles are required to identify as hydric soils under "Redox Depressions" (Hydric Soils Indicator F8).

Therefore, the sample site does not meet the hydric soils criterion for wetlands. Based on the absence of wetlands hydrology, the site would not be considered "Waters of the U.S.".

#### 3.1.6.16. SITE 34

This site is located in a relatively flat, poorly drained lowland area with no evidence of wetlands hydrology. The site is a lowland area dominated by alkali heath, an FACW indicator species, and common woody pickleweed, an OBL indicator species. The site passed the Dominance and Prevalence tests, and therefore meets the criteria for hydrophytic vegetation. Soils at this sampling point consist of clay. The soils within the top two inches exhibit faint mottles. Distinct or prominent mottles are required to identify as hydric soils under "Redox Depressions" (Hydric Soils Indicator F8). Therefore, the sample site does not meet the hydric soils criterion for wetlands. Based on the absence of wetlands hydrology, the site would not be considered "Waters of the U.S.".

#### 3.1.6.17. SITE 35

This site is located in a relatively flat, poorly drained lowland area with no evidence of wetlands hydrology. The site is dominated by alkali heath, an FACW indicator species, and common woody pickleweed, an OBL indicator species. The site passed the Dominance and Prevalence tests, and therefore meets the criteria for hydrophytic vegetation. Soils at this sampling point consist of clay. The soils exhibit "Distinct" mottles at 14 to 16 inches in depth but do not meet the minimum thickness (i.e., 4 inches) within the maximum depth (i.e., 12 inches) pursuant to the Arid West Supplement. Therefore, the sample site does not meet the hydric soils criterion for wetlands. Based on the absence of wetlands hydrology, the site would not be considered "Waters of the U.S.".

#### 3.1.6.18. SITE 36

This site is located in a relatively flat, poorly drained lowland area with no evidence of wetlands hydrology. The site is dominated by alkali heath, an FACW indicator species, and common woody pickleweed, an OBL indicator species. The site passed the Dominance and Prevalence tests, and therefore meets the criteria for hydrophytic vegetation. Soils at this site consist of clay. The soils exhibit "Prominent" mottles at 12 to 16 inches in depth but do not occur within the maximum depth (maximum depth of 12 inches) pursuant to the Arid West Supplement. Therefore, the sample site does not meet the hydric soils criterion for wetlands. Based on the absence of wetlands hydrology, the site would not be considered "Waters of the U.S.".

#### 3.1.6.19. SITE 37

This site is located in a relatively flat, poorly drained lowland area with no evidence of wetlands hydrology. The site is dominated by mule fat, an FACW indicator species, alkali heath, an FACW indicator species, and common woody pickleweed, an OBL indicator species. The site passed the Dominance and Prevalence tests, and therefore meets the criteria for hydrophytic vegetation. Soils at this site consist of silty clay. The soils with the A Horizon exhibit prominent mottles within a gleyed matrix to a depth of six inches meeting the indicator of "Loamy Gleyed Matrix" (Hydric Soils Indicator F3). Therefore, the sample site meets the hydric soils criterion for wetlands. Based on the absence of wetlands hydrology, the site would not be considered "Waters of the U.S.".

# 3.1.6.20. SITE 45

This site is located in a relatively flat lowland area with no evidence of wetlands hydrology. This site is dominated by common woody pickleweed, an OBL indicator species, and alkali heath, an

FACW indicator species. The site passed the Dominance and Prevalence tests, and therefore meets the criteria for hydrophytic vegetation. Soils at this site consist of clay. The soils within the A Horizon exhibit prominent mottles and meet the indicator of "Depleted Matrix" (Hydric Soils Indicator F3). Therefore, the sample site meets the hydric soils criterion for wetlands. Based on the absence of wetlands hydrology, the site would not be considered "Waters of the U.S.".

# 3.1.6.21. SITE 48

The site is located in a relatively flat lowland area with no evidence of wetlands hydrology. The site is dominated by alkali heath, an FACW indicated species, with small patches of common woody pickleweed, an OBL indicator species. The site passed the Dominance and Prevalence tests and therefore meets the hydrophytic vegetation criteria. However, these species may be considered phreatophytes given the absence of wetlands hydrology. Soils at this sampling point consist of silty loam and exhibit occasional redox concentrations in thin laminations of less than one percent. Therefore, the sample site does not meet the hydric soils criterion for wetlands. Based on the absence of wetlands hydrology, the site would not be considered "Waters of the U.S.".

#### 3.1.6.22. SITE 49

The site is located within a depression with evidence of wetlands hydrology. The site is dominated by common woody pickleweed, an OBL indicator species; it also passed the Dominance and Prevalence tests. Therefore, Site 49 meets the criteria for hydrophytic vegetation. Soils at this site consist of silty loam that exhibits prominent mottles meeting the indicator of "Redox Depressions" (Hydric Soils Indicator F8). Therefore, the sample site meets the hydric soils criterion for wetlands. Based on the presence of hydrophytic vegetation and hydric soils and the assumption of wetlands hydrology, the site would be considered a jurisdictional wetland.

#### 3.1.7 NORTHEAST LOWLANDS

The northwest lowlands consist of closed depressions surrounded by earthen berms and dirt access roads.

# 3.1.7.1. SITE 8

The site is located in a relatively flat lowland area with no evidence of wetlands hydrology. The dominant vegetation within the site is black willow and common woody pickleweed, which are both OBL indicator species. The site passed the Dominance and Prevalence tests, and therefore meets the criteria for hydrophytic vegetation. However, these species may be considered phreatophytes given the absence of wetlands hydrology. Soils at this sampling point consist of silty clay. However, no evidence of hydric soils was observed. Therefore, this sampling point does not meet the hydric soils criterion for wetlands. Based on the absence of wetlands hydrology and hydric soils, the site would not be considered "Waters of the U.S.".

#### 3.1.7.2. SITE 9

The site is located within a relatively flat lowland area with no evidence of wetlands hydrology. The dominant vegetation within the site is black willow and common woody pickleweed, both OBL indicator species; cheeseweed (*Malva parviflora*), a UPL species, is also present. The site passed the Dominance and Prevalence tests, and therefore meets the hydrophytic vegetation criteria. However, these species may be considered phreatophytes given the absence of wetlands hydrology. Soils at this site consist of clay and silty clay. Soils exhibit prominent mottles to a depth of four inches, meeting the indicator of "Redox Dark Surface" (Hydric Soils

Indicator F6). Therefore, the sample site meets the hydric soils criterion for wetlands. Based on the absence of wetlands hydrology the site would not be considered "Waters of the U.S.".

#### 3.1.7.3. SITE 10

The site is located in a relatively flat lowland area with no evidence of wetlands hydrology. The dominant vegetation within the site includes poison hemlock and alkali heath, which are both FACW indicator species; common woody pickleweed and alkali heliotrope, OBL indicator species, and cheeseweed, a UPL species, are also present. The site passed the Dominance and Prevalence tests, and therefore meets the hydrophytic vegetation criteria. Soils at this site consist of clay and silt and exhibit prominent mottles to a depth of five inches, meeting the indicator of "Redox Dark Surface" (Hydric Soils Indicator F6). Therefore, the sample site meets the hydric soils criterion for wetlands. Based on the absence of hydrology, the site would not be considered "Waters of the U.S.".

#### 3.1.7.4. SITE 20

The site is located in a relatively flat lowland area with no evidence of wetlands hydrology. The site is dominated by arroyo willow and mule fat, FACW indicator species, alkali mallow (*Malvella leprosa*), an FAC species, and alkali heliotrope, an OBL indicator species; it also passed the Dominance and Prevalence tests for hydrophytic vegetation. Therefore, the site meets the criteria for hydrophytic vegetation. However, these species may be considered phreatophytes given the absence of wetlands hydrology. Soils at this site consist of clay with a restrictive layer that was encountered at six inches. The soils exhibit distinct mottles between two and six inches, meeting the indicator of "Redox Depressions" (Hydric Soils Indicator F8). Therefore, the sample site meets the hydric soils criterion for wetlands. Based on the absence of wetlands hydrology, the site would not be considered "Waters of the U.S.".

#### 3.1.7.5. SITE 26

This site is located in a relatively flat lowland area with evidence of wetlands hydrology. The site is dominated by mule fat and rush (*Juncus* sp.), FACW indicator species, and heliotrope, an OBL indicator species. The site passed the Dominance and Prevalence tests and therefore meets the criteria for hydrophytic vegetation. Soils at this site consist of silty clay. The soils to ten inches exhibit prominent mottles meeting the indicator of "Redox Depressions" (Hydric Soils Indicator F8). Therefore, the sample site meets the hydric soils criterion for wetlands. Based on the assumed presence of wetlands hydrology, hydrophytic vegetation and hydric soils, the site would be considered a jurisdictional wetland.

#### 3.1.7.6. SITE 27

This site is located in a relatively flat lowland area with evidence of wetlands hydrology. The site is dominated by black willow, an OBL indicator species, and mule fat, an FACW indicator species. The site also contains small amounts of Sellow's pampas grass, a UPL indicator species. The site passed the Dominance and Prevalence tests and therefore meets the criteria for hydrophytic vegetation. Soils at this site consist of silty clay. The soils exhibit distinct mottles meeting the indicator of "Redox Depressions" (Hydric Soils Indicator F8). Therefore, the sample site meets the hydric soils criterion for wetlands. Based on the presence of wetlands hydrology, hydrophytic vegetation, and hydric soils, the site would be considered a jurisdictional wetland.

# 3.1.7.7. SITE 28

This site is a lowland area with no evidence of wetlands hydrology. The site is dominated by black willow, an OBL indicator species, and Sellow's pampas grass, a UPL species with lesser

amounts of arroyo willow, an FACW indicator species. The site passed the Prevalence test and meets the criteria for hydrophytic vegetation. Soils at this site consist of organic, clay, and silty clay. However, these species may be considered phreatophytes given the absence of wetlands hydrology. The soils between four and seven inches exhibit distinct mottles, meeting the indicator of "Redox Depressions" (Hydric Soils Indicator F8). Therefore, the sample site meets the hydric soils criterion for wetlands. Based on the absence of wetlands hydrology, the site would be not considered "Waters of the U.S.".

#### 3.1.7.8. SITE 29

This site is located in a relatively flat lowland area with no evidence of wetlands hydrology. The site contains saltgrass (*Distichlis spicata*), alkali heath, and mule fat, which are all FACW indicator species; it also contains alkali mallow and five-hook bassia (*Bassia hyssopifolia*), which are FAC species, and alkali heliotrope, which is an OBL species. The site passed the Dominance and Prevalence tests and therefore meets the criteria for hydrophytic vegetation. However, these species may be considered phreatophytes given the absence of wetlands hydrology. Soils at this sampling point consist of clay with a restrictive layer at 13 inches. No hydric soils were encountered. Therefore, the sample site does not meet the hydric soils criterion for wetlands. Based on the absence of wetlands hydrology, the site would be not considered "Waters of the U.S.".

#### 3.1.7.9. SITE 30

This site is located in a relatively flat lowland area with no evidence of wetlands hydrology. The site is dominated by black willow, an OBL indicator species. The site passed the Dominance and Prevalence tests and therefore meets the criteria for hydrophytic vegetation. Soils at this site consist of clay. The soils to eight inches exhibit distinct mottles, meeting the indicator of "Redox Depressions" (Hydric Soils Indicator F8). Therefore, the sample site meets the hydric soils criterion for wetlands. Based on the absence of wetlands hydrology, the site would be not considered "Waters of the U.S.".

# 3.1.7.10. SITE 38

This site is located in a relatively flat lowland area with no evidence of wetlands hydrology. The site is dominated by common woody pickleweed, an OBL indicator species. The site passed the Dominance and Prevalence tests and therefore meets the criteria for hydrophytic vegetation. Soils at this site consist of silty clay. The soils between 16 and 18 inches exhibit prominent mottles and below 18 inches exhibit a gleyed matrix; however, these soils do not meet the minimum thickness (i.e., 4 inches) within the maximum depth (i.e., 12 inches) pursuant to the Arid West Supplement. Therefore, the sample site does not meet the hydric soils criterion for wetlands. Based on the absence of wetlands hydrology, the site would not be considered "Waters of the U.S.".

#### 3.1.7.11. SITE 39

This site is located in a relatively flat lowland area with evidence of wetlands hydrology. The site is dominated by common woody pickleweed and saltwort (*Batis maritima*), which are both OBL indicator species. The site passed the Dominance and Prevalence tests and therefore meets the criteria for hydrophytic vegetation. Soils at this sampling point consist of silty clay. The soils at a depth of 18 inches exhibit a gleyed matrix but do not meet the minimum thickness (i.e., 4 inches) within the maximum depth (i.e., 12 inches) pursuant to the Arid West Supplement. Therefore, the sample site does not meet the hydric soils criterion for wetlands. Based on the presence wetlands hydrology and hydrophytic vegetation, the site would be considered "Waters of the U.S.".

#### 3.1.7.12. SITE 40

This site is located in a relatively flat lowland area with evidence of wetlands hydrology. The site is dominated by common woody pickleweed, an OBL indicator species. The site passed the Dominance and Prevalence tests and therefore meets the criteria for hydrophytic vegetation. Soils at this site consist of clay. The soils from six to eight inches exhibit "Prominent" mottles but do not meet the maximum depth (i.e., six inches) pursuant to the Arid West Supplement. Therefore, the sample site does not meet the hydric soils criterion for wetlands. Based on the presence wetlands hydrology and hydrophytic vegetation, the site would be considered "Waters of the U.S.".

#### 3.1.7.13. SITE 44

This site is located in a relatively flat lowland area with no evidence of wetlands hydrology. This site is dominated by black willow, an OBL indicator species, mule fat, an FACW indicator species, and Sellow's pampas grass, a UPL species. The site passed the Dominance and Prevalence tests and therefore meets the criteria for hydrophytic vegetation. Soils at this sampling point consist of clay. No evidence of hydric soils was observed. Based on the absence of wetlands hydrology, the site would not be considered "Waters of the U.S.".

#### 3.1.8 SOUTHERN LOWLANDS

The southern lowlands are located in a relatively flat area subject to tidal influence.

#### 3.1.8.1. SITE 41

The site is dominated by common woody pickleweed, an FACW indicator species; saltwort (*Batis maritima*) and alkali heath, both OBL indicator species, are also present. The site passed the Dominance and Prevalence tests and therefore meets the criteria for hydrophytic vegetation. Soils at this site consist of sandy clay. The soils exhibit prominent mottles, meeting the indicator of "Redox Depressions" (Hydric Soils Indicator F8). Therefore, the sample site meets the hydric soils criterion for wetlands. Surface water and other indicators of wetlands hydrology are present at this sampling point. Based on the presence of wetlands hydrology, hydrophytic vegetation, and hydric soils, the site would be considered a jurisdictional wetland.

#### 3.1.8.2. SITE 42

The site is dominated by common woody pickleweed and saltwort (*Batis maritima*), which is an OBL indicator species; alkali heath, an FACW indicator species, is also present. The site passed the Dominance and Prevalence tests and therefore meets the criteria for hydrophytic vegetation. Soils at this site consist of sandy clay. The soils within 17 inches of the surface exhibit prominent mottles, meeting the indicator of "Redox Depressions" (Hydric Soils Indicator F8). Therefore, the sample site meets the hydric soils criterion for wetlands. Surface water and other indicators of wetlands hydrology are present. Based on the presence of wetlands hydrology, hydrophytic vegetation, and hydric soils, the site would be considered a jurisdictional wetland.

#### 3.1.8.3. SITE 43

The site is dominated by common woody pickleweed and saltwort, which are both OBL indicator species. The site passed the Dominance and Prevalence tests and therefore meets the criteria for hydrophytic vegetation. It was not possible to dig a soil sample pit because of the depression was full of water. Therefore, the soils at this site are assumed to meet the hydric soils criterion

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for wetlands. Based on the presence of wetlands hydrology, hydrophytic vegetation, and assumed presence of hydric soils, the site would be considered a jurisdictional wetland.

# 3.1.9 VERNAL POOLS

#### 3.1.9.1. SITE 15

This upland area is a depression located on the mesa with evidence of wetlands hydrology (i.e., it contains Riverside fairy shrimp, which is a federally listed Endangered species [Wetlands hydrology Indicator B13]. Additionally, the site is dominated by saltgrass (*Distichlis spicata*), an FACW indicator species. The site passed the Dominance and Prevalence tests and therefore meets the hydrophytic vegetation criteria. Soils at this site consist of silty clay and exhibit prominent mottles, meeting the indicators of "Redox Depressions" (Hydric Soils Indicator F8) and vernal pools (Hydric Soils Indicator F9). Therefore, the sample site meets the hydric soils criterion for wetlands. Based on the presence of hydrophytic vegetation and hydric soils and the wetlands hydrology, the site would be considered a jurisdictional wetland.

#### 3.1.9.2. SITE 16

This upland site is a depression with evidence of wetlands hydrology (i.e., it contains Riverside fairy shrimp, which is a federally listed Endangered species (Wetlands hydrology Indicator B13). The site is dominated by alkali heath, an FACW indicator species, and it passed the Dominance and Prevalence tests. Therefore, the site meets the criteria for hydrophytic vegetation. Soils at this site consist of silty clay and exhibit prominent mottles to a depth of two inches, meeting the indicators of "Redox Depressions" (Hydric Soils Indicator F8) and vernal pools (Hydric Soils Indicator F9). Therefore, the sample site meets the hydric soils criterion for wetlands. Based on the presence of hydrophytic vegetation, hydric soils, and wetlands hydrology, the site would be considered a jurisdictional wetland.

#### 3.1.10 SOUTHERN BOUNDARY UPLANDS

This site is located in the southeastern portion of the Project site immediately adjacent to West Coast Highway.

#### 3.1.10.1. SITE 46

Evidence of wetlands hydrology was identified. Therefore, the site meets the criteria for wetlands hydrology. The site is dominated by saltbush, an FACW indicator species. The site also contains sweet cover (*Melitotus* sp.), an FAC indicator species, and hottentot fig (*Carpobrotus edulis*), a UPL indicator species. The site passed the Dominance and Prevalence tests and therefore meets the criteria for hydrophytic vegetation. The soils at this sampling site consist of sand and sandy clay. This area had previously been documented to have a depleted matrix (F3) and redox depressions (F8) (GLA 2008); however, during the June 25, 2009, site visit, the redox features were not abundant enough to qualify for indicator F8. This area is a depressional landscape feature that is seasonally ponded. Given that this is a problematic soil situation and that previous surveys had documented indicators of hydric soil, hydric soil may be considered present as long as hydrophytic vegetation and wetlands hydrology are also present. Based on the presence of wetlands hydrology, hydrophytic vegetation, and assumed presence of hydric soils, the site would be considered a jurisdictional wetland.

# 3.2 VEGETATION

Except for Sites 1 and 18, all other sites contain a dominance and/or prevalence of hydrophytic vegetation. Portions of Drainages A, B, C, the Northern Boundary Areas, and the Lowland Areas immediately adjacent to the mesa areas were dominated by black willow, mule fat, and arroyo willow, while the remainder of the Lowland Areas were dominated by common woody pickleweed and alkali heath.

# 3.3 SOILS

Sites 2, 3, 4, 7, 9, 10, 13, 14, 15, 16, 20, 22, 23, 24, 25, 26, 27, 28, 30, 31, 37, 41, 42, 43, 45, 46, and 48 meet the criteria for hydric soils. The remaining sites either do not contain hydric soils or contain redox concentrations that do not meet the thickness or depth requirements of the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region.

# 3.4 HYDROLOGY

As previously noted, the Project site includes a gently sloping coastal plain forming the western edge of Newport Mesa over the eastern portion of the Project site (Uplands); bluffs along the western edge of the mesa, drainages and arroyos; and Lowlands that were historically tidal marsh associated with Semeniuk Slough. The lowlands are now separated from Semeniuk Slough by a levee and have mostly lost a direct tidal influence. Sites 1, 2, 3, 4, 17, 18, 19, 25, 26, 27, 31, 39, 40, 41, 42, 43, 46, 47, and 49 meet the criterion for wetlands hydrology as either a drainage course or a depression with visible hydrologic activity. Sites 15 and 16 contain aquatic invertebrates (Riverside fairy shrimp), a primary indicator of wetlands hydrology.

#### SECTION 4.0 JURISDICTIONAL DELINEATION

# 4.1 <u>U.S. ARMY CORPS OF ENGINEERS DETERMINATION</u>

**Wetlands Determination:** As previously described in Section 2.0 of this report, an area must exhibit all three wetland parameters, as described in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008b) and the *1987 Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) in order to be considered a jurisdictional wetland.

The portions of the Project site exhibiting hydrophytic vegetation, wetlands hydrology, and hydric soils (Table 1) are considered wetland "Waters of the U.S.". A total of approximately 53.16 acres of wetlands are present on the Project site (Exhibit 6A; Table 2). Based on the current Project design, a total of 0.26 acre of wetland would be permanently impacted and 3.93 acres would be temporarily impacted by the proposed Project (Exhibit 6A; Table 2).

"Waters of the U.S." (Non-Wetland) Determination: Portions of the Project site contain evidence of OHWM sufficient to be considered "Waters of the U.S.". Based on field observations and data collection, approximately 0.61 acre of non-wetland "Waters of the U.S." occurs on the Project site (Exhibit 6A; Table 2). Based on the current design plans, a total of 0.06 acre of non-wetland "Waters of the U.S." would be permanently impacted by the proposed Project (Exhibit 6A; Table 2).

# TABLE 2 U.S. ARMY CORPS OF ENGINEERS JURISDICTIONAL "WATERS OF THE U.S."

Area	Existing (Acres)	Permanent Impacts (Acres)	Temporary Impacts (Acres)
Drainage A			
Wetland	0.02	0.02	0.00
Open Water	0.00	0.00	0.00
Other "Waters of the U.S."	0.05	0.01	0.00
Drainage B			
Wetland	0.03	0.03	0.00
Open Water	0.00	0.00	0.00
Other "Waters of the U.S."	0.10	0.02	0.00
Drainage C			
Wetland	0.00	0.00	0.00
Open Water	0.00	0.00	0.00
Other "Waters of the U.S."	0.46	0.03	0.00
Vernal Pools			
Wetland	0.33	0.00	0.06
Open Water	0.00	0.00	0.00
Other "Waters of the U.S."	0.00	0.00	0.00
Other Areas			
Wetland	52.78	0.21	3.87
Open Water	0.00	0.00	0.00
Other "Waters of the U.S."	0.00	0.00	0.00
Total	53.77	0.32	3.93

# 4.2 CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD DETERMINATION

The RWQCB jurisdictional boundaries are defined as those determined for the USACE under "Waters of the U.S.". However, the RWQCB takes jurisdiction over both connected and isolated waters. Approximately 53.77 acres under the jurisdiction of the RWQCB occurs on the Project site (Exhibit 6A, Table 2). Based on current design plans, a total of 0.32 acre would be permanently impacted and 3.93 acres would be temporarily impacted by the proposed Project (Exhibit 6A: Table 2).

#### 4.3 CALIFORNIA DEPARTMENT OF FISH AND GAME DETERMINATION

The CDFG jurisdiction within the drainages extends from the top of bank to the top of bank or to the outer drip line in areas containing riparian vegetation. Drainages A, B, C, and D; the area along the northern boundary of the Project site; and a concrete-lined V-ditch in the southeastern corner of the Project site contain bed and bank with riparian vegetation and are considered under CDFG jurisdiction. Based on the field observations and data collection, a total of 12.08 acres of resources under the jurisdiction of CDFG pursuant to the Section 1602 of the California Fish and Game Code are located within the boundaries of the Project site (Exhibit 6B; Table 3). Based on the current design plans, a total of 1.87 acres would be permanently impacted and 0.05 acre would be temporarily impacted by the proposed Project (Exhibit 6B; Table 3).



# TABLE 3 CALIFORNIA DEPARTMENT OF FISH AND GAME JURISDICTIONAL RESOURCES

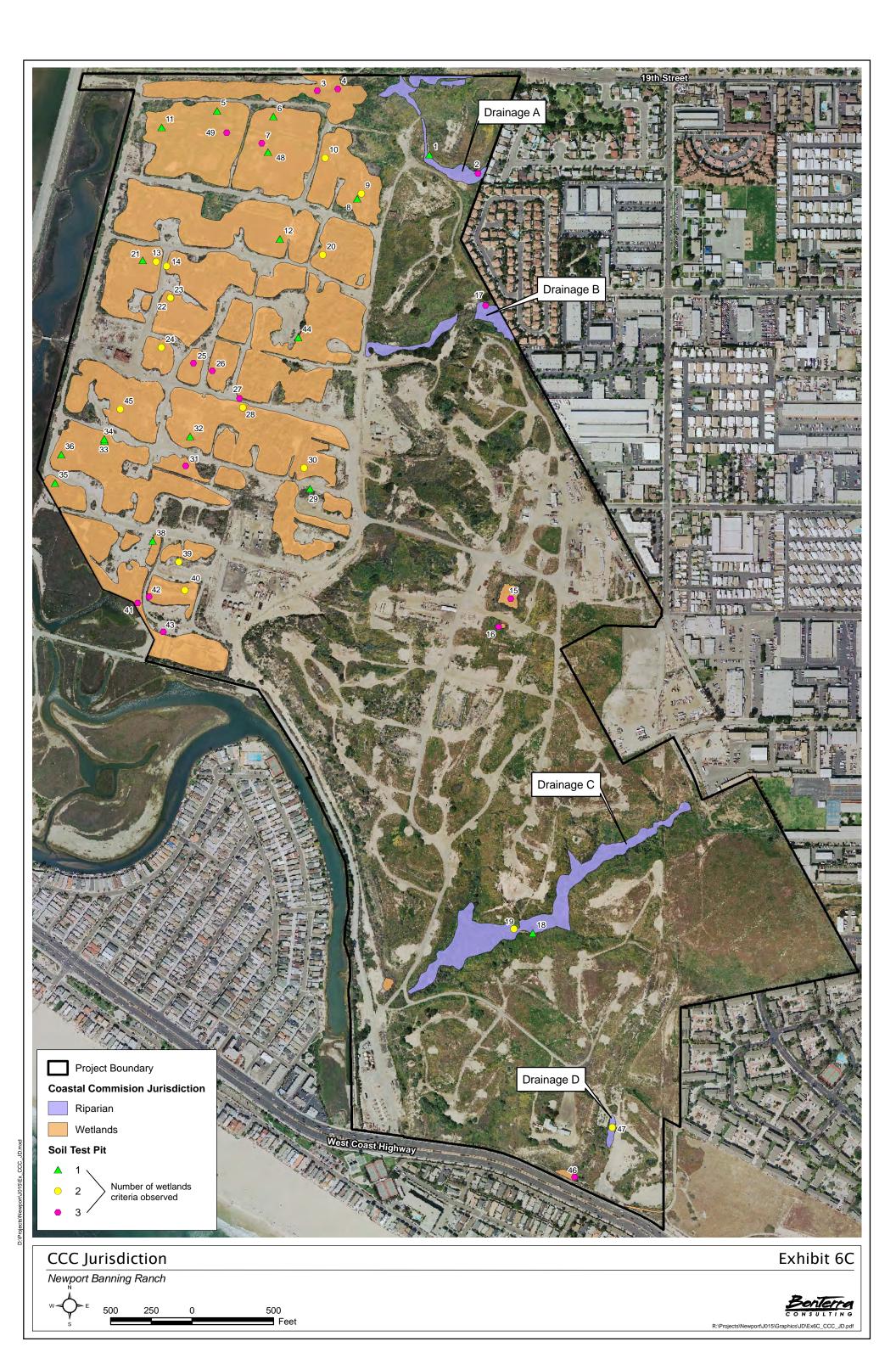
Area	Existing (Acres)	Permanent Impacts (Acres)	Temporary Impacts (Acres)				
Drainage A	0.67	0.30	0.00				
Drainage B	1.40*	0.69	0.00				
Drainage C	4.91	0.37	0.00				
Drainage D	0.45	0.32	0.00				
Other Areas	4.65	0.19	0.05				
Total	12.08	1.87	0.05				
* Includes 0.21 acre of Arundo vegetation.							

# 4.4 CALIFORNIA COASTAL COMMISSION DETERMINATION

Based on field observations and data collection, approximately 84.65 acres of resources under the jurisdiction of the CCC are located within the boundaries of the Project site (Exhibit 6C; Table 4). Based on the current design plans, a total of 2.52 acres would be permanently impacted and 6.48 acres would be temporarily impacted by the proposed Project (Exhibit 6C; Table 4).

TABLE 4
CALIFORNIA COASTAL COMMISSION
JURISDICTIONAL RESOURCES

•	Existing	Permanent Impacts	Temporary Impacts	Total Impacts
Area	(Acres)	(Acres)	(Acres)	(Acres)
Drainage A				
Riparian	0.67	0.30	0.00	0.30
Drainage B				
Riparian	1.19	0.69	0.00	0.69
Drainage C				
Riparian	4.82	0.28	0.00	0.28
Drainage D				
Riparian	0.17	0.05	0.00	0.05
Vernal Pools				
Wetland	0.33	0.00	0.06	0.06
Other Areas				
Riparian	0.79	0.17	0.00	0.17
Wetland	76.68	1.03	6.42	7.45
Total	84.65	2.52	6.48	9.00



#### SECTION 5.0 CONCLUSION OF REGULATORY APPROVAL PROCESS

# 5.1 REGULATORY PERMIT REQUIREMENTS

The following is a general summary of the various permits, agreements, and certifications required prior to initiation of Project activities that would involve impacts to areas under the jurisdiction of the USACE, the RWQCB, the CDFG, and the CCC. A summary of the regulatory permit requirements is as follows:

- USACE Section 404 Permit and Section 10 Rivers and Harbors Permit,
- RWQCB Section 401 Water Quality Certification,
- CDFG Section 1602 Streambed Alteration Agreement,
- CCC Coastal Development Permit.

Permit authorizations from the USACE and the RWQCB are required prior to the initiation of any construction-related project activity for a development proposal that involves impacts to drainages, streams, or wetlands within and/or immediately adjacent to a project site through activities including filling; stockpiling; converting to a storm drain; modifying an existing storm drain or channel; creating a channel; stabilizing a bank; modifying road or utility transmission line crossings; or completing other modifications of an existing drainage, stream, or wetland. Also, both permanent and temporary impacts to jurisdictional resources are regulated activities that require permit authorization from these agencies. There are two primary permits that the USACE routinely issues. These include a "Nationwide Permit" (NWP) and an "Individual Permit" (IP). The NWP is a type of general permit that authorizes certain specified activities nationwide. An IP is issued following an individual evaluation and a determination that the proposed activity is not contrary to the public interest. Standard permits and letters of permission are types of individual permits. The specific permit that is required depends on the project description and extent of jurisdictional impacts.

A USACE Section 404 permit would likely be issued subject to the receipt of the RWQCB's Section 401 Water Quality Certification. The USACE refers to this conditional approval as "Denial Without Prejudice". It should also be noted that USACE and RWQCB applications can be processed concurrently. Also, the RWQCB application submittal would not be deemed complete until the application fees have been paid and the agency is provided with a certified California Environmental Quality Act (CEQA) document and a signed copy of the receipt of County Clerk filing fees for the Notice of Determination (NOD). The CDFG fees increase annually.

A detailed explanation of the regulatory permitting requirements for impacts to jurisdictional resources is provided in Sections 5.2 through 5.4.

# 5.2 U.S. ARMY CORPS OF ENGINEERS

The acreage of loss of "Waters of the U.S." is a threshold measurement of the impact to jurisdictional waters for determining whether a project may qualify for an NWP or must be authorized under an IP. Regulatory authorization in the form of an IP would be required from the USACE Regulatory Branch, Los Angeles District Office if any permanent, construction-related activity results in a discharge of material into USACE jurisdictional "Waters of the U.S." that are greater than 0.2 hectare (0.5 acre) or 91 linear meters (300 linear feet). Permanent impacts up to 0.5 acre and less than 300 linear feet may be authorized under the provisions of the NWP. "Waters of the U.S." temporarily filled, flooded, excavated, or drained but restored to pre-construction contours and elevations after construction are not included in the measurement of loss of "Waters of the U.S.".

On January 31, 2007, the USACE published a memorandum clarifying the Interim Guidance for amendments to the National Historic Preservation Act and the Advisory Council on Historic Preservation (ACHP) implementing regulations. The Interim Guidance applies to all Department of the Army requests for authorization/verification, including individual permits (standard permits and letters of permission) and all Regional General Permits (RGP) and NWPs. The State or Tribal Historic Preservation Officer (SHPO/THPO) has 30 days to respond to a determination that a proposed activity, which otherwise qualifies for an NWP or RGP, has no effect or no adverse effect on a historic property. If the SHPO/THPO does not respond within 30 days of notification, the District Office may proceed with the verification. If the SHPO/THPO disagrees with the District Office's determination, the District Office may work with the SHPO/THPO to resolve the disagreement or request an opinion from the ACHP. The USACE will submit the draft jurisdictional delineation to the SHPO/THPO for review prior to initiating the actual regulatory process.

The USACE Regulatory Branch Offices would coordinate with the USEPA Regional Office and Corps Headquarters (HQ), as outlined in its January 28, 2008, memorandum entitled the "Process for Coordinating Jurisdictional Delineations Conducted Pursuant to Section 404 of the Clean Water Act in Light of the *Rapanos* and *SWANCC* Supreme Court Decisions". The guidance provided in this memorandum is quoted as follows:

- 1. Effective immediately, unless and until paragraph 5(b) of the June 5, 2007, Rapanos guidance coordination memorandum is modified by a joint memorandum from Army and EPA, we will follow these procedures:
  - a. For jurisdictional determinations involving significant nexus determinations, Corps districts will send copies of draft jurisdictional delineations via e-mail to appropriate EPA regional offices. The EPA regional office will have 15 calendar days to decide whether to take the draft jurisdictional delineation as a special case under the January 19, 1989, "Memorandum of Agreement Between the Department of the Army and the USEPA Concerning the Determination of the Section 404 Program and the Application of the Exceptions under Section 404(f) of the Clean Water Act." If the EPA regional office does not respond to the district within 15 days, the district will finalize the jurisdictional determination.
  - b. For jurisdictional determinations involving isolated waters determinations, the agencies will continue to follow the procedure in paragraph 5(b) of June 5, 2007, coordination memorandum, until a new coordination memorandum is signed by Army and EPA. (In accordance with paragraph 6 of the June 5, 2007, coordination memorandum, this is a 21-day timeline that can only be changed through a joint memorandum between agencies).
- Approved jurisdictional determinations are not required for non-reporting NWPs, unless
  the project proponent specifically requests an approved jurisdictional determination. For
  proposed activities that may qualify for authorization under a State Programmatic
  General Permit (SPGP) or RGP, an approved jurisdictional determination is not required
  unless requested by the project proponent.
- The Army will continue to work with EPA to resolve the jurisdictional determinations involving significant nexus and isolated waters determinations that are currently in the elevation process.
- 4. Districts will continue posting completed Approved Jurisdictional Determination Forms on their web pages.

Pursuant to USACE Regulatory Guidance Letter 08-02 (June 26, 2008) the USACE can issue two types of jurisdictional determinations to implement Section 404 of the CWA: Approved Jurisdictional Determinations and Preliminary Jurisdictional Determinations. An Approved Jurisdictional Determination is an official USACE determination that jurisdictional "Waters of the U.S.", "Navigable Waters of the U.S.", or both are either present or absent on a site. An Approved Jurisdictional Determination also identifies the precise limits of jurisdictional waters on a project site.

The USACE provides an Approved Jurisdictional Determination when (1) an Applicant requests an official jurisdictional determination; (2) an Applicant contests jurisdiction over a particular water body or wetland; or (3) when the USACE determines that jurisdiction does not exist over a particular water body or wetland. The Approved Jurisdictional Determination then becomes the USACE's official determination that can be relied upon over a five-year period to request regulatory authorization as part of the permit application.

In addition, an Applicant may decline to request an Approved Jurisdictional Determination and instead obtain a USACE IP or General Permit authorization based on a preliminary Jurisdictional Determination or, in certain circumstances (e.g., authorizations by non-reporting nationwide general permits), no Jurisdictional Determination.

Preliminary Jurisdictional Determinations are non-binding, advisory in nature, and may not be appealed. They indicate that there may be "Waters of the U.S." on a project site. An Applicant may elect to use a Preliminary Jurisdictional Determination to voluntarily waive or set aside questions regarding CWA jurisdiction over a site, usually in the interest of allowing the Applicant to move ahead expeditiously with the permitting process. The USACE would determine what form of Jurisdictional Determination is appropriate for a particular project site.

Based on the current conditions, a total of approximately 0.32 acre of "Waters of the U.S." would be permanently impacted and 3.93 acres would be temporarily impacted by the proposed Project. Please note that if the drainages are determined by the USACE to be jurisdictional and would be impacted by Project implementation, the Applicant would be required to obtain a CWA Section 401 Water Quality Certification from the RWQCB before the USACE would issue the Section 404 permit. If the USACE determines that the impacted drainages are non-jurisdictional, the Applicant would be required to obtain RWQCB authorization under the provisions of a WDR.

# 5.3 REGIONAL WATER QUALITY CONTROL BOARD

As noted above, issuance of the USACE Section 404 permit would be contingent upon the approval of a Section 401 Water Quality Certification from the Santa Ana RWQCB. Also, the RWQCB requires certification of a project's CEQA documentation before it will approve the Section 401 Water Quality Certification or WDR. The RWQCB, as a responsible agency, would use the Project's CEQA document to satisfy its own CEQA compliance requirements.

Upon acceptance of a complete permit application, the RWQCB has between 60 days and 1 year to make a decision regarding the permit request. That is, USACE regulations indicate that the RWQCB has 60 days from the date of receipt of a completed application that requests water quality certification to make a decision (33 CFR §325.2[b][1][ii]). The USACE District Engineer may specify a longer time (up to one year) or shorter time based on his/her determination of a reasonable processing time (33 CFR §325.2[b][1][ii]). If the RWQCB determines that more than 60 days is needed to process the request, it has the option of requesting additional time from the USACE. Also, the RWQCB has the option of issuing a "Denial Without Prejudice", which does not mean that the request is denied, but that it requires more information in order to make a decision. This effectively stops the processing clock until this information is provided.

The RWQCB is required under *California Code of Regulations* (CCR) Title 23, Section 3858(a) to have a "minimum 21 day public comment period" before any action can be taken on the Section 401 application. This period closes when the RWQCB acts on the application. Since projects often change or are revised during the Section 401 permit process, the comment period can remain open. The public comment period starts as soon as an application has been received. Generally, the RWQCB Section 401, USACE Section 404, and CDFG Section 1602 permit applications are submitted at the same time. However, the RWQCB Section 401 Water Quality Certifications may take longer to process.

The RWQCB requires the Applicant to address urban storm water runoff during and after construction in the form of Best Management Practices (BMPs). These BMPs are intended to address the treatment of pollutants carried by storm water runoff and are required in all complete applications. Please note that the application would also require the payment of a Section 401 Application Fee, which would be based the amount of project impacts.

# 5.4 CALIFORNIA DEPARTMENT OF FISH AND GAME

The CDFG regulates all work (including initial construction and ongoing operation and maintenance) that may substantially divert or obstruct the natural flow of or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake through its Streambed Alteration Program. An Applicant must enter into an agreement with the CDFG to ensure no net loss of wetland values and acreages.

As previously indicated, the extent of the CDFG jurisdiction in the Project site has been identified. Based on the current design plans, approximately 1.87 acres within the CDFG's jurisdiction would be permanently impacted and 0.05 acre would be temporarily impacted by the proposed Project. Impacts resulting from Project implementation would require a Section 1602 SAA. The SAA must address the initial construction and long-term operation and maintenance of any structures within areas identified as "Waters of the State" (such as a culvert or desilting basin) that may require periodic maintenance if these are included in the Project design.

Prior to construction, a notification (SAA application) must be submitted to the CDFG that describes any proposed streambed alteration requested as a result of the proposed Project. In addition to the formal application materials and the fee, a copy of the appropriate environmental document (e.g., EIR) should be included in the submittal consistent with CEQA requirements. The CDFG would prepare a draft SAA, which will include standard measures to protect sensitive plant and wildlife resources during Project construction and during ongoing operation and maintenance of any project element that occurs within a CDFG jurisdictional area.

If an SAA (agreement) is required, the CDFG may want to conduct an on-site inspection. The CDFG then prepares a draft agreement, which would include measures to protect fish and wildlife resources that would be directly or indirectly impacted by project construction. The draft agreement will be transmitted to the Applicant within 60 calendar days of the CDFG's determination that the notification is complete. However, the 60-day timeframe may not apply to long-range agreements.

The Applicant has 30 calendar days to notify the CDFG concerning the acceptability of the proposed terms, conditions, and measures. If the Applicant agrees with these terms, conditions, and measures, the agreement must be signed and returned to the CDFG. The agreement becomes final once the CDFG executes it and an SAA is issued. Please note that all application fees must be paid and the final certified CEQA documentation must be provided prior to the CDFG's execution of the agreement.

If the CDFG does not respond in writing concerning the completeness of the Notification within 30 days of its submittal, the Notification automatically becomes complete. If the CDFG does not submit a draft SAA to the Applicant within 60 days of the determination of a completed Notification package, the CDFG will issue a letter that either (1) identifies the final date to transmit a draft SAA or (2) indicates that an SAA was not required. The CDFG will also indicate that it was unable to meet this date and that, by law, the Applicant must complete the project without an SAA and must comply with all avoidance, minimization, and mitigation measures described in the submitted Notification package.

# 5.5 CALIFORNIA COASTAL COMMISSION

Development within the coastal zone may not commence until a Coastal Development Permit (CDP) has been issued by either the CCC or a local government that has a CCC-certified Local Coastal Program. After certification of a Local Coastal Program, CDP authority is delegated to the appropriate local government, but the CCC retains original permit jurisdiction over certain specified lands (such as tidelands and public trust lands). The CCC also has appellate authority over development approved by local governments in specified geographic areas and in certain other developments.

Based on the current design plans, a total of approximately 2.52 acres would be permanently impacted and 6.48 acres would be temporarily impacted by the proposed Project.

The City's certified Coastal Land Use Plan (CLUP) identifies the Project site as a Deferred Certification Area (DCA) due to the fact that a project plan is necessary in order to address land use, public access, and the protection of coastal resources. The City's CLUP was first approved by the CCC on October 13, 2005, and was adopted on December 13, 2005. The CLUP was amended by the CCC on February 5, 2009, and adopted again on July 14, 2009. The City is preparing the Implementation Program. Because the City does not have an adopted Implementation Actions Program for its Local Coastal Program, it does not have the ability to issue CDPs; all CDPs for new development in the City are processed by the California Coastal Commission.

The City of Newport Beach does not have a certified LCP, and therefore, does not have the authority to issue coastal development permits (CDPs). The City must review all development projects located within the LCP area for consistency with the City's General Plan, Coastal Land Use Plan and Zoning regulations before the project applicant can file for a Coastal Development Permit with the CCC. The CCC has 30 days to determine if the CDP application is complete and must take an action on the project within 180 days of a complete application.

#### 5.6 RECOMMENDATIONS

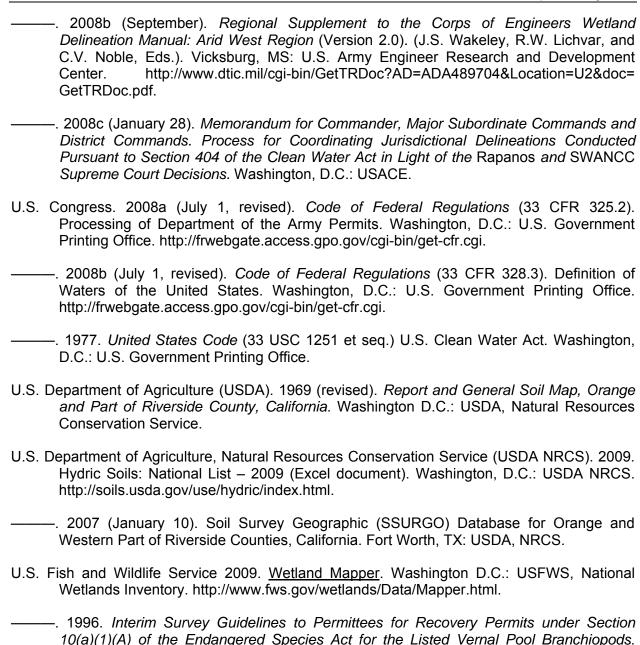
GLA conducted a pre-application meeting with the USACE on July 3, 2008; prepared and submitted a Jurisdictional Delineation Report for this project to the USACE on March, 5, 2009; and received a verification letter from the USACE on June 3, 2009, concurring with GLA's Jurisdictional Delineation Report submitted to the USACE on March 5, 2009. BonTerra Consulting also conducted an independent jurisdictional delineation and prepared a report on behalf of the City of Newport Beach. With the concurrence of the City, BonTerra Consulting met with GLA representatives to perform a comparative analysis. BonTerra Consulting and GLA also performed a field review of all the areas containing different conclusions with respect to jurisdictional wetlands, non-wetland "Waters of the U.S." or non-jurisdictional resources. Based on field verifications and information sharing, both jurisdictional delineations were revised based on mutually agreed upon observations.

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In conclusion, the BonTerra Consulting and GLA jurisdictional delineations were conducted in compliance with the requirements of State and federal regulations and represent each firm's best professional judgment concerning the type and extent of State and federal jurisdictional resources within the Project site. GLA's multi-year survey effort and more extensive hydrology information based on actual observations during and immediately following seasonal rain storms would represent the most comprehensive documentation of the site's jurisdictional resources.

#### SECTION 6.0 REFERENCES

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Washington, D.C.: USFWS.

# ATTACHMENT A CONCEPTUAL MASTER LAND USE PLAN

Source: FORMA 2011

#### Conceptual Master Land Use Plan

#### Attachment A

Newport Banning Ranch



### ATTACHMENT B SITE PHOTOGRAPHS



Overview of Drainage A.



Overview of Drainage C.



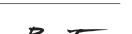
Overview of Drainage B.



Soil Test Pit #3 at the northern edge of the project site.

Site Photographs

Newport Banning Ranch



Attachment B



Soil Test Pit #18 in Drainage C.



Representative soil test pit location in the lowlands (Soil Test Pit #21).



Soil Test Pit #15 in Vernal Pool.



Representative soil test pit location in the lowlands (Soil Test Pit #26).

Site Photographs

Newport Banning Ranch



Attachment B

## ATTACHMENT C WETLAND DETERMINATION DATA FORMS

Project/Site: Newport Banning Ranch (Newport J015)	City/Co	ounty: Newpoi	rt Beach/Orange	Sampling Date:	7/14/09
Applicant/Owner: Newpost Banning Ranch			State: CA	Sampling Point	1
Investigator(s): Gary Medeiros, Allison Rudalevige	Sectio	n. Township. Ra	ange: N/A - "Santiago D	e Santa Ana" land	grant
Landform (hillslope, terrace, etc.): drainage					
Subregion (LRR): C	Lat: 33.64	1916	Long: -117.94547	7 Datum:	KIADX3
Soil Map Unit Name: Capistrano sandy los	am (9-15	% slopes	NWI classific	ration:	10.000
Are climatic / hydrologic conditions on the site typical for this					
Are Vegetation, Soil, or Hydrology si			"Normal Circumstances" p		No
Are Vegetation, Soil, or Hydrology na			eeded, explain any answe		
SUMMARY OF FINDINGS – Attach site map s		•		•	ures, etc.
Hydrophytic Vegetation Present? Yes No	V				
Hydric Soil Present? Yes No	X	Is the Sampled		🗸	
Wetland Hydrology Present? Yes X No	·	within a Wetla	nd? Yes	No	
Remarks:					
Drainage A					
VEGETATION – Use scientific names of plants	s.				
		nant Indicator	Dominance Test work	sheet:	
1	% Cover Speci	es? Status	Number of Dominant Sp		(4)
2			That Are OBL, FACW, o	or FAC:	(A)
3.			Total Number of Domina Species Across All Strat		(B)
4					(B)
Sapling/Shrub Stratum (Plot size: 25 × 25)	= Tota	l Cover	Percent of Dominant Sp That Are OBL, FACW, of	pecies or FAC: 33.3	(A/B)
1. Baccharis Salicifolia Evininea	50 u	Encil			(/(5)
2. Encelia Californica	50 y	<u>FACW</u> UPL	Prevalence Index work  Total % Cover of:		
3.	<u> </u>	W. C	OBL species		
4			FACW species 50		
5.			FAC species		
O = vo am	65 = Tota	l Cover	FACU species		
Herb Stratum (Plot size: 25 × 25		•	UPL species 65	x5= 32	5
1. Cortadoria selloana	<u>50 y</u>	_ upl	Column Totals:	5 (A) 42°	(B)
2			Provolence Index	= B/A = 3.69	
3 4			Hydrophytic Vegetatio		
5			Dominance Test is		
6			Prevalence Index is		
7				otations¹ (Provide sur	porting
8			data in Remarks	or on a separate she	eet)
	= Tota	l Cover	Problematic Hydrop	hytic Vegetation¹ (Ex	(plain)
Woody Vine Stratum (Plot size:)			1		
1			<sup>1</sup> Indicators of hydric soil be present, unless distu	and wetland hydrolo rbed or problematic.	gy must
2	~~	I Cover	Hydrophytic		
% Bare Ground in Herb Stratum 50 % Cover of			Vegetation	2.	
Remarks:	of Biotic Crust		Present? Yes	No	

SOIL				Sampling Point:
Profile Description: (Describe to the dep	th needed to document the inc	licator or confirm	the absence of i	
Depth <u>Matrix</u>	Redox Features			• •
(inches) Color (moist) %		Type <sup>1</sup> Loc <sup>2</sup>	Texture	Remarks
0-20 7.5 YR 4/4 100	2-		Sand	
	-			
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, CS=Covered o	r Coated Sand Gra	ains <sup>2</sup> l ocatio	n: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all	LRRs, unless otherwise noted.	)		Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	,		(A9) (LRR C)
Histic Epipedon (A2)	Stripped Matrix (S6)			(A10) (LRR B)
Black Histic (A3)	Loamy Mucky Mineral (F	1)	Reduced V	
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F.	2)		t Material (TF2)
Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)			lain in Remarks)
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6	,		
Depleted Below Dark Surface (A11)	Depleted Dark Surface (	,		
Thick Dark Surface (A12)	Redox Depressions (F8)			ydrophytic vegetation and
<ul><li>Sandy Mucky Mineral (S1)</li><li>Sandy Gleyed Matrix (S4)</li></ul>	Vernal Pools (F9)			ology must be present,
Restrictive Layer (if present):			unless distur	bed or problematic.
Type:				
Depth (inches):Remarks:			Hydric Soil Pres	sent? Yes NoX
łydrology				
Wetland Hydrology Indicators:				
Primary Indicators (minimum of one required	; check all that apply)		Secondary	Indicators (2 or more required)
Surface Water (A1)	Salt Crust (B11)		Water	Marks (B1) (Riverine)
High Water Table (A2)	Biotic Crust (B12)		Sedim	ent Deposits (B2) (Riverine)
Saturation (A3)	Aquatic Invertebrates (E	313)	Drift D	eposits (B3) (Riverine)
Water Marks (B1) (Nonriverine)	— Hydrogen Sulfide Odor	(C1)	🔏 Draina	age Patterns (B10)
Sediment Deposits (B2) (Nonriverine)	Oxidized Rhizospheres	along Living Roots	s (C3) Dry-Se	eason Water Table (C2)
X Drift Deposits (B3) (Nonriverine)	Presence of Reduced In	on (C4)	Crayfi	sh Burrows (C8)
Surface Soil Cracks (B6)	Recent Iron Reduction i	n Tilled Soils (C6)	Satura	ation Visible on Aerial Imagery (C9)
Inundation Visible on Aerial Imagery (B7			Shallo	w Aquitard (D3)
Water-Stained Leaves (B9)	Other (Explain in Rema	rks)	FAC-N	leutral Test (D5)
Field Observations:				
Surface Water Present? Yes N	lo 🔀 Depth (inches):			
Water Table Present? Yes N	lo X Depth (inches):			
Saturation Present? Yes N	lo X Depth (inches):	1	nd Hydrology Pre	esent? Yes X No
(includes capillary fringe)		1		
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos, previo	us inspections), if	available:	
Dansella				
Remarks:				

Project/Site: Newport Banning Ranch (Newport J015) Cit	y/County: Newport Beach/Orange Sampling Date: 7/14/09
Applicant/Owner: Newfort Barning Ranch	State: <u>CA</u> Sampling Point: <u>2</u>
Investigator(s): Gary Medeiros, Allison Rudalevige Se	ction, Township, Range: N/A - "Santiago De Santa Ana" land grant
Landform (hillslope, terrace, etc.): drainage Lo	cal relief (concave, convex, none): Slope (%): O-2 641614
Subregion (LRR): C Lat: 33.	641614 Long:-117.94448 Datum: NAD 83
Soil Map Unit Name: My ford Soundy Loan (9-30	20 slopes eroded) 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 dis	urbed? Are "Normal Circumstances" present? Yes √ No
Are Vegetation, Soil, or Hydrology naturally proble	
SUMMARY OF FINDINGS – Attach site map showing sa	impling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes X No	Is the Sampled Area
Wetland Hydrology Present? Yes X No	within a Wetland? Yes No
Remarks: Drainage A	
Statitude .	
VEGETATION – Use scientific names of plants.	nii-
	ominant Indicator Dominance Test worksheet:
1. Salix goodingii 90	Number of Dominant Species That Are OBL, FACW, or FAC
2	
3	Total Number of Dominant Species Across All Strata: 2 (B)
4	(B)
	otal Cover Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)
1. Ricinus Communis 5	V FACU Prevalence Index worksheet:
2. Solanum Oppenicanum <1	Total % Cover of: Multiply by:
3	OBL species 90 x1 = 90
4	
5	FAC species 1 x 3 = 3
<u>5</u> = T	otal Cover FACU species 5 x 4 = 20
Herb Stratum (Plot size:  1. Veronica opagalis - aguatica <1	UPL species x 5 =
2.	08L   Column Totals: 96 (A) 113 (B)
3	Prevalence Index = B/A =
4	Hydrophytic Vegetation Indicators:
5	Dominance Test is >50%
6	Y Prevalence Index is ≤3.0¹
7	Morphological Adaptations <sup>1</sup> (Provide supporting
8	data in Remarks or on a separate sheet)
Woody Vine Stratum (Plot size:)	otal Cover Problematic Hydrophytic Vegetation¹ (Explain)
1	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2	be present, unless disturbed or problematic.
~^	otal Cover Hydrophytic
% Bare Ground in Herb Stratum ~150 % Cover of Biotic Crust	Vegetation Present? Yes Y No
Remarks:	100 100

SOIL	
------	--

Sampling	Point:	1_

Profile Description: (De	scribe to the d	epth needed	l to document th	e indicator	or confirm	n the absence of indicators.)
Depth	/latrix		Redox Featu			·
(inches) Color (m		Color (	moist) %	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture Remarks
0-3 104 2	5/ (00					clay
3-8 104R 4	13 100					Silty clay
0 0 1011	10 10-	··· -·· ·· · · · · · · · · · · · · · ·				Sitry day
<sup>1</sup> Type: C=Concentration,	D=Depletion R	M=Reduced	Matrix CS=Cover	ed or Coato	d Cand Ca	oine 21
Hydric Soil Indicators: (	Applicable to a	III RRs uni	ess otherwise n	ed of Coale	a Sana Gra	ains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	, applicable to a			oteu.)		
Histosof (A1)			andy Redox (S5)	١		1 cm Muck (A9) (LRR C)
Black Histic (A3)			ripped Matrix (S6			2 cm Muck (A10) (LRR B)
X Hydrogen Sulfide (A4	1		oamy Mucky Mine oamy Gleyed Matr			Reduced Vertic (F18)
Stratified Layers (A5)			epleted Matrix (F3	. ,		Red Parent Material (TF2)
1 cm Muck (A9) (LRR			edox Dark Surface	,		Other (Explain in Remarks)
Depleted Below Dark	,		epleted Dark Surfa	, ,		
Thick Dark Surface (A	· ·		edox Depressions	, ,		<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral	-		ernal Pools (F9)	(1 0)		wetland hydrology must be present,
Sandy Gleyed Matrix						unless disturbed or problematic.
Restrictive Layer (if pres						arriode distarsed of problematic.
Type: Yooks						
Depth (inches):						Harter 6 11 Page 16 N X 11
Remarks:						Hydric Soil Present? Yes No
Remarks.						
HYDROLOGY					<del></del>	
Wetland Hydrology India						
Primary Indicators (minimu	ım of one requir	ed; check all	that apply)			Secondary Indicators (2 or more required)
X Surface Water (A1)		s	alt Crust (B11)			Water Marks (B1) (Riverine)
High Water Table (A2	· ·	в	iotic Crust (B12)			Sediment Deposits (B2) (Riverine)
Saturation (A3)			quatic Invertebrat	es (B13)		Drift Deposits (B3) (Riverine)
Water Marks (B1) (No	nriverine)		lydrogen Sulfide (			Y Drainage Patterns (B10)
Sediment Deposits (B			xidized Rhizosph	. ,	iving Roots	
Drift Deposits (B3) (Ne	, ,		resence of Reduc			
Surface Soil Cracks (E			lecent Iron Reduc	٠,		Crayfish Burrows (C8)
Inundation Visible on	•		hin Muck Surface		30lis (C0)	
Water-Stained Leaves				` '		Shallow Aquitard (D3)
Field Observations:	(00)		other (Explain in R	ternarks)		FAC-Neutral Test (D5)
	v V			<i>i</i>		
Surface Water Present?			Depth (inches): _		_	
Water Table Present?			Depth (inches):		_	
Saturation Present?	Yes X	No I	Depth (inches):	0	_   Wetlai	nd Hydrology Present? Yes X No
(includes capillary fringe)  Describe Recorded Data (	stroom source	onlie-!-	II naviststa		i	
Describe Recorded Data (	sueam gauge, n	ionitoring we	ıı, aerıaı photos, p	revious insp	ections), if	f available:
Remarks:						

Project/Site: Newport Banning Ranch (Newport J015)	City/C	County: Newpor	rt Beach/Orange	Sampling Date:	7/14/09
Applicant/Owner: <u>Newpost Banning Rancl</u>			State: <u>CA</u>	_	
Investigator(s): Gary Medeiros, Allison Rudalevige			ange: <u>N/A - "Santiago [</u>		
			convex, none): Non		
Subregion (LRR): C	Lat: 33.64	129107	Long: -117.94775	Dotum	AIADOZ
Soil Map Unit Name: Bolsa Silt loan			NWI classifi	^	
Are climatic / hydrologic conditions on the site typical for this ti	ime of year? V	es V No	/If no explain in F	Cattori. 110/03	
Are Vegetation, Soil, or Hydrology sign					
Are Vegetation, Soil, or Hydrology nat			"Normal Circumstances"   eeded, explain any answe		No
SUMMARY OF FINDINGS – Attach site map sh		,		,	itures, etc.
Hydrophytic Vegetation Present? Yes				-	
Hydric Soil Present?  Yes   No		Is the Sampled			
Wetland Hydrology Present? Yes No _		within a Wetlar	nd? Yes <u>X</u>	No	
Remarks:					
VEGETATION Lies exigntific names of plants			WILLIAM WILLIA		
VEGETATION – Use scientific names of plants			T	4	
	Absolute Domi <u>6 Cover</u> Spec	inant Indicator	Dominance Test work		
1. Salix lasiolepis	85 Y	L FACW	Number of Dominant S That Are OBL, FACW,		(A)
2. Salix good ingii	20 r	OBL			— (A)
3			Total Number of Domin Species Across All Stra		(B)
4					(6)
Sapling/Shrub Stratum (Plot size: 30 XSO )	105 = Tota		Percent of Dominant Sp That Are OBL, FACW, of	or FAC: 66.7	<u>Z</u> (A/B)
1. Baccharis Salicifolia	20 y	FACW	Prevalence Index world	ksheet:	
2	t		Total % Cover of:	Multiply I	oy:
3			OBL species	x 1 =	
4			FACW species		
5	20 = Tota		FAC species		
Herb Stratum (Plot size:)	= Tota	al Cover	FACU species		
1. Corta deria selloana	1 4	upl	UPL species		
2	l		Column Totals:	(A)	(B)
3			Prevalence Index	= B/A =	
4			Hydrophytic Vegetation		
5			Dominance Test is		
6			Prevalence Index is		
7			Morphological Adap	otations¹ (Provide su s or on a separate sl	ipporting
8			Problematic Hydrop		
Woody Vine Stratum (Plot size:)	= Tota	al Cover		onyao vogotation (E	-Apidiii)
1			<sup>1</sup> Indicators of hydric soil	and wetland hydrol	oav must
2			be present, unless distu	rbed or problematic	
	O = Tota	l Cover	Hydrophytic		
% Bare Ground in Herb Stratum 100 % Cover of	Biotic Crust	0	Vegetation Present? Yes	s_ <u>X</u> No	
Remarks:		-			

Profile Desc	cription: (Descri	oe to the dept	h needed to docu	ment the	indicator o	or confirm	n the absence of indicators.)
Depth	Matrix		Redo	x Feature	s		·
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture Remarks
0-8	10YR 3/2	<del> }0</del>	7.54R 5/8	30		M	Silty clay prominent mobiles
8-12	10YR 5/3	160					silty chy
12-20	10YR 5/3	100					Sand
					-	· · · · · · · · · · · · · · · · · · ·	sand
				-			
**							
1				-			
Type: C=Co	oncentration, D=D	epletion, RM=	Reduced Matrix, CS	S=Covered	d or Coated	Sand Gra	
		icable to all L	RRs, unless other		ed.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol	` '		Sandy Redo				1 cm Muck (A9) (LRR C)
	pipedon (A2)		Stripped Ma				2 cm Muck (A10) (LRR B)
Black His			Loamy Muc				Reduced Vertic (F18)
	n Sulfide (A4)		Loamy Gley		(F2)		Red Parent Material (TF2)
	Layers (A5) (LRF	R C)	Depleted Ma				Other (Explain in Remarks)
	ck (A9) (LRR D)	nn (A44)		,	,		
	l Below Dark Surfa rk Surface (A12)	ace (ATT)	Depleted Da				3
	ucky Mineral (S1)		Redox Depr		-8)		<sup>3</sup> Indicators of hydrophytic vegetation and
	leyed Matrix (S4)		Vernal Pools	s (F9)			wetland hydrology must be present,
	ayer (if present):						unless disturbed or problematic.
Type:	<b></b> ( procerte).						
Depth (inc	hoo):						V.
Remarks:							Hydric Soil Present? Yes X No
IYDROLOG	2V						
	rology Indicators						
			-11 11-11				
		one required;	check all that apply	')			Secondary Indicators (2 or more required)
	Water (A1)		Salt Crust (				Water Marks (B1) (Riverine)
	er Table (A2)		Biotic Crus				Sediment Deposits (B2) (Riverine)
Saturatio			Aquatic Inv	ertebrates	s (B13)		🗴 Drift Deposits (B3) (Riverine)
	arks (B1) ( <b>Nonrive</b>	•	Hydrogen S		, ,		🗴 Drainage Patterns (B10)
	t Deposits (B2) (N		Oxidized R	hizospher	es along Li	ving Roots	s (C3) Dry-Season Water Table (C2)
Drift Dep	osits (B3) ( <b>Nonriv</b>	erine)	Presence o	f Reduce	d Iron (C4)		Crayfish Burrows (C8)
	Soil Cracks (B6)		Recent Iron	Reduction	n in Tilled	Soils (C6)	
Inundatio	n Visible on Aeria	Imagery (B7)	Thin Muck	Surface (0	C7)		Shallow Aguitard (D3)
Water-Sta	ained Leaves (B9)		Other (Expl	ain in Rer	marks)		FAC-Neutral Test (D5)
Field Observ	ations:						
Surface Wate	r Present?	Yes No	Depth (inc	hes):			
Water Table F			Depth (inc				
Saturation Pre (includes capi	esent? Illary fringe)	Yes No	Depth (inc	hes):		Wetlar	nd Hydrology Present? Yes 🛌 No
Describe Rec	orded Data (strea	m gauge, mon	itoring well, aerial p	hotos, pre	vious inspe	ections), if	f available:
Domorlini					********		
Remarks:							

Project/Site: Newport Banning Ranch (Newport J015)	City/County: Newpor	rt Beach/Orange Sampling Date: 71469
Applicant/Owner: Wewfort Banning Rand	4	State:CA Sampling Point:
Investigator(s): Gary Medeiros, Allison Rudalevige	Section, Township, Ra	ange: N/A - "Santiago De Santa Ana" land grant
Landform (hillslope, terrace, etc.): lowlands	Local relief (concave.	convex. none): In Me Slope (%):
Subregion (LRR): C	Lat: 33.642998	Long: -117.94734 Datum: A1A083
		NWI classification: PFO/SSC
Are climatic / hydrologic conditions on the site typical for this ti		//f no explain in Develop )
Are Vegetation, Soil, or Hydrology sign		
Are Vegetation, Soil, or Hydrology natr		"Normal Circumstances" present? Yes No
SUMMARY OF FINDINGS – Attach site map sh	,	eeded, explain any answers in Remarks.)
		erations, transcotts, important reatures, etc.
1	Is the Sampled	d Area
Hydric Soil Present?  Wetland Hydrology Present?  Yes X No Yes No No	within a Wetlan	nd? Yes <u>X</u> No
Remarks:		,
VEGETATION – Use scientific names of plants.	•	4
	Absolute Dominant Indicator 6 Cover Species? Status	Dominance Test worksheet:
1. Salix goodlingii	60 V OBL	Number of Dominant Species That Are OBL, FACW, or FAC: 2  (A)
2. Salix lasiolepis	40 Y FACW	(A)
3		Total Number of Dominant Species Across All Strata:  3 (B)
4		(-/
Cooling/Charle Chartery (District	Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size:)		
1		Prevalence Index worksheet:
3.		
4		FACW species x 2 =
5		FAC species x 3 =
	O = Total Cover	FACU species x 4 =
Herb Stratum (Plot size:  1. Corta deria selloana	10 . 10	UPL species x 5 =
2.	10 y UPL	Column Totals: (A) (B)
3		Prevalence Index = B/A =
4		Hydrophytic Vegetation Indicators:
5		✓ Dominance Test is >50%
6		Prevalence Index is ≤3.0 <sup>1</sup>
7.		Morphological Adaptations <sup>1</sup> (Provide supporting
8.		data in Remarks or on a separate sheet)
Woody Vine Stratum (Plot size:)	10 = Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2		be present, unless disturbed or problematic.
	= Total Cover	Hydrophytic
% Bare Ground in Herb Stratum 9 % Cover of	Biotic Crust 6	Vegetation
Remarks:	DIOLIC Crust	Present? Yes Y No
romano.		
		1

Profile Description: (Describe  Depth Matrix	to the dop.				01 0011111	in the absence of indicators.
(inches) Color (moist)	%	Color (moist)	x Feature: %	_Type <sup>1</sup>	Loc <sup>2</sup>	
0-8 10YR 414	70	7.5 YR 5/8	30	C	M	Silty day prominent mottles
8-12 104R5/3	loo		•			
12-20 10YR 5/3						Silty clay
10 1078 313	100		<del></del>	-		Sand
	-					
Type: C=Concentration, D=Dep Hydric Soil Indicators: (Applications)	letion, RM=	Reduced Matrix, CS	=Covered	or Coate	d Sand G	
	able to all L			ea.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1) Histic Epipedon (A2)		Sandy Redo				1 cm Muck (A9) (LRR C)
Black Histic (A3)		Stripped Ma Loamy Mucl		([4)		2 cm Muck (A10) (LRR B)
Hydrogen Sulfide (A4)		Loamy Much				Reduced Vertic (F18)
Stratified Layers (A5) (LRR 0	3)	Depleted Ma		(1 2)		Red Parent Material (TF2)
1 cm Muck (A9) (LRR D)	-,	Redox Dark	, ,	<del>-</del> 6)		Other (Explain in Remarks)
Depleted Below Dark Surface	e (A11)	Depleted Da	•	,		
Thick Dark Surface (A12)	- ( /	Redox Depre				<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)		Vernal Pools	•	٠,		wetland hydrology must be present,*
Sandy Gleyed Matrix (S4)			( /			unless disturbed or problematic.
Restrictive Layer (if present):						
Туре:						_
Depth (inches):						Hydric Soil Present? Yes No
						Hydric Soil Present? Yes / No
Remarks: Everall landscape	is dep	ressional.				Hydric Soil Present? Yes X No
overall landscape	is dep	ressional.				Hydric Soil Present? Yes _/* No
overall landscape	is dep	ressional.				Hydric Soli Present? Yes _/* No
overall landscape  YDROLOGY	is dep	ressional.				Hydric Soli Present? Yes _/*_ No
Overall landscape  YDROLOGY  Vetland Hydrology Indicators:			)			
Overall landscape  /DROLOGY  Vetland Hydrology Indicators:		check all that apply				Secondary Indicators (2 or more required)
Overall landscape  /DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of or		check all that apply	B11)			Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)
(DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of or _ Surface Water (A1)		check all that apply Salt Crust ( Biotic Crust	B11) : (B12)	(B13)		Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)
/DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of or _ Surface Water (A1) _ High Water Table (A2) _ Saturation (A3)	ne required;	check all that apply Salt Crust ( Biotic Crust Aquatic Inv	B11) (B12) ertebrates			Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine)
/DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriveria	ne required:	check all that apply Salt Crust ( Biotic Crust Aquatic Inv. Hydrogen S	B11) (B12) ertebrates Sulfide Odd	or (C1)	ivina Roc	Secondary Indicators (2 or more required)  — Water Marks (B1) (Riverine)  — Sediment Deposits (B2) (Riverine)  — Drift Deposits (B3) (Riverine)  — Drainage Patterns (B10)
/DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3)	ne required; ne) ne) nriverine)	check all that apply Salt Crust ( Biotic Crust Aquatic Involuted Hydrogen S	B11) (B12) ertebrates Sulfide Odo nizosphere	or (C1) es along L		Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Torift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ots (C3) Dry-Season Water Table (C2)
YDROLOGY Vetland Hydrology Indicators: Vimary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonrivering Sediment Deposits (B2) (Non	ne required; ne) ne) nriverine)	check all that apply  Salt Crust ( Biotic Crust ( Aquatic Involution S)  Hydrogen S  Oxidized RI	B11) (B12) ertebrates Sulfide Odd nizosphere f Reduced	or (C1) es along L I Iron (C4)		Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Value (B3) (Riverine)  Value (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)
Verall landscape  Vetland Hydrology Indicators:  rimary Indicators (minimum of or  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverial  Sediment Deposits (B2) (Nonriverial  Drift Deposits (B3) (Nonriverial  Surface Soil Cracks (B6)	ne required; ne) nriverine) ine)	check all that apply Salt Crust ( Biotic Crust ( Aquatic Inv. Hydrogen S Oxidized RI Presence o	B11) (B12) ertebrates Sulfide Odd nizosphere f Reduced Reductio	or (C1) es along L I Iron (C4) n in Tilled		Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
/DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of or _ Surface Water (A1) _ High Water Table (A2) _ Saturation (A3) _ Water Marks (B1) (Nonriveril _ Sediment Deposits (B2) (Nonriveril _ Drift Deposits (B3) (Nonriveril	ne required; ne) nriverine) ine)	check all that apply  Salt Crust ( Biotic Crust ( Aquatic Involution   Hydrogen S Oxidized RI Presence o	B11) ertebrates Gulfide Odd nizosphere f Reduced Reduction Surface (C	or (C1) es along L I Iron (C4) n in Tilled C7)		Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Video Drift Deposits (B3) (Riverine) Video Drainage Patterns (B10) Ots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
/DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverial Sediment Deposits (B2) (Non- Drift Deposits (B3) (Nonriverial Surface Soil Cracks (B6) Inundation Visible on Aerial In Water-Stained Leaves (B9)	ne required; ne) nriverine) ine)	check all that apply Salt Crust ( Biotic Crust ( Aquatic Inv. Hydrogen S Oxidized RI Presence o Recent Iron	B11) ertebrates Gulfide Odd nizosphere f Reduced Reduction Surface (C	or (C1) es along L I Iron (C4) n in Tilled C7)		Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
VDROLOGY  Vetland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonrivering Sediment Deposits (B2) (Nonrivering Surface Soil Cracks (B6) Inundation Visible on Aerial In Water-Stained Leaves (B9)  iteld Observations: Surface Water Present?	ne required; ne) nriverine) ine) magery (B7)	check all that apply Salt Crust ( Biotic Crust ( Aquatic Involution   Hydrogen S Oxidized RI Presence o Recent Iron Thin Muck S Other (Expl	B11)  (B12)  ertebrates  Sulfide Odd  nizosphere  f Reduced  Reduction  Surface (Cain in Ren  hes):	or (C1) es along L I Iron (C4) n in Tilled C7) narks)	Soils (C6	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Video Drift Deposits (B3) (Riverine) Video Drainage Patterns (B10) Ots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
VDROLOGY  Vetland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonrivering Sediment Deposits (B2) (Nonrivering Surface Soil Cracks (B6) Inundation Visible on Aerial In Water-Stained Leaves (B9)  iteld Observations: Surface Water Present?	ne required; ne) nriverine) ine) magery (B7)	check all that apply Salt Crust ( Biotic Crust ( Aquatic Involution   Hydrogen S Oxidized RI Presence o Recent Iron Thin Muck S Other (Expl	B11)  (B12)  ertebrates  Sulfide Odd  nizosphere  f Reduced  Reduction  Surface (Cain in Ren  hes):	or (C1) es along L I Iron (C4) n in Tilled C7) narks)	Soils (C6	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Video Drift Deposits (B3) (Riverine) Video Drainage Patterns (B10) Ots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
VDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of or  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverial  Sediment Deposits (B2) (Nonriverial  Surface Soil Cracks (B6)  Inundation Visible on Aerial In  Water-Stained Leaves (B9)  Veter Table Present?  Veter Table Present?  Veter Table Present?	ne required; ne) nriverine) ine) magery (B7)	check all that apply Salt Crust ( Biotic Crust ( Aquatic Inv. Hydrogen S Oxidized RI Presence o Recent Iron Thin Muck S	B11)  (B12)  ertebrates  Sulfide Odo  nizosphere  f Reduced  Reduction  Surface (Cain in Ren  hes):  hes):	or (C1) es along L l Iron (C4) n in Tilled C7) narks)	Soils (Ce	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Video Drift Deposits (B3) (Riverine) Video Drainage Patterns (B10) Ots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
VDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of or  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriveriants)  Sediment Deposits (B2) (Nonriveriants)  Surface Soil Cracks (B6)  Inundation Visible on Aerial In Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Veter Table Present?	ne required; ne) nriverine) ine) magery (B7)  es Notes	check all that apply Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized RI Presence o Recent Iron Thin Muck S Other (Expl	B11) c (B12) ertebrates Sulfide Odd nizosphere f Reduced Reduction Surface (Cain in Ren hes): hes):	or (C1) es along L I Iron (C4) n in Tilled C7) narks)	Soils (Co	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Varinage Patterns (B10)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of or  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonrivering  Sediment Deposits (B2) (Nonrivering  Surface Soil Cracks (B6)  Inundation Visible on Aerial Ingulation Visible Observations:  Surface Water Present?	ne required; ne) nriverine) ine) magery (B7)  es Notes	check all that apply Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized RI Presence o Recent Iron Thin Muck S Other (Expl	B11) c (B12) ertebrates Sulfide Odd nizosphere f Reduced Reduction Surface (Cain in Ren hes): hes):	or (C1) es along L I Iron (C4) n in Tilled C7) narks)	Soils (Co	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Varinage Patterns (B10)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
YDROLOGY  Wetland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverial Sediment Deposits (B2) (Nonriverial Sediment Deposits (B3) (Nonriverial Surface Soil Cracks (B6) Inundation Visible on Aerial In Water-Stained Leaves (B9)  Field Observations: Surface Water Present?  Veter Table Present?	ne required; ne) nriverine) ine) magery (B7)  es Notes	check all that apply Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized RI Presence o Recent Iron Thin Muck S Other (Expl	B11) c (B12) ertebrates Sulfide Odd nizosphere f Reduced Reduction Surface (Cain in Ren hes): hes):	or (C1) es along L I Iron (C4) n in Tilled C7) narks)	Soils (Co	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Varinage Patterns (B10)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of or  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverial  Sediment Deposits (B2) (Nonriverial  Surface Soil Cracks (B6)  Inundation Visible on Aerial In  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Vater Table Present?	ne required; ne) nriverine) ine) magery (B7)  es Notes	check all that apply Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized RI Presence o Recent Iron Thin Muck S Other (Expl	B11) c (B12) ertebrates Sulfide Odd nizosphere f Reduced Reduction Surface (Cain in Ren hes): hes):	or (C1) es along L I Iron (C4) n in Tilled C7) narks)	Soils (Co	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Varinage Patterns (B10)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of or  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriveriants)  Sediment Deposits (B2) (Nonriveriants)  Surface Soil Cracks (B6)  Inundation Visible on Aerial In  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Vater Table Present?	ne required; ne) nriverine) ine) magery (B7)  es Notes	check all that apply Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized RI Presence o Recent Iron Thin Muck S Other (Expl	B11) c (B12) ertebrates Sulfide Odd nizosphere f Reduced Reduction Surface (Cain in Ren hes): hes):	or (C1) es along L I Iron (C4) n in Tilled C7) narks)	Soils (Co	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Varinage Patterns (B10)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9  Shallow Aquitard (D3)  FAC-Neutral Test (D5)

Project/Site: Newport Banning Ranch (Newport J015)	City/Co	unty: <u>Newpor</u>	t Beach/Orange	Sampling Date:	7/14/09
Applicant/Owner: New port Banning Ranch			State: <u>CA</u>		
Investigator(s): Gary Medeiros, Allison Rudalevige					
Landform (hillslope, terrace, etc.): depression	Local r	elief (concave.	convex. none): OM C	2.100 Slon	e (%)·
Subregion (LRR): C	Lat: 33.64	2596	Long: -117.9497	Datum	NAD83
Soil Map Unit Name: Bolsa Silt loam			NWI classific		
Are climatic / hydrologic conditions on the site typical for this tir	me of year? Yes	s_ <b>√</b> No	(If no, explain in F	Remarks.)	<del>-</del>
Are Vegetation, Soil, or Hydrology sign			'Normal Circumstances" p	•	No
Are Vegetation, Soil, or Hydrology natu	ırally problemati	c? (If ne	eded, explain any answe	rs in Remarks.)	
SUMMARY OF FINDINGS – Attach site map sh	owing samp	ling point l	ocations, transects	, important fea	tures, etc.
Hydrophytic Vegetation Present? Yes X No					
Hydric Soil Present? Yes No _	<del>y</del> ''	s the Sampled		🗸	
Wetland Hydrology Present? Yes No _		vithin a Wetlar	id? Yes	No <u>X</u>	
Remarks: Closed depression surrounded by la	. herms				
ansex depression scarbandlar by in	y per ives.				
VEGETATION – Use scientific names of plants.					
	bsolute Domin	ant Indicator	Dominance Test work	sheet:	
	Cover Specie		Number of Dominant S		
1			That Are OBL, FACW, o	or FAC:	(A)
3			Total Number of Domin		4-5
4			Species Across All Stra	.a.	(B)
	= Total	Cover	Percent of Dominant Sp That Are OBL, FACW, o		(A/B)
Sapling/Shrub Stratum (Plot size:)					(A/B)
1			Prevalence Index worl		
3			Total % Cover of:		
4			OBL species		
5			FAC species		
	O = Total	Cover	FACU species		
Herb Stratum (Plot size: 30+30)			UPL species		
1.24-1	2 Y	_ FACW	Column Totals:		(B)
2. Heliotropium Curassavicum		_OBL	Drovolones Index	- D(A	
3.       4.	· · · · · · · · · · · · · · · · · · ·		Hydrophytic Vegetatio	= B/A =	
5.			Dominance Test is		
6			Prevalence Index is		
7			Morphological Adap		upporting
8			data in Remarks	or on a separate sl	neet)
Washin Vine Out to 100 (DL t	102 = Total	Cover	Problematic Hydrop	hytic Vegetation <sup>1</sup> (E	Explain)
Woody Vine Stratum (Plot size:)			1 maliantana at hardida a su		
1.     2.			<sup>1</sup> Indicators of hydric soil be present, unless distu	and wetland hydrol rbed or problematic	ogy must
	O = Total	Cover	Hydrophytic	•	
% Bara Ground in Harb Stratum	rotar		Vegetation	$\wedge$	
% Bare Ground in Herb Stratum % Cover of E Remarks:	Biotic Crust		Present? Yes	:_ <u>\UNo</u>	
Tomano.					
I					1

SOIL	
------	--

inches) Color (moist) % Color (moist) %  D - 20   UYR 5/3   CO	Type Loc Texture Remarks - Sandy loam
	- Sandyloam
Vine: C=Concentration D=Depletion PM=Peducod Matrix CS=C	
Vine: C=Concentration D=Depletion PM=Peducod Matrix CS=C	
Vine: C=Concentration D=Depletion PM=Peducod Matrix CS=C	
Vine: C=Concentration D=Depletion PM=Peducod Matrix CS=C	
ivne: C=Concentration D=Depletion PM=Padurod Matrix CS=C	
Vine: C=Concentration D=Depletion PM-Padurod Matrix CS=Cd	
Vine: C=Concentration D=Depletion PM=Peducod Matrix CS=C	
Vine: C=Concentration D=Depletion PM=Peduced Matrix CS=C	
vne: C=Concentration D=Depletion RM-Reduced Matrix CS-C	
	or Coated Sand Crains 21 and 5 and 5 and 6
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted	or Coated Sand Grains.  2 Location: PL=Pore Lining, M=Matrix.  d.) Indicators for Problematic Hydric Soils <sup>3</sup> :
_ Histosol (A1) Sandy Redox (S5)	·
Histic Epipedon (A2) Stripped Matrix (S6)	1 cm Muck (A9) (LRR C)
Black Histic (A3) Loamy Mucky Mineral (F	2 cm Muck (A10) (LRR B)
Hydrogen Sulfide (A4)  Loamy Gleyed Matrix (F	,
Stratified Layers (A5) (LRR C) Depleted Matrix (F3)	F2) Red Parent Material (TF2) Other (Explain in Remarks)
1 cm Muck (A9) (LRR D) Redox Dark Surface (F6	
Depleted Below Dark Surface (A11)  Depleted Dark Surface (A11)	•
Thick Dark Surface (A12) Redox Depressions (F8)	·
Sandy Mucky Mineral (S1) Vernal Pools (F9)	wetland hydrology must be present,
_ Sandy Gleyed Matrix (S4)	unless disturbed or problematic.
estrictive Layer (if present):	
Type:	
Depth (inches):	Hydric Soil Present? Yes No X
emarks:	
DROLOGY	
etland Hydrology Indicators:	
imary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1) Salt Crust (B11)	
High Water Table (A2) Biotic Crust (B12)	Water Marks (B1) (Riverine)
	Sediment Deposits (B2) (Riverine)
,	s along Living Roots (C3) Dry-Season Water Table (C2)
,	
Surface Soil Cracks (B6) Recent Iron Reduction	7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7	1 /
Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7 Water-Stained Leaves (B9) Other (Explain in Rema	
Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7 Water-Stained Leaves (B9) Other (Explain in Remarked Observations:	arks) FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7 Water-Stained Leaves (B9) Other (Explain in Remarked Observations:	arks) FAC-Neutral Test (D5)
_ Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7 Water-Stained Leaves (B9) Other (Explain in Remarkeld Observations: Inface Water Present? Yes No Depth (inches):	arks) Y FAC-Neutral Test (D5)
_ Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7 Water-Stained Leaves (B9) Other (Explain in Remarked Observations:  Inface Water Present? Yes No Depth (inches): ater Table Present? Yes No Depth (inches):	Arks) Y FAC-Neutral Test (D5)
_ Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7 Water-Stained Leaves (B9) Other (Explain in Remarked Observations:  Inface Water Present? Yes No Depth (inches):  ater Table Present? Yes No Depth (inches):  Ituration Present? Yes No Depth (inches):  Ituration Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No _X
Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Other (Explain in Remarked Observations:  Inface Water Present?  Yes No Depth (inches):  Intuition Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No _X
Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7 Water-Stained Leaves (B9) Other (Explain in Remarked Observations:  Inface Water Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No _X
_ Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7 Water-Stained Leaves (B9) Other (Explain in Remarked Observations:  Inface Water Present? Yes No Depth (inches):  ater Table Present? Yes No Depth (inches):  Ituration Present? Yes No Depth (inches):  Ituration Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No _X
Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7 Water-Stained Leaves (B9) Other (Explain in Remarked Observations:  Inface Water Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No _X
Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7 Water-Stained Leaves (B9) Other (Explain in Remarked Observations:  Inface Water Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No _X
Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7 Water-Stained Leaves (B9) Other (Explain in Remarked Observations:  Inface Water Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No _X

Project/Site: Newport Banning Ranch (Newport 10	15) City/Cou	ınty: <u>New</u> po	rt Beach/Orange Sampling Date: 7/19/0
Applicant/Owner: New port Barning /	anch	-	State: <u>CA</u> Sampling Point: <u>U</u>
Investigator(s): Gary Medeiros, Allison Rudalevige	Section.	Township, R	ange: N/A - "Santiago De Santa Ana" land grant
Landform (hillslope, terrace, etc.): depression	Local re	lief (concave	, convex, none): Slope (%):
Subregion (LRR): C	Lat: 33.64	2518	Long: -117.94862 Datum: NAD 8
Soil Map Unit Name: Bolsa Silt loam			NWI classification: PEMCx
Are climatic / hydrologic conditions on the site typical for	this time of year? Yes	√ No	(If no explain in Pomerka)
Are Vegetation, Soil, or Hydrology	_ significantly disturbed		"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology			eeded, explain any answers in Remarks.)
		,	locations, transects, important features, etc
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes  Yes	No Is	the Sample ithin a Wetla	d Area
Remarks: Closed depression surround		berms	
1			
VEGETATION – Use scientific names of pla	ints.		4
Tree Stratum (Plot size:)	Absolute Domina <u>% Cover Species</u>	nt Indicator	Dominance Test worksheet:
1			Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2			
3			Total Number of Dominant Species Across All Strata: (B)
4			Percent of Deminent Consider
Sapling/Shrub Stratum (Plot size:)	= Total C	Cover	That Are OBL, FACW, or FAC: 100% (A/B)
1			Prevalence Index worksheet:
2			Total % Cover of: Multiply by:
34			OBL species x 1 =
5			FAC species x 2 =
	= Total C	Cover	FAC species x 3 = FACU species x 4 =
Herb Stratum (Plot size:)  1. Salicornia Virginica	99 V	OBL	UPL species x 5 =
2. Heliotropium curassavicum	$-\frac{1}{10}\frac{y}{n}$	OBL	Column Totals: (A) (B)
3. Frankenia Saling Egrandi fobias	5 1	EACW	Prevalence Index = B/A =
A			Hydrophytic Vegetation Indicators:
5			Dominance Test is >50%
6			Prevalence Index is ≤3.0 <sup>1</sup>
7 8			Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
	= Total C	`ovor	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:)	•	over.	
1			<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	= Total C	Cover	Hydrophytic
% Bare Ground in Herb Stratum % Cov	er of Biotic Crust	<u></u>	Vegetation Present? Yes No
Remarks:		*	

SOIL
------

Sampling Point: \_\_\_ Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

(inches) Color (moist) %	Redox Features  Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	
0-18 2.544/3 100	osto, (meter) /a Type Loc	- Tomano
18-20 2.5 44/3 80		Silty clay
10-20 - 1913 80	white 20	Catium or diatomaceou
		Mottles
		1,100
	-	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Re	duced Matrix, CS=Covered or Coated Sand	Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRI	Rs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	1 cm Muck (A9) (LRR C)
Histic Epipedon (A2)	Stripped Matrix (S6)	2 cm Muck (A10) (LRR B)
Black Histic (A3)	Loamy Mucky Mineral (F1)	Reduced Vertic (F18)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Red Parent Material (TF2)
Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)	Other (Explain in Remarks)
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6)	( ) ( )
Depleted Below Dark Surface (A11)	Depleted Dark Surface (F7)	
Thick Dark Surface (A12) Sandy Mucky Mineral (S1)	Redox Depressions (F8)	³Indicators of hydrophytic vegetation aŋd̈́
Sandy Gleyed Matrix (S4)	Vernal Pools (F9)	wetland hydrology must be present,
Restrictive Layer (if present):		unless disturbed or problematic.
Type:		
Depth (inches):		~
Remarks:		Hydric Soil Present? Yes No
YDROLOGY		
Vetland Hydrology Indicators:		
Primary Indicators (minimum of one required; che	eck all that apply)	
Surface Water (A1)	Salt Crust (B11)	Secondary Indicators (2 or more required)
High Water Table (A2)	Biotic Crust (B12)	Water Marks (B1) (Riverine)
Saturation (A3)	Aquatic Invertebrates (B13)	Sediment Deposits (B2) (Riverine)
Water Marks (B1) (Nonriverine)	— Hydrogen Sulfide Odor (C1)	Drift Deposits (B3) (Riverine)
Sediment Deposits (B2) (Nonriverine)		Drainage Patterns (B10)
Drift Deposits (B3) (Nonriverine)	Presence of Reduced Iron (C4)	pots (C3) Dry-Season Water Table (C2)
Surface Soil Cracks (B6)	Recent Iron Reduction in Tilled Soils (C	Crayfish Burrows (C8)
Inundation Visible on Aerial Imagery (B7)	Thin Muck Surface (C7)	== magary (03)
Water-Stained Leaves (B9)	Other (Explain in Remarks)	Shallow Aquitard (D3)
ield Observations:		FAC-Neutral Test (D5)
Surface Water Present? Yes No	Depth (inches):	
Vater Table Present? Yes No	/ / / / / / / / / / / / / / / / / / / /	
aturation Present? Yes No	1	<b>V</b>
ncludes capillary fringe)	1 ( 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	tland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous inspections)	i if available:
		, a diable.
Remarks:		

Project/Site: Newport Banning Ranch (Newport J015)	Cit	y/County: <u>Newpor</u>	t Beach/Orange	Sampling Date: 7114/09
Applicant/Owner: Newport Barning Ran	nch			Sampling Point: 7
Investigator(s): Gary Medeiros, Allison Rudalevige	Se			
Landform (hillslope, terrace, etc.): <u>depression</u>	Lo	cal relief (concave,	convex, none): Conco	we Slope (%):
Subregion (LRR): C	_ Lat: 33.0	642066	Long: -117.94885	Datum: NAD 83
Soil Map Unit Name: Bolsa Silt loan			NWI classific	
Are climatic / hydrologic conditions on the site typical for this	s time of year?	Yes _ ✓ No _	(If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrologys				oresent? Yes <u>√</u> No
Are Vegetation, Soil, or Hydrologyn			eeded, explain any answe	
SUMMARY OF FINDINGS - Attach site map	showing sa			*
Wetland Hydrology Present? Yes No	o	Is the Sampled within a Wetlar		) No
closed depression surrounded by	ion ber	.w.2		
VEGETATION – Use scientific names of plant	ts.			
		ominant Indicator	Dominance Test works	sheet:
<u>Tree Stratum</u> (Plot size:) 1		oecies? Status	Number of Dominant Sp That Are OBL, FACW, o	pecies 7
2.			Total Number of Domina	ant _
3 4			Species Across All Strat	*1
Sapling/Shrub Stratum (Plot size:)		otal Cover	Percent of Dominant Sp That Are OBL, FACW, c	
1			Prevalence Index work	sheet:
2			Total % Cover of:	Multiply by:
3				x 1 =
4				x 2 =
5	<u></u>			x 3 =
Herb Stratum (Plot size: 30 x 50	T =	otal Cover		x 4 =
1. Salicornia virginica	20	Y OBL		x 5 =
2. Frankenia Salina Egrandifolia J	15	4 FACW	Column Totals:	(A) (B)
3				= B/A =
4			Hydrophytic Vegetatio	
5			Dominance Test is	1
6			Prevalence Index is	
7				otations <sup>1</sup> (Provide supporting or on a separate sheet)
8	35 = T	otal Cover		hytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:)		otal Covel		
1			<sup>1</sup> Indicators of hydric soil be present, unless distu	and wetland hydrology must rbed or problematic.
	T = 0	otal Cover	Hydrophytic	
	of Biotic Crust		Vegetation Present? Yes	. <u> </u>
Remarks:				

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-	6 5	Ħ	i

Depth (inches)						0. 00	n the absence	or moroacors.
(inches)	Matrix		Redo	x Feature:	3			,
4 (1	Color (moist)	%	Color (moist)		Type <sup>1</sup>	Loc²	<u>Texture</u>	Remarks
0-4	7.54R 4/4	90	7.54R 8/6	10	_ <u>C</u>	M	silt	prominent mottles
4-16	10 YR 413	70	5 YR 5/6	15	C	M	clay	
			•	15	0	M		
16-20							-	
		-						
							***************************************	
		-						
17								
Hydric Soil I	ncentration, D=Depl	letion, RM=	Reduced Matrix, CS LRRs, unless other	=Covered	or Coate	d Sand Gi		ation: PL=Pore Lining, M=Matrix.
		able to all i			a.)		Indicators	for Problematic Hydric Soils <sup>3</sup> :
Histosol	(AT) ipedon (A2)		Sandy Redo	. ,				luck (A9) ( <b>LRR C</b> )
Black His			Stripped Ma		/E4\			luck (A10) (LRR B)
	n Sulfide (A4)		Loamy Mucl Loamy Gley		. ,			ed Vertic (F18)
	Layers (A5) (LRR C	;)	Depleted Ma		,i" <i>Z)</i>			arent Material (TF2)
	ck (A9) ( <b>LRR D</b> )	,	Redox Dark	٠,	-6)		Other (	Explain in Remarks)
	Below Dark Surface	e (A11)	Depleted Da					
	rk Surface (A12)		¥ Redox Depre				<sup>3</sup> Indicators	of hydrophytic vegetation and
	ucky Mineral (S1)		Vernal Pools	(F9)				nydrology must be present,
	eyed Matrix (S4)							sturbed or problematic.
	ayer (if present):							
Туре:								
Depth (incl	nes):						Hydric Soil	Present? Yes No
VDDOLOG								
Wetland Hyd	rology Indicators:							
<b>Wetland Hyd</b> ı Primary Indica	rology Indicators: ators (minimum of on	ne required;	check all that apply	)			Second	dary Indicators (2 or more required)
<b>Wetland Hyd</b> i Primary Indica Surface V	rology Indicators: ators (minimum of on Vater (A1)	ne required;	Salt Crust (	B11)				dary Indicators (2 or more required) ater Marks (B1) (Riverine)
Wetland Hydi Primary Indica Surface V High Wate	rology Indicators: ators (minimum of on Vater (A1) er Table (A2)	ne required;	Salt Crust ( Biotic Crust	B11) (B12)			W	
Wetland Hydi Primary Indica Surface V High Wate Saturation	rology Indicators: ators (minimum of on Vater (A1) er Table (A2) n (A3)		Salt Crust (	B11) (B12)	(B13)		W	ater Marks (B1) (Riverine)
Wetland Hydromery Indice Surface V High Wate Saturation Water Ma	rology Indicators: ators (minimum of on Vater (A1) er Table (A2) n (A3) rks (B1) (Nonriverin	ne)	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S	B11) (B12) ertebrates sulfide Odd	or (C1)		W: Se Dr Dr	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine)
Wetland Hydrometric Primary Indica Surface V High Wate Saturation  ✓ Water Ma Sediment	rology Indicators: ators (minimum of on Vater (A1) er Table (A2) n (A3) rks (B1) (Nonriverir Deposits (B2) (Non	ne) riverine)	Salt Crust (I Biotic Crust Aquatic Inve	B11) (B12) ertebrates sulfide Odo nizosphere	or (C1) s along L		W: Se Dr Dr	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine)
Wetland Hydrometric Primary Indicator Surface Volumetric High Water Saturation Water March Sediment Drift Depos	rology Indicators: ators (minimum of on Vater (A1) er Table (A2) n (A3) rks (B1) (Nonriverir Deposits (B2) (Non osits (B3) (Nonriveri	ne) riverine)	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized RI Presence or	B11) (B12) ertebrates sulfide Odo nizosphere f Reduced	or (C1) s along L Iron (C4)	ı	Wa Se Dr Dr ts (C3) Dr Cr	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8)
Wetland Hydromery Indication Surface V High Water Saturation ✓ Water Mater Sediment Drift Depo	rology Indicators: ators (minimum of on Vater (A1) er Table (A2) n (A3) rks (B1) (Nonriverir Deposits (B2) (Non osits (B3) (Nonriveri oil Cracks (B6)	ne) riverine) ne)	Salt Crust (I Biotic Crust Aquatic Invo Hydrogen S Oxidized RI Presence or	B11) (B12) ertebrates sulfide Odo nizosphere f Reduced Reduction	or (C1) es along L Iron (C4) n in Tilled	ı	Wa Se Dr Dr ts (C3) Dr Cr	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8)
Wetland Hydromary Indication Surface V High Water Saturation Water Mater Sediment Drift Depo	rology Indicators: ators (minimum of on Vater (A1) er Table (A2) n (A3) rks (B1) (Nonriverir Deposits (B2) (Non usits (B3) (Nonriveri oil Cracks (B6) n Visible on Aerial Im	ne) riverine) ne)	Salt Crust (I Biotic Crust Aquatic Invo Hydrogen S Oxidized RI Presence or Recent Iron Thin Muck S	B11) (B12) ertebrates culfide Odd nizosphere f Reduced Reduction Surface (C	or (C1) es along L Iron (C4) n in Tilled 7)	ı	W. Se Dr Dr is (C3) Dr Cr Sa Sh	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9 allow Aquitard (D3)
Wetland Hydrometric Primary Indice Surface V High Water Saturation ✓ Water Ma Sediment Drift Depo Surface S Inundation Water-Sta	rology Indicators: ators (minimum of on Vater (A1) er Table (A2) n (A3) rks (B1) (Nonriverir Deposits (B2) (Non esits (B3) (Nonriveri ioil Cracks (B6) n Visible on Aerial In ained Leaves (B9)	ne) riverine) ne)	Salt Crust (I Biotic Crust Aquatic Invo Hydrogen S Oxidized RI Presence or	B11) (B12) ertebrates culfide Odd nizosphere f Reduced Reduction Surface (C	or (C1) es along L Iron (C4) n in Tilled 7)	ı	W. Se Dr Dr is (C3) Dr Cr Sa Sh	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9
Wetland Hydro Primary Indica Surface V High Wate Saturation  ✓ Water Ma Sediment Drift Depo Surface S Inundation Water-Sta	rology Indicators: ators (minimum of on Vater (A1) er Table (A2) n (A3) rks (B1) (Nonriverir Deposits (B2) (Non esits (B3) (Nonriveri doil Cracks (B6) n Visible on Aerial In alined Leaves (B9) ations:	ne) riverine) ine) nagery (B7)	Salt Crust (I Biotic Crust Aquatic Invo Hydrogen S Oxidized Ri Presence or Recent Iron Thin Muck S Other (Expl	B11) (B12) ertebrates sulfide Odo nizosphere f Reduced Reduction Surface (C ain in Rem	or (C1) es along L fron (C4) n in Tilled 7) narks)	Soils (C6	W. Se Dr Dr is (C3) Dr Cr Sa Sh	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9 allow Aquitard (D3)
Wetland Hydromary Indication Surface V High Water Saturation Water Ma Sediment Drift Depo Surface S Inundation Water-Sta Field Observa Surface Water	rology Indicators: ators (minimum of on Vater (A1) er Table (A2) n (A3) rks (B1) (Nonriverir Deposits (B2) (Non usits (B3) (Nonriverir doil Cracks (B6) n Visible on Aerial In alined Leaves (B9) ations:	ne) riverine) ne) nagery (B7)	Salt Crust (I Biotic Crust Aquatic Invo Hydrogen S Oxidized Ri Presence or Recent Iron Thin Muck S Other (Expl	B11) (B12) ertebrates sulfide Odo nizosphere f Reduced Reduction Surface (C ain in Rem	or (C1) es along L fron (C4) n in Tilled 7) narks)	Soils (C6	W. Se Dr Dr is (C3) Dr Cr Sa Sh	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9 allow Aquitard (D3)
Wetland Hydromary Indication Surface V High Water Saturation Water Ma Sediment Drift Depo Surface S Inundation Water-Sta Field Observa Surface Water	rology Indicators: ators (minimum of on Vater (A1) er Table (A2) n (A3) rks (B1) (Nonriverir Deposits (B2) (Non usits (B3) (Nonriveri ioil Cracks (B6) n Visible on Aerial In ained Leaves (B9) ations: Present? Ye	ne) riverine) ne) nagery (B7)	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized RI Presence or Recent Iron Thin Muck S Other (Expl.	B11) (B12) ertebrates sulfide Odd nizosphere f Reduced Reduction Surface (C ain in Rem nes):	or (C1) es along L Iron (C4) n in Tilled 7) aarks)	Soils (C6	W. Se Dr Dr ts (C3) Dr Cr )	ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) iff Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9 allow Aquitard (D3) aC-Neutral Test (D5)
Wetland Hydro Primary Indica Surface V High Water Saturation Water Ma Sediment Drift Depo Surface S Inundation Water-Sta Field Observa Surface Water Water Table P Saturation Pre (includes capil	rology Indicators: ators (minimum of on Vater (A1) er Table (A2) n (A3) rks (B1) (Nonriverir Deposits (B2) (Non usits (B3) (Nonriveri ioil Cracks (B6) n Visible on Aerial Im ained Leaves (B9) ations: Present? Ye resent? Ye lary fringe)	ne) riverine) nagery (B7) s N s N	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized RI Presence of Recent Iron Thin Muck S Other (Explication) Depth (inclication) Depth (inclication)	B11) (B12) ertebrates sulfide Odo nizosphere f Reduced Reductior Surface (C ain in Rem nes):	or (C1) ss along L lron (C4) n in Tilled 7) aarks)	Soils (C6	Works (C3) — Dr ts (C3) — Dr Cr Sa — Sh — FA	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9 allow Aquitard (D3)
Wetland Hydromary Indicate Surface Water Ma Sediment Drift Depote Surface S Inundation Water-Sta Field Observa Surface Water Water Table P Saturation Pre (includes capil	rology Indicators: ators (minimum of on Vater (A1) er Table (A2) n (A3) rks (B1) (Nonriverir Deposits (B2) (Non usits (B3) (Nonriveri ioil Cracks (B6) n Visible on Aerial Im ained Leaves (B9) ations: Present? Ye resent? Ye lary fringe)	ne) riverine) nagery (B7) s N s N	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized RI Presence or Recent Iron Thin Muck S Other (Expl.	B11) (B12) ertebrates sulfide Odo nizosphere f Reduced Reductior Surface (C ain in Rem nes):	or (C1) ss along L lron (C4) n in Tilled 7) aarks)	Soils (C6	Works (C3) — Dr ts (C3) — Dr Cr Sa — Sh — FA	ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) iff Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9 allow Aquitard (D3) aC-Neutral Test (D5)
Primary Indica Surface V High Water Saturation Water Ma Sediment Drift Depo Surface S Inundation Water-Sta Field Observa Surface Water Water Table P Saturation Pre (includes capil	rology Indicators: ators (minimum of on Vater (A1) er Table (A2) n (A3) rks (B1) (Nonriverir Deposits (B2) (Non usits (B3) (Nonriveri ioil Cracks (B6) n Visible on Aerial Im ained Leaves (B9) ations: Present? Ye resent? Ye lary fringe)	ne) riverine) nagery (B7) s N s N	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized RI Presence of Recent Iron Thin Muck S Other (Explication) Depth (inclication) Depth (inclication)	B11) (B12) ertebrates sulfide Odo nizosphere f Reduced Reductior Surface (C ain in Rem nes):	or (C1) ss along L lron (C4) n in Tilled 7) aarks)	Soils (C6	Works (C3) — Dr ts (C3) — Dr Cr Sa — Sh — FA	ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) iff Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9 allow Aquitard (D3) aC-Neutral Test (D5)
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Project/Site: Newport Banning Ranch (Newport J01	5) City/	County: Newpo	rt Beach/Orange	Sampling Date: 7/15/09
Applicant/Owner: Newfort Banning Ray	ich	,	State: CA	Sampling Date:
				e Santa Ana" land grant
Landform (hillslope, terrace, etc.): 16wlands				Slope (%):
Subregion (LRR): C	1 at: 33.1	41154	-117.9469	Datum: NAD 8 3
Soil Map Unit Name: Bodsa Silt loam	Zat.		Long: 11111101	Detum: OAD&3
Are climatic / hydrologic conditions on the site typical for the	ois time of veer?	/	NWI classific	
Are Vegetation, Soil, or Hydrology		_	(If no, explain in R	•
Are Vegetation, Soil, or Hydrology				resent? Yes No
		•	eeded, explain any answer	
SUMMARY OF FINDINGS – Attach site map		npling point	locations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes	No	Is the Sample	4 Araa	
Hydric Soil Present? Yes	Vo oV	within a Wetla		No X
Wetland Hydrology Present? Yes Remarks:	No <u>X</u>		nd: les	No <u>X</u>
Remarks.				
VEGETATION – Use scientific names of plan	nts.			
Tree Stratum (Plot size: 30730)	Absolute Don	ninant Indicator	Dominance Test works	heet:
1. Salix gooddingii	% Cover Spe	cies? Status	Number of Dominant Sp	ecies o
1. Salix goodsingii	75 - 1	f OBL	That Are OBL, FACW, or	r FAC: 2 (A)
3.			Total Number of Domina	
4			Species Across All Strata	a: <u>2</u> (B)
	75 = Tot	al Cover	Percent of Dominant Spe	- 4 5
Sapling/Shrub Stratum (Plot size:)			That Are OBL, FACW, or	FAC: 100% (A/B)
1			Prevalence Index works	
2			Total % Cover of:	
3			OBL species	
4.     5.			FACW species	
	<u> </u>	al Cover		x 3 =
Herb Stratum (Plot size: 30×30)		ai Covei	FACU species	
1. Salicornia Virginica		4 OBL	Column Totals:	(A) (D)
2. Malva parvillom	_ <1	n LIPL	osiami rotalo.	(A) (B)
3				= B/A =
4			Hydrophytic Vegetation	
5				
6			Prevalence Index is :	i i
7 8			data in Remarks o	ations <sup>1</sup> (Provide supporting or on a separate sheet)
	= Tota	al Cover		ytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:)	·			
1,			<sup>1</sup> Indicators of hydric soil a	and wetland hydrology must
2			be present, unless disturb	ped or problematic.
_	= Tota	al Cover	Hydrophytic	
% Bare Ground in Herb Stratum % Cover	of Biotic Crust	0	Vegetation Present? Yes	<u> </u>
Remarks:			-	

SO		_
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Depth	cription: (Describe Matrix		Rode	x Feature	s					
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remar	ks
0-20	2.54412	100					Silty c	la		
					***************************************		31/19 0			
				_						
	-									-
				-						
		-								
								_		
	oncentration, D=Depl					d Sand Gra	ains. <sup>2</sup> L	.ocation: I	PL=Pore Lining	ı, M=Matrix.
	Indicators: (Applica	ble to all LR	Rs, unless other	rwise note	∍d.)		Indicato	rs for Pro	blematic Hydi	ric Soils³:
Histosol	· ·		Sandy Red	, ,			1 cm	Muck (As	9) ( <b>LRR C</b> )	
	oipedon (A2)		Stripped Ma				2 cm	n Muck (A	10) (LRR B)	
_ Black Hi			Loamy Muc					uced Verti		
	en Sulfide (A4)		Loamy Gley		(F2)				aterial (TF2)	
	d Layers (A5) (LRR C	)	Depleted M		=0\		Othe	er (Explain	in Remarks)	
	ick (A9) (LRR D)	(014)	Redox Dark	,	•					
	d Below Dark Surface ark Surface (A12)	(ATT)	Depleted Da				3,			
	fucky Mineral (S1)		Redox Depi		-8)				ophytic vegetati	
	Bleyed Matrix (S4)		vemai rooi	s (ra)					gy must be pre	
	_ayer (if present):						uness	uisturbea	or problemation	
Type:	ches):		_				Usalain Co	:! D	40 V	>
Type: Depth (in	ches):						Hydric Sc	oil Presen	t? Yes	NoX_
Type: Depth (independent of the control of the	GY						Hydric Sc	oil Presen	t? Yes	NoX_
Type: Depth (independent of the control of the	GY drology Indicators:			Α.						
Type: Depth (independent of the content of the	<b>GY</b> drology Indicators: ators (minimum of on		neck all that appl				Sec	ondary Inc	dicators (2 or m	ore required)
Type: Depth (inc emarks:  'DROLO  'etland Hyd rimary Indic _ Surface	<b>GY</b> drology Indicators: eators (minimum of on Water (A1)		neck all that apply	(B11)			Sec.	ondary Inc Water Ma	dicators (2 or m	ore required)
Type: Depth (inc emarks:  'DROLO  'etland Hye rimary Indic _ Surface _ High Wa	<b>GY</b> drology Indicators: ators (minimum of on Water (A1) ter Table (A2)		neck all that apply Salt Crust Biotic Crus	(B11) st (B12)	\/D40\		Sec.	ondary Inc Water Ma Sediment	<u>dicators (2 or m</u> irks (B1) ( <b>Rive</b> i Deposits (B2)	ore required) rine) (Riverine)
Type: Depth (inc emarks:  'DROLO  'etland Hyd rimary Indic _ Surface _ High Wa _ Saturatio	<b>GY</b> drology Indicators: eators (minimum of on Water (A1) ter Table (A2) on (A3)	ne required; cl	neck all that apply Salt Crust Biotic Crus Aquatic Inv	(B11) st (B12) vertebrates	. ,		<u>Sec</u>	ondary Ind Water Ma Sediment Drift Depo	dicators (2 or m arks (B1) ( <b>Rive</b> r Deposits (B2) osits (B3) ( <b>Riv</b> e	ore required) rine) (Riverine) rine)
Type: Depth (independent of the content of the	<b>GY</b> drology Indicators: eators (minimum of on Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriverir	ne required; ch	neck all that appl Salt Crust Biotic Crus Aquatic Inv Hydrogen :	(B11) st (B12) vertebrates Sulfide Od	or (C1)		Sec.	ondary Inc Water Ma Sediment Drift Depo	dicators (2 or m arks (B1) (River Deposits (B2) osits (B3) (River Patterns (B10)	ore required) rine) (Riverine) rine)
Type: Depth (indicates)  /DROLO /etland Hydrimary Indicates _ High Water Mater M	GY drology Indicators: eators (minimum of on Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriverir tt Deposits (B2) (Non	ne required; ch ne) riverine)	neck all that apply Salt Crust Biotic Crus Aquatic Inv Hydrogen	(B11) st (B12) vertebrates Sulfide Od thizospher	or (C1) es along L		Sec s (C3)	ondary Ind Water Ma Sediment Drift Depo Drainage Dry-Seas	dicators (2 or m rks (B1) ( <b>Rive</b> Deposits (B2) osits (B3) ( <b>Rive</b> Patterns (B10) on Water Table	ore required) rine) (Riverine) rine)
Type: Depth (independent of the content of the	GY drology Indicators: eators (minimum of on Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriverir tt Deposits (B2) (Non	ne required; ch ne) riverine)	neck all that apply Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized R	(B11) of (B12) vertebrates Sulfide Od Chizospher of Reduced	or (C1) es along L d Iron (C4)	)	Sec	ondary Ind Water Ma Sediment Drift Depo Drainage Dry-Seas Crayfish F	dicators (2 or m rks (B1) (River Deposits (B2) osits (B3) (River Patterns (B10) on Water Table Burrows (C8)	ore required) rine) (Riverine) rine)
Type: Depth (independent of the content of the	GY  drology Indicators: eators (minimum of on Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriverin to Deposits (B2) (Non posits (B3) (Nonriverin Soil Cracks (B6)	ne required; ch ne) riverine) ne)	neck all that apply Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized R Presence o	(B11)  vertebrates Sulfide Od thizospher of Reduced n Reduction	or (C1) es along L d Iron (C4) on in Tilled	)	Sec.	ondary Inc Water Ma Sediment Drift Depo Drainage Dry-Seas Crayfish E Saturation	dicators (2 or marks (B1) (River) Deposits (B2) Desits (B3) (River) Patterns (B10) On Water Table Burrows (C8) In Visible on Ae	ore required) rine) (Riverine) rine)
Type: Depth (independent of the content of the	GY  drology Indicators: eators (minimum of on Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriverir at Deposits (B2) (Non cosits (B3) (Nonriveri Soil Cracks (B6) on Visible on Aerial In	ne required; ch ne) riverine) ne)	neck all that apply Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized R Presence o	(B11) vertebrates Sulfide Od thizospher of Reduced Neduction Surface (C	or (C1) es along L d Iron (C4) on in Tilled C7)	)	Sec	ondary Inc Water Ma Sediment Drift Depo Drainage Dry-Seas Crayfish E Saturation Shallow A	dicators (2 or marks (B1) (River) Deposits (B2) Desits (B3) (River) Patterns (B10) On Water Table Burrows (C8) In Visible on Ae	ore required) rine) (Riverine) rine)
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Type: Depth (independent of the content of the	GY drology Indicators: eators (minimum of on Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriverir at Deposits (B2) (Non cosits (B3) (Nonriveri Soil Cracks (B6) on Visible on Aerial In tained Leaves (B9) vations:	ne required; chene) riverine) ne)	neck all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Thin Muck Other (Exp	(B11)  It (B12)  Vertebrates  Sulfide Od  Chizospher  Of Reduced  n Reductio  Surface (Collain in Rer	or (C1) es along L d Iron (C4) on in Tilled C7) marks)	Soils (C6)	Sec	ondary Inc Water Ma Sediment Drift Depo Drainage Dry-Seas Crayfish E Saturation Shallow A	dicators (2 or marks (B1) (River) Deposits (B2) Desits (B3) (River) Patterns (B10) On Water Table Burrows (C8) In Visible on Ae	ore required) rine) (Riverine) rine)
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Type: Depth (included)  Portland Hydrimary India Surface High Wa Saturatia Water M Sedimer Drift Dep Surface Inundatia Water-S ield Observurface Water //ater Table	GY  drology Indicators: eators (minimum of on Water (A1) ter Table (A2) on (A3) arks (B1) (Nonrivering the Deposits (B2) (Nonrivering the Deposits (B3) (Nonrivering the Deposits (B6) on Visible on Aerial Intained Leaves (B9) votations: er Present?  Ye Present?  Yesent?	ne required; cl ne) riverine) ne) nagery (B7) s No _ s No _	neck all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Thin Muck Other (Exp	(B11) It (B12) Vertebrates Sulfide Od Chizospher of Reduced In Reduction Surface (Colain in Rer Ches):	or (C1) es along L d Iron (C4) on in Tilled C7) marks)	Soils (C6)	Sec.	ondary Inc Water Ma Sediment Drift Depo Dry-Seas Crayfish E Saturation Shallow A FAC-Neur	dicators (2 or marks (B1) (River) Deposits (B2) Desits (B3) (River) Patterns (B10) On Water Table Burrows (C8) In Visible on Ae Aquitard (D3) tral Test (D5)	ore required) rine) (Riverine) rine) s (C2) rial Imagery (C9)
Type: Depth (inclemarks:  /DROLO /etland Hydrimary Indication _ Surface _ High Wa _ Saturation _ Water M _ Sedimer _ Drift Depth _ Surface _ Inundation _ Water-Sield Observirace Water Table aturation Prince _ Surface _ Vater Table _ Surface Water Table _ Surface _ Su	GY  drology Indicators: eators (minimum of on Water (A1) ter Table (A2) on (A3) arks (B1) (Nonrivering the Deposits (B2) (Nonrivering the Deposits (B3) (Nonrivering the Deposits (B6)) on Visible on Aerial Interior Leaves (B9) vations: er Present? Present? Yesent? Yesent?	ne required; chene) riverine) ne) nagery (B7)	neck all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Thin Muck Other (Exp	(B11) of (B12) vertebrates Sulfide Od thizospher of Reduced n Reductic Surface (Collain in Rer	or (C1) es along L d Iron (C4) on in Tilled C7) marks)	Soils (C6)	Sec.	ondary Inc Water Ma Sediment Drift Depo Dry-Seas Crayfish E Saturation Shallow A FAC-Neur	dicators (2 or marks (B1) (River) Deposits (B2) Desits (B3) (River) Patterns (B10) On Water Table Burrows (C8) In Visible on Ae Aquitard (D3) tral Test (D5)	ore required) rine) (Riverine) rine) s (C2) rial Imagery (C9)
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Type: Depth (ind Remarks:  YDROLO  Vetland Hyd rimary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S ield Observiorface Water Vater Table raturation Princludes cap	GY  drology Indicators: eators (minimum of on Water (A1) ter Table (A2) on (A3) arks (B1) (Nonrivering the Deposits (B2) (Nonrivering the Deposits (B3) (Nonrivering the Deposits (B6)) on Visible on Aerial Interior Leaves (B9) vations: er Present? Present? Yesent? Yesent?	ne required; che riverine) ne) nagery (B7) s No _ s No _	neck all that apple Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Thin Muck Other (Exp	(B11)  of (B12)  vertebrates  Sulfide Od  thizospher  of Reduced  n Reductic  Surface (Colain in Rer  ches):  ches):  ches):	or (C1) es along L d Iron (C4) on in Tilled C7) marks)	Soils (C6)	Second Se	ondary Inc Water Ma Sediment Drift Depo Dry-Seas Crayfish E Saturation Shallow A FAC-Neur	dicators (2 or marks (B1) (River) Deposits (B2) Desits (B3) (River) Patterns (B10) On Water Table Burrows (C8) In Visible on Ae Aquitard (D3) tral Test (D5)	ore required) rine) (Riverine) rine) s (C2) rial Imagery (C9)
Type: Depth (ind Remarks:  YDROLO  Vetland Hyd rimary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S ield Observiorface Water Vater Table raturation Princludes cap	GY  drology Indicators: eators (minimum of on Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriverir at Deposits (B2) (Non cosits (B3) (Nonriveri Soil Cracks (B6) on Visible on Aerial In tained Leaves (B9) vations: er Present? Present? Ye resent? Ye resent? Ye resent? Ye resent? Ye resent?	ne required; che riverine) ne) nagery (B7) s No _ s No _	neck all that apple Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Thin Muck Other (Exp	(B11)  of (B12)  vertebrates  Sulfide Od  thizospher  of Reduced  n Reductic  Surface (Colain in Rer  ches):  ches):  ches):	or (C1) es along L d Iron (C4) on in Tilled C7) marks)	Soils (C6)	Second Se	ondary Inc Water Ma Sediment Drift Depo Dry-Seas Crayfish E Saturation Shallow A FAC-Neur	dicators (2 or marks (B1) (River) Deposits (B2) Desits (B3) (River) Patterns (B10) On Water Table Burrows (C8) In Visible on Ae Aquitard (D3) tral Test (D5)	ore required) rine) (Riverine) rine)
Type: Depth (includes cap  Type: Depth (includes cap  Type: Depth (includes cap	GY  drology Indicators: eators (minimum of on Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriverir at Deposits (B2) (Non cosits (B3) (Nonriveri Soil Cracks (B6) on Visible on Aerial In tained Leaves (B9) vations: er Present? Present? Ye resent? Ye resent? Ye resent? Ye resent? Ye resent?	ne required; che riverine) ne) nagery (B7) s No _ s No _	neck all that apple Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Thin Muck Other (Exp	(B11)  of (B12)  vertebrates  Sulfide Od  thizospher  of Reduced  n Reductic  Surface (Colain in Rer  ches):  ches):  ches):	or (C1) es along L d Iron (C4) on in Tilled C7) marks)	Soils (C6)	Second Se	ondary Inc Water Ma Sediment Drift Depo Dry-Seas Crayfish E Saturation Shallow A FAC-Neur	dicators (2 or marks (B1) (River) Deposits (B2) Desits (B3) (River) Patterns (B10) On Water Table Burrows (C8) In Visible on Ae Aquitard (D3) tral Test (D5)	ore required) rine) (Riverine) rine) s (C2) rial Imagery (C9)
Type: Depth (includes cap  Type: Depth (includes cap  Type: Depth (includes cap	GY  drology Indicators: eators (minimum of on Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriverir at Deposits (B2) (Non cosits (B3) (Nonriveri Soil Cracks (B6) on Visible on Aerial In tained Leaves (B9) vations: er Present? Present? Ye resent? Ye resent? Ye resent? Ye resent? Ye resent?	ne required; che riverine) ne) nagery (B7) s No _ s No _	neck all that apple Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Thin Muck Other (Exp	(B11)  of (B12)  vertebrates  Sulfide Od  thizospher  of Reduced  n Reductic  Surface (Colain in Rer  ches):  ches):  ches):	or (C1) es along L d Iron (C4) on in Tilled C7) marks)	Soils (C6)	Second Se	ondary Inc Water Ma Sediment Drift Depo Dry-Seas Crayfish E Saturation Shallow A FAC-Neur	dicators (2 or marks (B1) (River) Deposits (B2) Desits (B3) (River) Patterns (B10) On Water Table Burrows (C8) In Visible on Ae Aquitard (D3) tral Test (D5)	ore required) rine) (Riverine) rine) s (C2) rial Imagery (C9)

Project/Site: Newport Banning Ranch (Newport JO	15) City/	County: Newpo	ort Beach/Orange Sampling Date: 7/15/09
Applicant/Owner: Newport Banning P	anch		State: (A Sampling Point: 9
Investigator(s): Gary Medeiros, Allison Rudalevige			tange: N/A - "Santiago De Santa Ana" land grant
Landform (hillslope, terrace, etc.): lowlands	Loca	al relief (concave	convey panal ( MCO Le
Subregion (LRR): C	Lat. 33.64	11242	Long: <u>117.94683</u> Datum: <u>WAD83</u>
Soil Map Unit Name: Bolsa Silt loan			NWI classification: PSSCx
Are climatic / hydrologic conditions on the site typical for	this time of year?	Voc √ No	NVVI classification:
Are Vegetation, Soil, or Hydrology	significantly distu		
Are Vegetation, Soil, or Hydrology			"Normal Circumstances" present? Yes No needed, explain any answers in Remarks.)
		•	locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes			
Hydric Soil Present? Yes 🗡		Is the Sample	_
Wetland Hydrology Present? Yes		within a Wetla	nd? Yes No X
Remarks:			
VEGETATION LIes esignifications of L			
VEGETATION – Use scientific names of pla			
Tree Stratum (Plot size: _ ろひょるひ )	Absolute Dom <u>% Cover</u> Spe	ninant Indicator	Dominance Test worksheet:
1. Salix gooddingii	110	BBL	Number of Dominant Species That Are OBL FACW or FAC:
2			(A)
3			Total Number of Dominant
4			Species Across All Strata:
Sapling/Shrub Stratum (Plot size:)	40 = Tot		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
1			Prevalence Index worksheet:
2			Total % Cover of: Multiply by:
3			OBL species x 1 =
4			FACW species x 2 =
5			FAC species x 3 =
Herb Stratum (Plot size: ろのメるの)	= Tot	al Cover	FACU species x 4 =
1 Malia annilla	70 L	e upe	UPL species x 5 =
2. Salicornia virginica	50	OBL	Column Totals: (A) (B)
			Prevalence Index = B/A =
4			Hydrophytic Vegetation Indicators:
5			
6.			Prevalence Index is ≤3.0 <sup>1</sup>
7 8			Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
	120 = Tota	al Cover	Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:)			
1			<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	~	al Cover	Hydrophytic
% Bare Ground in Herb Stratum % Cov.	er of Biotic Crust	9	Vegetation
Remarks:			Present? Yes No

Profile Desi	cription: (Describe	to the dept	th needed to docu	ment the i	ndicator	or confirm	the absence of	Sampling Point	
Depth	Matrix	•		ox Feature			авоблюб с	in manualoro.,	
(inches)	Color (moist)	%	Color (moist)	%	_Type <sup>1</sup>	e <sup>1</sup> Loc <sup>2</sup>	Texture	Remarks	
0-4	104R 3/2	90	104R 6/6	10	C	M	clay	prominent r	notllos
4-20	2.54 4/2	100					citt de	Promo cod v	- 000 1 1 000
. 20							sing day		
***************************************					-				
	Att. 1	-							
		-							
					***************************************				
	oncentration, D=Dep					d Sand Gr		tion: PL=Pore Lining, N	
	Indicators: (Applic	able to all L			ed.)			or Problematic Hydric	Soils <sup>3</sup> :
Histosol			Sandy Red					ick (A9) (LRR C)	
Histic Ep Black Hi	pipedon (A2)		Stripped Ma Loamy Muc		/E4\			ick (A10) (LRR B)	
	en Sulfide (A4)		Loamy Gley	-	. ,			d Vertic (F18) ent Material (TF2)	
	d Layers (A5) (LRR (	<b>C</b> )	Depleted M		()			xplain in Remarks)	
1 cm Mu	ıck (A9) ( <b>LRR D</b> )		Redox Dark		F6)			,	
Depleted	d Below Dark Surface	e (A11)	Depleted Da						
	ark Surface (A12)		Redox Depi		F8)		<sup>3</sup> Indicators of	hydrophytic vegetation	and
	flucky Mineral (S1)		Vernal Pool	ls (F9)				drology must be preser	nt,
	Gleyed Matrix (S4) Layer (if present):						unless dist	turbed or problematic.	
							1		
Туре:								<b>S</b>	
Type:							Hydric Soil P	resent? Yes 🗡	No
Type: Depth (inc							Hydric Soil P	resent? Yes 🗡	No
Type:							Hydric Soil P	resent? Yes <u></u>	No
Type: Depth (inc							Hydric Soil P	resent? Yes <u>Y</u>	No
Type: Depth (inc							Hydric Soil P	resent? Yes 🗡	No
Type: Depth (ind Remarks:	ches):						Hydric Soil P	resent? Yes <u>Y</u>	No
Type: Depth (inc Remarks: YDROLO	ches):						Hydric Soil P	resent? Yes <u>Y</u>	No
Type: Depth (ind Remarks:  YDROLO Vetland Hyd	GY drology Indicators:			y)					
Type: Depth (ind Remarks:  YDROLO Vetland Hyd Primary Indic	GY		check all that apply				Seconda	ary Indicators (2 or more	e required)
Type: Depth (ind Remarks:  YDROLO  Vetland Hyd  Surface  Surface	GY drology Indicators: cators (minimum of o		check all that apple	(B11)			Seconda	ary Indicators (2 or more ter Marks (B1) ( <b>Riverin</b> e	e required)
Type: Depth (ind Remarks:  YDROLO  Vetland Hyd  Surface  High Wa	GY drology Indicators: cators (minimum of or Water (A1) ster Table (A2)		check all that appl Salt Crust Biotic Crus	(B11) st (B12)	s (B13)		Seconda Wat Sed	ary Indicators (2 or more ter Marks (B1) (Riverin liment Deposits (B2) (R	e required) e) ilverine)
Type: Depth (inc Remarks:  YDROLO Vetland Hyc Surface ' High Wa Saturatic	GY drology Indicators: cators (minimum of or Water (A1) tter Table (A2) on (A3)	ne required;	check all that appl Salt Crust Biotic Crust Aquatic Inv	(B11) st (B12) vertebrates			Seconda Wal Sed	ary Indicators (2 or more ter Marks (B1) (Riverin liment Deposits (B2) (R t Deposits (B3) (Riverin	e required) e) liverine)
Type: Depth (ind Remarks:  YDROLO  Vetland Hyd Surface  High Wa Saturatic Water M	GY drology Indicators: cators (minimum of or Water (A1) tter Table (A2) on (A3) larks (B1) (Nonriveri	ne required;	check all that apply Salt Crust Biotic Crust Aquatic Inv	(B11) st (B12) vertebrates Sulfide Od	or (C1)	iving Roo	Seconda  Wat Seconda  Drift Dra	ary Indicators (2 or more ter Marks (B1) (Riverin diment Deposits (B2) (R t Deposits (B3) (Riverin inage Patterns (B10)	e required) e) iiverine) ne)
Type: Depth (ind Remarks:  YDROLO  YURIAN Hyd  Primary Indic  Surface  High Wa  Saturatic  Water M  Sedimen	GY drology Indicators: cators (minimum of or Water (A1) ster Table (A2) on (A3) larks (B1) (Nonriveri nt Deposits (B2) (Nor	ne required; ine) nriverine)	check all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F	(B11) st (B12) vertebrates Sulfide Od Rhizospher	lor (C1) es along l		<u>Seconda</u> Wal Driff Dra ts (C3) Dry	ary Indicators (2 or more ter Marks (B1) (Riverin fliment Deposits (B2) (R t Deposits (B3) (Riverin inage Patterns (B10) -Season Water Table (0	e required) e) iiverine) ne)
Type: Depth (ind Remarks:  YDROLO  Wetland Hyd  Primary Indic  Surface  High Wa  Saturatio  Water M  Sedimen  Drift Dep	GY drology Indicators: cators (minimum of or Water (A1) tter Table (A2) on (A3) larks (B1) (Nonriveri	ne required; ine) nriverine)	check all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F	(B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduce	lor (C1) es along l d Iron (C4	)	Seconda Wat Sed Driff Dra ts (C3) Dry- Cra	ary Indicators (2 or more ter Marks (B1) (Riverine diment Deposits (B2) (R t Deposits (B3) (Riverine dinage Patterns (B10) -Season Water Table (C yfish Burrows (C8)	e required) e) iverine) ne)
Type: Depth (ind Remarks:  YDROLO  Vetland Hyd  Primary Indic  Surface  High Wa  Saturatic  Water M  Sedimen  Drift Dep  Surface	GY drology Indicators: cators (minimum of or Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriveri at Deposits (B2) (Nor cosits (B3) (Nonriver Soil Cracks (B6)	ne required; ine) nriverine) rine)	check all that apple Salt Crust Biotic Crust Aquatic Int Hydrogen Oxidized F Recent Iro	(B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduced n Reduction	lor (C1) res along I d Iron (C4 on in Tilled	)	Seconda	ary Indicators (2 or more ter Marks (B1) (Riverine diment Deposits (B2) (R t Deposits (B3) (Riverine inage Patterns (B10) -Season Water Table (C yfish Burrows (C8) uration Visible on Aerial	e required) e) iverine) ne)
Type: Depth (inc Remarks:  YDROLO  Vetland Hyc Primary Indic Surface High Wa Saturatic Water M Sedimen Drift Dep Surface Inundation	GY drology Indicators: cators (minimum of or Water (A1) ster Table (A2) on (A3) arks (B1) (Nonriveri nt Deposits (B2) (Nor cosits (B3) (Nonriver Soil Cracks (B6) on Visible on Aerial In	ne required; ine) nriverine) rine)	check all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro	(B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduced n Reductio	lor (C1) res along I d Iron (C4 on in Tilled C7)	)	Seconda	ary Indicators (2 or more ter Marks (B1) (Rivering diment Deposits (B2) (R t Deposits (B3) (Rivering inage Patterns (B10) -Season Water Table (C yfish Burrows (C8) uration Visible on Aerial allow Aquitard (D3)	e required) e) viverine) ne)
Type: Depth (ind Remarks:  YDROLO Vetland Hyd Surface High Wa Saturatio Water M Sedimen Drift Dep Surface Inundatio Water-Si	GY drology Indicators: cators (minimum of or Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriveri at Deposits (B2) (Nor cosits (B3) (Nonriver Soil Cracks (B6) on Visible on Aerial In tained Leaves (B9)	ne required; ine) nriverine) rine)	check all that apple Salt Crust Biotic Crust Aquatic Int Hydrogen Oxidized F Recent Iro	(B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduced n Reductio	lor (C1) res along I d Iron (C4 on in Tilled C7)	)	Seconda	ary Indicators (2 or more ter Marks (B1) (Riverine diment Deposits (B2) (R t Deposits (B3) (Riverine inage Patterns (B10) -Season Water Table (C yfish Burrows (C8) uration Visible on Aerial	e required) e) viverine) ne)
Type: Depth (ind Remarks:  YDROLO  Vetland Hyd Surface High Wa Saturation Water M Sedimen Drift Dep Surface Inundation Water-Si Field Observ	GY  drology Indicators: cators (minimum of or Water (A1) ster Table (A2) on (A3) arks (B1) (Nonriveri nt Deposits (B2) (Nor cosits (B3) (Nonriver Soil Cracks (B6) on Visible on Aerial In tained Leaves (B9) vations:	ne required; ine) nriverine) rine) magery (B7)	check all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Thin Muck Other (Exp	(B11) st (B12) vertebrates Sulfide Od Rhizospher of Reducee n Reductio s Surface (Colain in Red	or (C1) es along I d Iron (C4 on in Tillec C7) marks)	) I Soils (C6	Seconda	ary Indicators (2 or more ter Marks (B1) (Rivering diment Deposits (B2) (R t Deposits (B3) (Rivering inage Patterns (B10) -Season Water Table (C yfish Burrows (C8) uration Visible on Aerial allow Aquitard (D3)	e required) e) viverine) ne)
Type: Depth (ind Remarks:  YDROLO  Vetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimen Drift Dep Surface Inundatic Water-Si	GY  drology Indicators: eators (minimum of or Water (A1) ster Table (A2) on (A3) larks (B1) (Nonriveri at Deposits (B2) (Nor cosits (B3) (Nonriver Soil Cracks (B6) on Visible on Aerial In tained Leaves (B9) vations: er Present?	ne required; ine) nriverine) rine) magery (B7)	check all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Thin Muck Other (Exp	(B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduced n Reduction Surface (Colain in Reduction ches):	or (C1) es along I d Iron (C4 on in Tilled C7) marks)	) I Soils (C6	Seconda	ary Indicators (2 or more ter Marks (B1) (Rivering diment Deposits (B2) (R t Deposits (B3) (Rivering inage Patterns (B10) -Season Water Table (C yfish Burrows (C8) uration Visible on Aerial allow Aquitard (D3)	e required) e) viverine) ne)
Type: Depth (ind Remarks:  YDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimen Drift Dep Surface Inundation	GY  drology Indicators: cators (minimum of or Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriveri at Deposits (B2) (Nor cosits (B3) (Nonriver Soil Cracks (B6) on Visible on Aerial In tained Leaves (B9) vations: er Present? Ye Present?	ne required; ine) nriverine) rine) magery (B7)	check all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Thin Muck Other (Exp	(B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduced in Reduction Surface (Colain in Reduction ches):ches):ches):	or (C1) es along I d Iron (C4 on in Tilled C7) marks)	) I Soils (C6)	Seconda  Wat Seconda Drift Drift Dra ts (C3) Dry Cra Sati Sha	ary Indicators (2 or more ter Marks (B1) (Rivering diment Deposits (B2) (R t Deposits (B3) (Rivering inage Patterns (B10) -Season Water Table (C yfish Burrows (C8) uration Visible on Aerial allow Aquitard (D3)	e required) e) liverine) ne) C2)

Remarks:

Project/Site: Newport Banning Ranch (Newport J015	5) City/0	County: Newpo	rt Beach/Orange	Sampling Date:	7/15/09
Applicant/Owner: Dewport Banning Ranch	h		State: CA	Sampling Point:	10
Investigator(s): Gary Medeiros, Allison Rudalevige	Section	on, Township R	ange: N/A - "Santiago	_ camping rolli De Santa Ana" lan	d grant
Landform (hillslope, terrace, etc.): depression	Loca	relief (concave	convex none): Cant	alle Slon	2 GIGITE
Subregion (LRR): C	Lat: 33.64	11834	Long: -117.947	S(c Datum	, 1142 O.7
Soil Map Unit Name: Bolsa Silt loan			NWI classif		
Are climatic / hydrologic conditions on the site typical for thi					
Are Vegetation, Soil, or Hydrology			"Normal Circumstances"		NI
Are Vegetation, Soil, or Hydrology			eeded, explain any answ		NO
SUMMARY OF FINDINGS – Attach site map		•		•	tures, etc.
	lo				
	lo	Is the Sample		<u></u>	
Wetland Hydrology Present? Yes N		within a Wetla	nd? Yes	No X	
Remarks:					
VEGETATION – Use scientific names of plan	its.				
To Olaria (Di Li		inant Indicator	Dominance Test work	ksheet:	
Tree Stratum (Plot size:)	% Cover Spec		Number of Dominant S		
1			That Are OBL, FACW,	or FAC:	(A)
2.       3.			Total Number of Domin	nant 🤧	
4			Species Across All Stra	ata: 3	(B)
	= Tot	al Cover	Percent of Dominant S	pecies	,
Sapling/Shrub Stratum (Plot size:)		ai Covei	That Are OBL, FACW,	or FAC: 100	<u>(A/B)</u>
1			Prevalence Index wor	ksheet:	
2			Total % Cover of:	Multiply b	· <u>Υ</u> :
3			OBL species		
4			FACW species		
5			1	x 3 =	
Herb Stratum (Plot size:)	= Tota	al Cover	FACU species		
1. Conjun maculatum	20 0	FACW	UPL species		1
2. Frankenia Salina Igrandifolia)	15 u	FACW	Column Totals:	(A)	(B)
2. Frankenia Salina Egrandifolia) 3. Salicornia Virginica	15 0	, ,,,	Prevalence Index	: = B/A =	
4. Malva parustora	_ 2 _ n	MPL	Hydrophytic Vegetati	on Indicators:	-
5. Heliotropium Chrassavicum	<u>                                    </u>	OBL	Marinance Test is	>50%	
6			Prevalence Index i	s ≤3.0 <sup>1</sup>	
7			Morphological Ada	ptations¹ (Provide su	pporting
8	- AL		l .	s or on a separate sh	· ·
Woody Vine Stratum (Plot size:)	_53_ = Tota	al Cover	Froblematic Hydro	phytic Vegetation <sup>1</sup> (E	xpiain)
1			<sup>1</sup> Indicators of hydric so	il and wetland hydrol	any must
2.			be present, unless dist	urbed or problematic.	ogy must
	2	al Cover	Hydrophytic		
% Bare Ground in Herb Stratum % Cover			Vegetation	<b>S</b>	
			Present? Ye	s <u> </u>	
Remarks: Cead Frankenia covered ~ 60%	of bare 9	round.		-	7
		,			

60	15°%	в	E .	

Profile Desc	ription: (Describe	to the depth	n needed to docur	nent the i	ndicator	or confirm	n the absenc	e of indicators.)
Depth	Matrix		Redo	x Feature				·
(inches)	Color (moist)		Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-5	104R312	70	2.54R 4/3	30		_H	clay	prominent moffles
5-19	2.574/2	100					Sitt	•
19-20	2.54 4/3	90		10	$\overline{D}$	M	-	
				-				
							•	
¹Type: C=Cc	ncentration, D=Depl	etion, RM=F	Reduced Matrix, CS	=Covered	or Coated	d Sand Gr	rains <sup>2</sup> l c	ocation: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (Applica	ble to all Li	RRs, unless other	wise note	ed.)	2 Oana Oi		s for Problematic Hydric Soils <sup>3</sup> :
Histosol			Sandy Redo		,			Muck (A9) (LRR C)
Histic Ep	ipedon (A2)		Stripped Ma					Muck (A10) (LRR B)
Black His	stic (A3)		Loamy Mucl	ky Mineral	(F1)			ced Vertic (F18)
	n Sulfide (A4)		Loamy Gley		(F2)			Parent Material (TF2)
	Layers (A5) (LRR C	)	Depleted Ma				Other	(Explain in Remarks)
	ck (A9) (LRR D)	/ / / / / /	PRedox Dark	•	,			
	Below Dark Surface rk Surface	(A11)	Depleted Da				3,	
	ucky Mineral (S1)		Redox Depre		8)			s of hydrophytic vegetation and
	leyed Matrix (S4)		Vernal Pools	s (F9)				hydrology must be present,
	ayer (if present):	·					unless	disturbed or problematic.
Type:	, , , , , , , , , , , , , , , , , , , ,							
Depth (inc	hes):		<del></del>				Hydric Soi	I Brossetta Van V
Remarks:							Hydric 30i	I Present? Yes No
HYDROLOG	GY							
	rology Indicators:							
_	ators (minimum of on	e required: i	check all that apply	1			2000	ndary Indicators /2 or more required)
	Vater (A1)	o roquirou, i	Salt Crust (			<del></del>		ndary Indicators (2 or more required)
	er Table (A2)		Biotic Crust	•				Vater Marks (B1) (Riverine)
Saturation			Aquatic Inv		(D12)			Sediment Deposits (B2) (Riverine)
	arks (B1) ( <b>Nonriveri</b> r	ie)	Hydrogen S					Orift Deposits (B3) (Riverine)
	Deposits (B2) (Non		Oxidized RI		. ,	ivina Doo		Orainage Patterns (B10)
	osits (B3) (Nonriveri	-	Presence o					Ory-Season Water Table (C2)
	Soil Cracks (B6)	,	Recent Iron		, ,			Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
	n Visible on Aerial Im	nagery (B7)	Thin Muck			00113 (00		Shallow Aquitard (D3)
	ained Leaves (B9)	3-7 (7	Other (Expl				^	FAC-Neutral Test (D5)
Field Observ	ations:						<u> </u>	710 Notice (Do)
Surface Wate	r Present? Ye	sNo	Depth (inc	hes):				
Water Table F		s No				1		
Saturation Pre		s No				- 1	and Hydrolog	y Present? Yes No 🔀
(includes capi	llary fringe)		ě.					
Peacing 1760	orded Data (stream o	jauge, moni	toring well, aerial p	notos, pre	vious insp	ections), i	ıt available:	
Domorko								
Remarks:								

Project/Site: Newport Banning Ranch (Newpo	rt J015)	City/County: Newpo	ort Beach/Orange	Sampling Date:	715/09
Applicant/Owner: Newport Banning R	anch		State: CA	Sampling Point	) [
Investigator(s): Gary Medeiros, Allison Rudaley	/ige	Section, Township, R	lange: N/A - "Santiago	De Santa Ana" lar	ad grapt
Landform (hillslope, terrace, etc.):		Local relief (concave	convex none).	CI	(0/)
Subregion (LRR): C	Lat: 3	3.642304	_ Long:	187 D-4	11 3 A N SZ
Soil Map Unit Name: Bolsa Silt loar			NWI classi		
Are climatic / hydrologic conditions on the site typica	al for this time of ve	ar? Yes √ No.	//f no analaia ia	Reaction: VEINO	<u>X</u>
Are Vegetation, Soil, or Hydrology _	significantly				
Are Vegetation, Soil, or Hydrology _			"Normal Circumstances"		No
SUMMARY OF FINDINGS – Attach site		•	eeded, explain any answ	ers in Remarks.)	·
	No		iodations, manacce	s, important rea	itures, etc.
	No	Is the Sample	d Area		
and the same of th	NoX	within a Wetla	nd? Yes	No <u>X</u>	
Remarks:					
·					
					4
/EGETATION – Use scientific names of	nlante				4
200 colonatio maines of		Dominant I. I'			& 
Tree Stratum (Plot size:)	<u>% Cover</u>	Dominant Indicator Species? Status	Dominance Test work	••	
1			Number of Dominant S That Are OBL, FACW,	species or FAC:	(A)
2		<u> </u>	Total Number of Domir		( 7
3			Species Across All Stra		(B)
		= Total Cover	Percent of Dominant S	pecies 1. (	,
Sapling/Shrub Stratum (Plot size:	)		That Are OBL, FACW,	or FAC: 100	D_ (A/B)
1			Prevalence Index wor	ksheet:	
2			Total % Cover of:	Multiply b	oy:
34			OBL species		
4 5.			FACW species		
	0	= Total Cover	FACIL procies		
Herb Stratum (Plot size:)			FACU species	x4 = x5 =	
1. Conjum maculatum		y FACW	Column Totals:		
2. <u>Salicornia virginica</u>		'n 08L		•	
3 4				= B/A =	
5.			Hydrophytic Vegetation  Dominance Test is		
6			Prevalence Index i		
7			Morphological Ada		Innorting
8			data in Remark	s or on a separate sh	neet)
Woody Vine Stratum (Plot size:)	102	= Total Cover	Problematic Hydro	phytic Vegetation <sup>1</sup> (E	xplain)
			11-11-1		
1 2			<sup>1</sup> Indicators of hydric so be present, unless dist	it and wetland hydrol urbed or problematic	ogy must
	$\overline{\mathcal{D}}$	= Total Cover	Hydrophytic	- F. Faromado.	-
% Bare Ground in Herb Stratum 0	Cover of Biotic Cru		Vegetation	V	
Remarks:	Cover or blotte Cru	ist	Present? Ye	s X No	
					Ì

8	à
- 1	1
- 8	1

Profile Description: (Describe to the depth needed to document the indicator of	Sampling Point:
	or confirm the absence of indicators.)
Depth Matrix Redox Features	
70 1706	Loc <sup>2</sup> Texture Remarks
	Silty clay
5-18 loyrs/3 100	Silty clay
18-20 164R4/2 70 104R4/3 30 C	M sitty clay faint moltles
	sing clay fair maples
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated lydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	
_ Histosol (A1) Sandy Redox (S5)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histic Epipedon (A2)  Stripped Matrix (S6)	1 cm Muck (A9) (LRR C)
Black Histic (A3) Loamy Mucky Mineral (F1)	2 cm Muck (A10) (LRR B) Reduced Vertic (F18)
Hydrogen Sulfide (A4) Loamy Gleved Matrix (F2)	Red Parent Material (TF2)
_ Stratified Layers (A5) (LRR C) Depleted Matrix (F3)	Other (Explain in Remarks)
1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7)	
Depleted Below Dark Surface (A11)	
Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Wernal Pools (F9)	³Indicators of hydrophytic vegetation aṛjd
Sandy Gleyed Matrix (S4)	wetland hydrology must be present,
strictive Layer (if present):	unless disturbed or problematic.
Туре:	
Depth (inches):	Hydric Soil Present? Yes No
DROLOGY	
etland Hydrology Indicators:	
etland Hydrology Indicators: mary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
etland Hydrology Indicators:  mary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  Salt Crust (B11)	Water Marks (B1) (Riverine)
etland Hydrology Indicators:  mary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Biotic Crust (B12)	<ul><li>Water Marks (B1) (Riverine)</li><li>Sediment Deposits (B2) (Riverine)</li></ul>
tland Hydrology Indicators:  mary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Multiply (A3)  Aquatic Invertebrates (B13)	<ul><li>Water Marks (B1) (Riverine)</li><li>Sediment Deposits (B2) (Riverine)</li><li>Drift Deposits (B3) (Riverine)</li></ul>
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine)  Setland Hydrology Indicators:  Mary Indicators (minimum of one required; check all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	<ul> <li>Water Marks (B1) (Riverine)</li> <li>Sediment Deposits (B2) (Riverine)</li> <li>Drift Deposits (B3) (Riverine)</li> <li>Drainage Patterns (B10)</li> </ul>
etland Hydrology Indicators:  mary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Salt Crust (B11)  High Water Table (A2) Biotic Crust (B12)  Saturation (A3) Aquatic Invertebrates (B13)  Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Liv	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Ving Roots (C3) Dry-Season Water Table (C2)
Estland Hydrology Indicators:  mary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Salt Crust (B11)  High Water Table (A2) Biotic Crust (B12)  Saturation (A3) Aquatic Invertebrates (B13)  Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Live Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Ving Roots (C3) Crayfish Burrows (C8)
etland Hydrology Indicators:  mary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Salt Crust (B11)  High Water Table (A2) Biotic Crust (B12)  Saturation (A3) Aquatic Invertebrates (B13)  Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Livering Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4)  Surface Soil Cracks (B6) Recent Iron Reduction in Tilled States	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Ving Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery (C
Extland Hydrology Indicators:  mary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Salt Crust (B11)  High Water Table (A2) Biotic Crust (B12)  Saturation (A3) Aquatic Invertebrates (B13)  Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Live  Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4)  Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Second Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7)  Water-Stained Leaves (B9) Other (Explain in Remarks)	Water Marks (B1) (Riverine) Sedliment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Ving Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3)
etland Hydrology Indicators:  mary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Salt Crust (B11)  High Water Table (A2) Biotic Crust (B12)  Saturation (A3) Aquatic Invertebrates (B13)  Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Liv.  Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4)  Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Simulation Visible on Aerial Imagery (B7) Thin Muck Surface (C7)  Water-Stained Leaves (B9) Other (Explain in Remarks)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Ving Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery (C
etland Hydrology Indicators: imary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Salt Crust (B11)  High Water Table (A2) Biotic Crust (B12)  Saturation (A3) Aquatic Invertebrates (B13)  Water Marks (B1) (Nonriverine) Mydrogen Sulfide Odor (C1)  Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Live  Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4)  Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Seding Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7)  Water-Stained Leaves (B9) Depth (inches):	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Ving Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3) FAC-Neutral Test (D5)
etland Hydrology Indicators: imary Indicators (minimum of one required; check all that apply)  Surface Water (A1)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Ving Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3) FAC-Neutral Test (D5)
etland Hydrology Indicators:  imary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Salt Crust (B11)  High Water Table (A2) Biotic Crust (B12)  Saturation (A3) Aquatic Invertebrates (B13)  Water Marks (B1) (Nonriverine) Mydrogen Sulfide Odor (C1)  Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Liverian Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4)  Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Sediment Invertebrates (B9) Thin Muck Surface (C7)  Water-Stained Leaves (B9) Depth (inches):  Inface Water Present? Yes No Depth (inches):  Sufface Water Present? Yes No Depth (inches):	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Ving Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
rimary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Salt Crust (B11)  High Water Table (A2) Biotic Crust (B12)  Saturation (A3) Aquatic Invertebrates (B13)  Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Live  Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4)  Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Sediment Deposits (B9) Other (Explain in Remarks)  Presence Water Present? Yes No Depth (inches):  Surface Water Present? Yes No Depth (inches):	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Ving Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Drift Deposits (B2) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Water-Stained Leaves (B9) Depth (inches): Surface Water Present? Surface Water Present Present? Surface Water Present Pre	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Ving Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
etland Hydrology Indicators: imary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Salt Crust (B11)  High Water Table (A2) Biotic Crust (B12)  Saturation (A3) Aquatic Invertebrates (B13)  Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Live  Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4)  Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Selection (C7)  Water-Stained Leaves (B9) Other (Explain in Remarks)  Peld Observations:  Inface Water Present? Yes No Depth (inches):  Surface Water Present? Yes No Pepth (inches):  Surface Water Present? Yes No	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Ving Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
etland Hydrology Indicators: imary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Salt Crust (B11)  High Water Table (A2) Biotic Crust (B12)  Saturation (A3) Aquatic Invertebrates (B13)  Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Live  Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4)  Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Seding Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7)  Water-Stained Leaves (B9) Other (Explain in Remarks)  eld Observations:  Inface Water Present? Yes No Depth (inches):  Surface Water Present? Yes No Depth (inches):	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Ving Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
etland Hydrology Indicators: imary Indicators (minimum of one required; check all that apply)  Surface Water (A1)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Ving Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No

Project/Site: Newport Banning Ranch	(Newport J015)	City/C	County: Newpo	rt Beach/Orange	Sampling Date:	7/15/09
Applicant/Owner: Newpot Bann	ring Ranch			State: CA	Sampling Point:	12
Investigator(s): Gary Medeiros, Allison	n Rudalevige	Section	n. Township, R	ange: N/A - "Santiago [	)e Santa Δna" lar	nd grant
Landform (hillslope, terrace, etc.): de p	ression	Loca	relief (concave.	convex none). Amaga	e Slor	ne (%).
Subregion (LRR): C	Lat:	33.6	40455	Long: -117.948	45 Datur	m. NAD83
Soil Map Unit Name: Bolsa Silf				NWI classific		
Are climatic / hydrologic conditions on the	site typical for this time	of vear? Y	es √ No	(If no, explain in R	lemarke	
Are Vegetation, Soil, or Hy				"Normal Circumstances" p		, No
Are Vegetation, Soil, or Hy				eeded, explain any answe		INO
SUMMARY OF FINDINGS – Atta			,		•	atures, etc.
Hydric Soil Present?	Yes No Yes No		Is the Sample		<b>.</b>	
Wetland Hydrology Present?	Yes No X		within a Wetla	nd? Yes	NoX	
Remarks:		L				
VEGETATION – Use scientific na	ames of plants					
	Abso	ute Dom	inant Indicator	Dominance Test works	shoot.	
Tree Stratum (Plot size:		ver Spec	ies? Status	Number of Dominant Sp		
1.				That Are OBL, FACW, o		(A)
2		····		Total Number of Domina	ant 🤿	
3				Species Across All Strat		(B)
Sapling/Shrub Stratum (Plot size:		= Tota	al Cover	Percent of Dominant Sp That Are OBL, FACW, o		, ⊃ (A/B)
1				Prevalence Index work	rehoat:	` '
2.				Total % Cover of:		hv:
3				OBL species		
4				FACW species		1
5				FAC species		
Herb Stratum (Plot size: 30×30	<u>_0</u>	= Tota	al Cover	FACU species		
1 Frankenia Salina Somund	folia J 50	,	e FACUO	UPL species		
1. Frankenia salina Egrand 2. Salicornia virginica	61		<u>FACW</u> 1 OBL	Column Totals:	(A)	(B)
3.				Prevalence Index	= B/A =	
4				Hydrophytic Vegetatio		
5				Dominance Test is:		
6				Prevalence Index is		
7				Morphological Adap		
8					or on a separate s	•
Woody Vine Stratum (Plot size:		_ = Tota	l Cover	Problematic Hydrop	hytic Vegetation' (I	Explain)
				<sup>1</sup> Indicators of hydric soil	ond	1
2				be present, unless distu	and wetland nydro rbed or problematio	logy must
		= Tota	d Cover	Hydrophytic	-	
% Bare Ground in Herb Stratum				Vegetation	10	
Remarks:	% Cover of Bioti	c Crust		Present? Yes	No	
Remarks.					-	

SOIL							Sampling Point: 12
Profile Desc	ription: (Describe	to the depth	needed to docum	nent the i	indicator (	or confirn	m the absence of indicators.)
Depth	Matrix			x Feature			
(inches)	Color (moist)		Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture Remarks
0-4	10 YR 412	<u> 100 _</u>			· · · · · · · · · · · · · · · · · · ·	-	Silty clay
4-18	104R 5/3	100	~	-	-	~	day
18-20	104R 4/2	70	10484/3	30	C	M	silty clay faint mottles
					P		
<sup>1</sup> Type: C=Co	ncentration, D=Depl	etion, RM=R	educed Matrix, CS	=Covered	or Coated	Sand Gr	rains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (Applica	ble to all LF	RRs, unless other	wise note	ed.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy Redo	x (S5)			1 cm Muck (A9) ( <b>LRR C</b> )
	ipedon (A2)		Stripped Mat	trix (S6)			2 cm Muck (A10) (LRR B)
Black His	, ,		Loamy Muck	-	. ,		Reduced Vertic (F18)
	n Sulfide (A4) Layers (A5) ( <b>LRR C</b>	١	Loamy Gleye		(F2)		Red Parent Material (TF2)
	ck (A9) ( <b>LRR D</b> )	)	Depleted Ma Redox Dark		<b>-6</b> )		Other (Explain in Remarks)
	Below Dark Surface	(A11)	Depleted Da				
	k Surface (A12)	` ,	Redox Depre				<sup>3</sup> Indicators of hydrophytic vegetation and
	ucky Mineral (S1)		Vernal Pools	(F9)	·		wetland hydrology must be present,*
	eyed Matrix (S4)						unless disturbed or problematic.
	ayer (if present):						
Туре:			_				
Depth (inc	nes):	·					Hydric Soil Present? Yes No
Remarks:							
HYDROLOG	÷Y						
	rology Indicators:						
-	<del></del>		h111-11-1				
	tors (minimum of on	e requirea; c					Secondary Indicators (2 or more required)
Surface V	vater (A1) er Table (A2)		Salt Crust (I				Water Marks (B1) (Riverine)
Saturation			Biotic Crust	` '	(D40)		Sediment Deposits (B2) (Riverine)
	rks (B1) ( <b>Nonriveri</b> n	(A)	Aquatic Inve				Drift Deposits (B3) (Riverine)
	Deposits (B2) (Noni		Hydrogen S			vina Doct	Drainage Patterns (B10)
	osits (B3) ( <b>Nonriver</b> i	,	Oxidized Rham Presence of			ving Koot	
	oil Cracks (B6)	10)	Recent Iron			Soile (C6)	Crayfish Burrows (C8)
	n Visible on Aerial Im	agery (B7)	Thin Muck S			00113 (00)	) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
	ined Leaves (B9)	0 , ( ,	Other (Expla	•	,		FAC-Neutral Test (D5)
Field Observa	ations:					1	
Surface Water	Present? Yes	s No	X Depth (inch	nes):			
Water Table F						- 1	
Saturation Pre			Depth (incl				and Hydrology Present? Yes No
(includes capi	lary fringe)					1	
Describe Reco	orded Data (stream g	auge, monit	oring well, aerial ph	otos, pre	vious inspe	ections), if	if available:
Remarks:							

Project/Site: Newport Banning Ranch (Newport J015	)City/Co	ounty: Newpor	t Beach/Orange	Sampling Date: 7/15/09
Applicant/Owner: Newport Barming Rand				
Investigator(s): Gary Medeiros, Allison Rudalevige				
Landform (hillslope, terrace, etc.): depression	Local	relief (concave.	convex none): ( av Co	s NO Slone (%):
Subregion (LRR): C	Lat: 33.64	1004	Long: -117.950	94 Datum: NAD83
Soil Map Unit Name: Basa Silt loam			NWI classifi	4
Are climatic / hydrologic conditions on the site typical for thi	s time of year? Ye			
Are Vegetation, Soil, or Hydrologys				present? Yes <u>√</u> No
Are Vegetation, Soil, or Hydrology r			eeded, explain any answe	
SUMMARY OF FINDINGS – Attach site map	showing samp			,
	Δ	ls the Sampled		
Wetland Hydrology Present? Yes N		within a Wetlar	nd? Yes	NoX_
Remarks:				
VEGETATION – Use scientific names of plan	ta			THE STATE OF THE S
VEGETATION - Use scientific flames of plan				
Tree Stratum (Plot size:)	Absolute Domir <u>% Cover Specie</u>	nant Indicator es? Status	Dominance Test work	· · ·
1			Number of Dominant S That Are OBL, FACW,	
2			Total Number of Domin	, ,
3.			Species Across All Stra	
4			Percent of Dominant Sp	nasias
Sapling/Shrub Stratum (Plot size:)	= Tota	l Cover	That Are OBL, FACW,	
1			Prevalence Index wor	ksheet:
2				Multiply by:
3				x 1 =
4	-			x 2 =
5			FAC species	x 3 =
Herb Stratum (Plot size:)	<b>0</b> = Total	Cover	FACU species	x 4 =
1. Salicornia Virginica	99 V	ZIBL		x 5 =
2. Conium maculation		FACW	Column Totals:	(A) (B)
3			Prevalence Index	= B/A =
4			Hydrophytic Vegetation	
5			Dominance Test is	
6			Prevalence Index is	s ≤3.0 <sup>1</sup>
7				ptations <sup>1</sup> (Provide supporting
8				s or on a separate sheet)
Woody Vine Stratum (Plot size:)	104 = Total	Cover	Problematic Hydrol	phytic Vegetation <sup>1</sup> (Explain)
1			1 Indicators of bydric soi	I and wetland hydrology must
2			be present, unless distu	urbed or problematic.
			Hydrophytic	
% Bare Ground in Herb Stratum	of Biotic Crust	0	Vegetation	$\mathcal{C}$
Remarks:	UI DIOUC UTUST	<u> </u>	Present? Yes	s_ <u>YNo</u>
romand.				
				1

m	1	п	et
3	E B	В	į.

Frome Desc	cription: (Describe t	o me aepm	needed to docu	ıment the i	ndicator (	or confirm (	he absence of indi	cators.)
Depth	Matrix		Red	ox Feature	s			•
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-5	104R312	<u>80                                    </u>	10YR 618	20	_ <u>C</u>	H_	Silty clay D	comment mottles
5-18	104RS/3	100		e-	-	-	clay	
18-20	10YR 4/2	70_	104R4[3	30	C	м	71//	faint mottles
Hydric Soil I  Histosol Histic Ep Black His Hydrogee Stratified 1 cm Mu Depleted Thick Da Sandy M Sandy G	pipedon (A2) stic (A3) n Sulfide (A4) I Layers (A5) (LRR C) ck (A9) (LRR D) I Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4)	ole to all LR	educed Matrix, C Rs, unless othe Sandy Red Stripped M Loamy Muc Loamy Gle Depleted M Redox Dari Depleted D Redox Dep	erwise note lox (S5) atrix (S6) cky Mineral yed Matrix datrix (F3) k Surface (I ark Surface ressions (F	(F1) (F2) (F6) (F7)	d Sand Grain	Indicators for Pro  1 cm Muck (As 2 cm Muck (As Reduced Verti Red Parent Ma Other (Explain	(0) (LRR B) c (F18) aterial (TF2) in Remarks) uphytic vegetation and up must be present
Restrictive L	ayer (if present):							-
Type:			_					
Depth (inc	hes):		_			1	Hydric Soil Presen	t? Yes <u> </u>
HYDROLOG								
	rology Indicators:							
Primary Indica	ators (minimum of one	required; cl	neck all that appl	y)			Secondary Ind	icators (2 or more required)
	Vater (A1)		Salt Crust	(B11)				
	er Table (A2)		Biotic Crus	( /			Water Ma	rks (B1) (Riverine)
Saturation	, ,							rks (B1) ( <b>Riverine</b> ) Deposits (B2) ( <b>Riverine</b> )
Mater Ma	1 (5) (5)				(B13)		Sediment	Deposits (B2) (Riverine)
vvalei ivia	arks (B1) ( <b>Nonriverin</b> e	<b>)</b>	Aquatic In	st (B12)			Sediment Drift Depo	Deposits (B2) ( <b>Riverine</b> ) sits (B3) ( <b>Riverine</b> )
	arks (B1) ( <b>Nonriverine</b> t Deposits (B2) ( <b>Nonr</b> i		Aquatic In	st (B12) vertebrates Sulfide Odd	or (C1)	iving Roots (	Sediment Drift Depo	Deposits (B2) ( <b>Riverine</b> ) sits (B3) ( <b>Riverine</b> ) Patterns (B10)
Sediment		verine)	Aquatic In- Hydrogen Oxidized F	st (B12) vertebrates Sulfide Odd Rhizosphere	or (C1) es along Li	iving Roots (	Sediment Drift Depo Drainage C3) Dry-Seaso	Deposits (B2) ( <b>Riverine</b> ) sits (B3) ( <b>Riverine</b> ) Patterns (B10) on Water Table (C2)
Sediment	t Deposits (B2) ( <b>Nonr</b> i	verine)	Aquatic In Hydrogen Oxidized F Presence	st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced	or (C1) es along Li Iron (C4)		Sediment Drift Depo Drainage C3) Dry-Seaso Crayfish E	Deposits (B2) (Riverine) sits (B3) (Riverine) Patterns (B10) on Water Table (C2) surrows (C8)
Sediment Drift Depo	t Deposits (B2) ( <b>Nonri</b> osits (B3) ( <b>Nonriverin</b>	verine) e)	Aquatic In Hydrogen Dividized F Presence	st (B12) vertebrates Sulfide Odd Rhizosphere of Reduced n Reduction	or (C1) es along Li Iron (C4) n in Tilled		Sediment Drift Depo Drainage C3) Dry-Seaso Crayfish E Saturation	Deposits (B2) (Riverine) sits (B3) (Riverine) Patterns (B10) on Water Table (C2) durrows (C8) Visible on Aerial Imagery (C9)
Sediment Drift Depo Surface S Inundation	t Deposits (B2) ( <b>Nonr</b> i osits (B3) ( <b>Nonriverin</b> Soil Cracks (B6)	verine) e)	Aquatic In Hydrogen  Oxidized F Presence Recent Iro Thin Muck	st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced	or (C1) es along Li Iron (C4) n in Tilled 7)		Sediment Drift Depo Drainage C3) Dry-Seaso Crayfish E Saturation Shallow A	Deposits (B2) (Riverine) sits (B3) (Riverine) Patterns (B10) on Water Table (C2) durrows (C8) Visible on Aerial Imagery (C9) quitard (D3)
Sediment Drift Depo Surface S Inundation Water-Sta	t Deposits (B2) (Nonri osits (B3) (Nonriverin Soil Cracks (B6) n Visible on Aerial Ima ained Leaves (B9)	verine) e)	Aquatic In Hydrogen  Oxidized F Presence Recent Iro Thin Muck	st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced n Reduction Surface (C	or (C1) es along Li Iron (C4) n in Tilled 7)		Sediment Drift Depo Drainage C3) Dry-Seaso Crayfish E Saturation	Deposits (B2) (Riverine) sits (B3) (Riverine) Patterns (B10) on Water Table (C2) durrows (C8) Visible on Aerial Imagery (C9) quitard (D3)
Sediment Drift Depo Surface S Inundatio Water-Sta	t Deposits (B2) (Nonri posits (B3) (Nonriverin Soil Cracks (B6) n Visible on Aerial Ima ained Leaves (B9) ations:	verine) e)	Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp	st (B12) vertebrates Sulfide Odd Rhizosphere of Reduced n Reduction Surface (Colain in Ren	or (C1) es along Li Iron (C4) n in Tilled 7) narks)	Soils (C6)	Sediment Drift Depo Drainage C3) Dry-Seaso Crayfish E Saturation Shallow A	Deposits (B2) (Riverine) sits (B3) (Riverine) Patterns (B10) on Water Table (C2) durrows (C8) Visible on Aerial Imagery (C9) quitard (D3)
Sediment Drift Depo Surface S Inundation Water-State Field Observation	t Deposits (B2) (Nonricesits (B3) (Nonrivering Soil Cracks (B6) in Visible on Aerial Imagined Leaves (B9) ations:	verine) e) agery (B7)	Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp	st (B12) vertebrates Sulfide Odd Rhizosphere of Reduced n Reduction Surface (Collain in Ren	or (C1) es along Li Iron (C4) n in Tilled (7) narks)	Soils (C6)	Sediment Drift Depo Drainage C3) Dry-Seaso Crayfish E Saturation Shallow A	Deposits (B2) (Riverine) sits (B3) (Riverine) Patterns (B10) on Water Table (C2) durrows (C8) Visible on Aerial Imagery (C9) quitard (D3)
Sediment Drift Depo Surface S Inundation Water-Sta Field Observ Surface Water Water Table F Saturation Pre (includes capi	t Deposits (B2) (Nonrivering posits (B3) (Nonrivering posits (B3) (Nonrivering posits (B6) and Visible on Aerial Imagined Leaves (B9) ations:  r Present? Yes Present? Yes posent? Yes plary fringe)	verine) e) agery (B7)	Aquatic Interpretation  Aquati	st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced n Reduction Surface (Colain in Ren ches): ches):	or (C1) es along Li Iron (C4) n in Tilled (7) narks)	Soils (C6)	Sediment Drift Depo Drainage C3) Dry-Seaso Crayfish E Saturation Shallow A FAC-Neut	Deposits (B2) (Riverine) sits (B3) (Riverine) Patterns (B10) on Water Table (C2) durrows (C8) Visible on Aerial Imagery (C9) quitard (D3)
Sediment Drift Depo Surface S Inundation Water-Sta Field Observ Surface Water Water Table F Saturation Pre (includes capi	t Deposits (B2) (Nonrivering posits (B3) (Nonrivering posits (B6) (Nonrivering posits (B6) (Nonrivering posits (B6) (Nonrivering posits (B6) (Nonrivering posits (B9) (Nonr	verine) e) agery (B7)	Aquatic Interpretation  Aquati	st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced n Reduction Surface (Colain in Ren ches): ches):	or (C1) es along Li Iron (C4) n in Tilled (7) narks)	Soils (C6)	Sediment Drift Depo Drainage C3) Dry-Seaso Crayfish E Saturation Shallow A FAC-Neut	Deposits (B2) (Riverine) sits (B3) (Riverine) Patterns (B10) on Water Table (C2) surrows (C8) Visible on Aerial Imagery (C9) quitard (D3) ral Test (D5)
Sediment Drift Depo Surface S Inundation Water-Sta Field Observa Surface Water Water Table F Saturation Pre (includes capi Describe Reco	t Deposits (B2) (Nonrivering posits (B3) (Nonrivering posits (B3) (Nonrivering posits (B6) and Visible on Aerial Imagined Leaves (B9) ations:  r Present? Yes Present? Yes posent? Yes plary fringe)	verine) e) agery (B7)	Aquatic Interpretation  Aquati	st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced n Reduction Surface (Colain in Ren ches): ches):	or (C1) es along Li Iron (C4) n in Tilled (7) narks)	Soils (C6)	Sediment Drift Depo Drainage C3) Dry-Seaso Crayfish E Saturation Shallow A FAC-Neut	Deposits (B2) (Riverine) sits (B3) (Riverine) Patterns (B10) on Water Table (C2) surrows (C8) Visible on Aerial Imagery (C9) quitard (D3) ral Test (D5)
Sediment Drift Depo Surface S Inundation Water-Sta Field Observ Surface Water Water Table F Saturation Pre (includes capi	t Deposits (B2) (Nonrivering posits (B3) (Nonrivering posits (B3) (Nonrivering posits (B6) and Visible on Aerial Imagined Leaves (B9) ations:  r Present? Yes Present? Yes posent? Yes plary fringe)	verine) e) agery (B7) No No No auge, monito	Aquatic Interpretation  Aquati	st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced n Reduction Surface (Colain in Ren ches): ches):	or (C1) es along Li Iron (C4) n in Tilled (7) narks)	Soils (C6)	Sediment Drift Depo Drainage C3) Dry-Seaso Crayfish E Saturation Shallow A FAC-Neut	Deposits (B2) (Riverine) sits (B3) (Riverine) Patterns (B10) on Water Table (C2) surrows (C8) Visible on Aerial Imagery (C9) quitard (D3) ral Test (D5)
Sediment Drift Depo Surface S Inundation Water-Sta Field Observa Surface Water Water Table F Saturation Pre (includes capi Describe Reco	t Deposits (B2) (Nonrivering posits (B3) (Nonrivering posits (B3) (Nonrivering posits (B6) and Visible on Aerial Imagined Leaves (B9) ations:  r Present? Yes Present? Yes posent? Yes plary fringe)	verine) e) agery (B7)	Aquatic Interpretation  Aquati	st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced n Reduction Surface (Colain in Ren ches): ches):	or (C1) es along Li Iron (C4) n in Tilled (7) narks)	Soils (C6)	Sediment Drift Depo Drainage C3) Dry-Seaso Crayfish E Saturation Shallow A FAC-Neut	Deposits (B2) (Riverine) sits (B3) (Riverine) Patterns (B10) on Water Table (C2) surrows (C8) Visible on Aerial Imagery (C9) quitard (D3) ral Test (D5)
Sediment Drift Depo Surface S Inundation Water-Sta Field Observa Surface Water Water Table F Saturation Pre (includes capi Describe Reco	t Deposits (B2) (Nonrivering posits (B3) (Nonrivering posits (B3) (Nonrivering posits (B6) and Visible on Aerial Imagined Leaves (B9) ations:  r Present? Yes Present? Yes posent? Yes plary fringe)	verine) e) agery (B7) No No No auge, monito	Aquatic Interpretation  Aquati	st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced n Reduction Surface (Colain in Ren ches): ches):	or (C1) es along Li Iron (C4) n in Tilled (7) narks)	Soils (C6)	Sediment Drift Depo Drainage C3) Dry-Seaso Crayfish E Saturation Shallow A FAC-Neut	Deposits (B2) (Riverine) sits (B3) (Riverine) Patterns (B10) on Water Table (C2) surrows (C8) Visible on Aerial Imagery (C9) quitard (D3) ral Test (D5)
Sediment Drift Depo Surface S Inundatio Water-Sta Field Observa Surface Water Water Table F Saturation Pre (includes capi Describe Reco	t Deposits (B2) (Nonrivering posits (B3) (Nonrivering posits (B3) (Nonrivering posits (B6) and Visible on Aerial Imagined Leaves (B9) ations:  r Present? Yes Present? Yes posent? Yes plary fringe)	verine) e) agery (B7) No No No auge, monito	Aquatic Interpretation  Aquati	st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced n Reduction Surface (Colain in Ren ches): ches):	or (C1) es along Li Iron (C4) n in Tilled (7) narks)	Soils (C6)	Sediment Drift Depo Drainage C3) Dry-Seaso Crayfish E Saturation Shallow A FAC-Neut	Deposits (B2) (Riverine) sits (B3) (Riverine) Patterns (B10) on Water Table (C2) surrows (C8) Visible on Aerial Imagery quitard (D3) ral Test (D5)

Project/Site: Newport Banning Ranch (Newport J015) City/County: Newport J015	ewport Beach/Orange Sampling Date: 7/15/09
Applicant/Owner: Newfort Banning Ranch	State: CA Sampling Point: 14
Investigator(s): Gary Medeiros, Allison Rudalevige Section, Towns	hip. Range: N/A - "Santiago De Santa Ana" land grant
Landform (hillslope, terrace, etc.):lowlands Local relief (cor	OCRIVE CODIVEY DODE): Slove (9/):
Subregion (LRR): C Lat: 33.639965	Long: -117.95073 Datum: NAD 83
	NWI classification: PEMCx
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 _ ✓ No
Are Vegetation, Soil, or Hydrology naturally problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling pe	•
Hydrophytic Vegetation Present?  Yes No Is the Sa	
Hydric Soil Present? Yes You No	mpled Area
Wetland Hydrology Present? Yes No Within a	Wetland? Yes NoX
Remarks:	
VEGETATION – Use scientific names of plants.  Absolute Dominant India	cator   Dominance Test worksheet:
Tree Stratum (Plot size:)	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2	
3	Total Number of Dominant Species Across All Strata: (B)
4	- Daniel Co.
Sapling/Shrub Stratum (Plot size:) = Total Cover	That Are OBL, FACW, or FAC: 100% (A/B)
1	Prevalence Index worksheet:
2	
3	OBL species x 1 =
4	FACW species x 2 =
5	FAC species x 3 =
Herb Stratum (Plot size: 30×30) = Total Cover	FACU species x 4 =
1. <u>Salicornia virginica</u> 95 v 013	UPL species x 5 = Column Totals: (A) (B)
2. Frankenia Salina Egrandifolia ] 5 n FA	CW   Column Totals: (A) (B)
3	Prevalence Index = B/A =
4	Hydrophytic Vegetation Indicators:
5	\sum_ Dominance Test is >50%
6	Prevalence Index is ≤3.0 <sup>1</sup>
7	Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
8	Problematic Hydrophytic Vegetation (Explain)
Woody Vine Stratum (Plot size:) = Total Cover	, , , , , , , , , , , , , , , , , , ,
1	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2	be present, unless disturbed or problematic.
= Total Cover	Hydrophytic
% Bare Ground in Herb Stratum % Cover of Biotic Crust	Vegetation Present? Yes No
Remarks:	700 / 100

-				
€%	00	я	8	

Depth	Matrix		Redo	ox Features				
(inches)	Color (moist)	%	Color (moist)		Type <sup>1</sup>	_Loc <sup>2</sup> _	Texture	Remarks
	10YR 3/2	80	104R6/8	20	<u> </u>	_M_	silty clay	prominent moffles
5-18	164R5/3	100		***			Clary	*
18-20	0YR412	70	10YR413	30	<u></u>	<u> </u>	Silty clay	faint mottles
							-	
<sup>1</sup> Type: C=Conc	entration, D=Depl	etion, RM=	Reduced Matrix, C	S=Covered	or Coated	d Sand Gr	rains. <sup>2</sup> Locat	ion: PL=Pore Lining, M=Matrix.
Hydric Soil Ind	icators: (Applica	ible to all I	LRRs, unless othe	rwise noted	i.)			r Problematic Hydric Soils³:
Histosol (A1	1)		Sandy Red	ox (S5)			1 cm Mu	ck (A9) ( <b>LRR C</b> )
Histic Epipe			Stripped Ma	atrix (S6)				ck (A10) (LRR B)
Black Histic	(A3)		Loamy Muc					Vertic (F18)
Hydrogen S	. ,		Loamy Gley	ed Matrix (F	=2)		Red Pare	ent Material (TF2)
	yers (A5) ( <b>LRR C</b>	)	Depleted M				Other (Ex	xplain in Remarks)
1 cm Muck	(A9) ( <b>LRR D</b> )		Redox Dark	Surface (F	6)			•
Depleted Be	elow Dark Surface	(A11)	Depleted Da	ark Surface	(F7)			
Thick Dark	Surface (A12)		🔀 Redox Depi	ressions (F8	3)		3Indicators of	hydrophytic vegetation and
Sandy Mucl	(S1) (S1)		Vernal Pool	s (F9)	•			drology must be present,
Sandy Gley	ed Matrix (S4)			, ,				urbed or problematic.
Restrictive Lay	er (if present):							
Туре:								
Depth (inches	s):						Hydric Soil Pr	resent? Yes X
VDPOLOGV	,							
Netland Hydrol	ogy Indicators:	e required	chook all that apple	Δ.				
Vetland Hydrol Primary Indicato	ogy Indicators: rs (minimum of on	e required:	check all that apply					ury Indicators (2 or more required)
Vetland Hydrol Primary Indicato Surface Wa	logy Indicators: rs (minimum of on ter (A1)	e required:	Salt Crust	(B11)			Wat	er Marks (B1) (Riverine)
Vetland Hydrol Primary Indicato Surface War High Water	ogy Indicators: rs (minimum of on ter (A1) Table (A2)	e required:	Salt Crust Biotic Crus	(B11) t (B12)			Wat Sed	er Marks (B1) (Riverine) iment Deposits (B2) (Riverine)
Vetland Hydrol Irimary Indicato Surface Wat High Water _ Saturation (	logy Indicators: rs (minimum of on ter (A1) Table (A2) A3)		Salt Crust Biotic Crust Aquatic Inv	(B11) st (B12) vertebrates (	. ,		Wat Sed	er Marks (B1) (Riverine)
Vetland Hydrol  rimary Indicato  Surface Wa'  High Water  Saturation (  Water Marks	ogy Indicators: rs (minimum of on ter (A1) Table (A2) A3) s (B1) (Nonriverir	ne)	Salt Crust Biotic Crust Aquatic Inv	(B11) it (B12) /ertebrates ( Sulfide Odo	r (C1)		Wat Sed Drift Drai	er Marks (B1) (Riverine) iment Deposits (B2) (Riverine)
Vetland Hydrol  Primary Indicato Surface War High Water Saturation ( Water Marks Sediment Do	ogy Indicators: rs (minimum of on ter (A1) Table (A2) A3) s (B1) (Nonriverir eposits (B2) (Non	ne) riverine)	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized R	(B11) st (B12) vertebrates ( Sulfide Odo thizospheres	r (C1) s along L		Wat Sed Drift Drai	er Marks (B1) (Riverine) liment Deposits (B2) (Riverine) Deposits (B3) (Riverine)
Vetland Hydrol Primary Indicato Surface Wat High Water Saturation ( Water Marks Sediment Do Drift Deposit	logy Indicators: rs (minimum of onter (A1) Table (A2) A3) s (B1) (Nonrivering eposits (B2) (Nonrivering (B3) (Nonriverin	ne) riverine)	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized R	(B11) it (B12) /ertebrates ( Sulfide Odo	r (C1) s along L		Wat Sed Drift Drai ts (C3) Dry-	er Marks (B1) (Riverine) liment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10)
Vetland Hydrol Primary Indicato Surface Wat High Water Saturation ( Water Marks Sediment Do Drift Deposit	logy Indicators: rs (minimum of onter (A1) Table (A2) A3) s (B1) (Nonrivering eposits (B2) (Nonrivering (B3) (Nonrivering (B3) (Nonrivering (B6))	ne) riverine) ne)	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron	(B11) st (B12) vertebrates ( Sulfide Odo thizospheres	r (C1) s along L Iron (C4)		Wat Sed Drift Drai ts (C3) Dry- Cray	er Marks (B1) (Riverine) iment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) /fish Burrows (C8)
Vetland Hydrol Primary Indicato Surface Wat High Water Saturation ( Water Marks Sediment Do Drift Deposit	logy Indicators: rs (minimum of onter (A1) Table (A2) A3) s (B1) (Nonrivering eposits (B2) (Nonrivering (B3) (Nonriverin	ne) riverine) ne)	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence o	(B11)  of (B12)  vertebrates ( Sulfide Odor  thizospheres  of Reduced	r (C1) s along L Iron (C4) in Tilled		Wat Sed Drift Draits (C3) Dry Cray ) Satu	er Marks (B1) ( <b>Riverine</b> ) iment Deposits (B2) ( <b>Riverine</b> ) Deposits (B3) ( <b>Riverine</b> ) nage Patterns (B10) Season Water Table (C2) /fish Burrows (C8) rration Visible on Aerial Imagery (C9
Vetland Hydrol Primary Indicato Surface Wat High Water Saturation ( Water Marks Sediment Do Drift Deposit Surface Soil	logy Indicators: rs (minimum of onter (A1) Table (A2) A3) s (B1) (Nonrivering eposits (B2) (Nonrivering (B3) (Nonrivering (B3) (Nonrivering (B6))	ne) riverine) ne)	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Thin Muck	(B11)  of (B12)  vertebrates ( Sulfide Odo  thizospheres  of Reduced  n Reduction	r (C1) s along L Iron (C4) in Tilled		Wat Sed Drift Drai ts (C3) Dry Cray ) Satu Sha	er Marks (B1) (Riverine) iment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) /fish Burrows (C8) uration Visible on Aerial Imagery (C9
Vetland Hydrol Primary Indicato Surface War High Water Saturation (A Water Marks Sediment Do Drift Deposit Surface Soil Inundation V	logy Indicators: rs (minimum of onter (A1) Table (A2) A3) s (B1) (Nonrivering eposits (B2) (Nonrivering (B3) (Nonrivering (B3) (Nonrivering (B3) (Nonrivering (B3) (Nonrivering (B3) (Nonrivering (B4))	ne) riverine) ne)	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Thin Muck	(B11)  It (B12)  Vertebrates ( Sulfide Odor  Ithizosphere:  Of Reduced  In Reduction  Surface (C7	r (C1) s along L Iron (C4) in Tilled		Wat Sed Drift Drai ts (C3) Dry Cray ) Satu Sha	er Marks (B1) ( <b>Riverine</b> ) iment Deposits (B2) ( <b>Riverine</b> ) Deposits (B3) ( <b>Riverine</b> ) nage Patterns (B10) Season Water Table (C2) /fish Burrows (C8) rration Visible on Aerial Imagery (C9
Vetland Hydrol Primary Indicato Surface War High Water Saturation ( Water Marks Sediment Do Drift Deposit Surface Soil Inundation ( Water-Stain	logy Indicators: rs (minimum of onter (A1) Table (A2) A3) s (B1) (Nonrivering eposits (B2) (Nonrivering (B3) (Nonrivering (B3) (Nonrivering (B4)) Cracks (B6) //isible on Aerial Imed Leaves (B9) ons:	ne) riverine) ne)	Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized R Presence communication Recent Iron Thin Muck Other (Exp	(B11)  It (B12)  Vertebrates ( Sulfide Odor  Ithizosphere:  Of Reduced  In Reduction  Surface (C7	r (C1) s along L Iron (C4) in Tilled 7) arks)	Soils (C6	Wat Sed Drift Drai ts (C3) Dry Cray ) Satu Sha	er Marks (B1) (Riverine) iment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) /fish Burrows (C8) uration Visible on Aerial Imagery (C9
Primary Indicato Surface Water High Water Saturation (A Water Marks Sediment Do Drift Deposit Surface Soil Inundation V Water-Stain Surface Water P	logy Indicators: rs (minimum of onter (A1) Table (A2) A3) s (B1) (Nonrivering eposits (B2) (Nonrivering Cracks (B6) //isible on Aerial Imed Leaves (B9) ons: resent? Ye	ne) riverine) ne) nagery (B7)	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Thin Muck Other (Exp	(B11)  of (B12)  vertebrates ( Sulfide Odor  thizospheres  of Reduced  in Reduction  Surface (C7)	r (C1) s along L Iron (C4) in Tilled <sup>7</sup> ) arks)	Soils (C6	Wat Sed Drift Drai ts (C3) Dry- Cray ) Satu Sha ————————————————————————————————————	er Marks (B1) (Riverine) liment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) /fish Burrows (C8) Iration Visible on Aerial Imagery (C9 llow Aquitard (D3) :-Neutral Test (D5)
Primary Indicato Surface Water High Water Saturation (A) Water Marks Sediment Do Drift Deposit Surface Soil Inundation (A) Water-Stain Field Observation Surface Water Presenter Table Presenter Saturation Presenter	logy Indicators: rs (minimum of onter (A1) Table (A2) A3) s (B1) (Nonriverir eposits (B2) (Nonriverir Cracks (B6) //isible on Aerial Imed Leaves (B9) ons: resent? Yesent?	ne) riverine) ne) nagery (B7) s N s N	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Thin Muck Other (Exp	(B11)  of (B12)  vertebrates ( Sulfide Odor  thizospheres  of Reduced  n Reduction  Surface (C7  clain in Remandal	r (C1) s along L Iron (C4) in Tilled 7) arks)	Soils (C6	Wat Sed Drift Drai ts (C3) Dry- Cray ) Satu Sha ————————————————————————————————————	er Marks (B1) (Riverine) iment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) /fish Burrows (C8) uration Visible on Aerial Imagery (C9
Wetland Hydrol Primary Indicato Surface Wat High Water Saturation ( Water Marks Sediment Do Drift Deposit Surface Soil Inundation \ Water-Stain Field Observati Surface Water P Water Table Pre Saturation Prese (includes capillar	logy Indicators: rs (minimum of onter (A1) Table (A2) A3) s (B1) (Nonrivering eposits (B2) (Nonrivering Cracks (B6) //isible on Aerial Imed Leaves (B9) ons: resent? yesent? yesent? yesent? yent? yery fringe)	ne) ne) nagery (B7) s N s N	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Thin Muck Other (Exp	(B11)  It (B12)  Vertebrates ( Sulfide Odor  Chizospheres  Of Reduced  In Reduction  Surface (Collain in Remail  Ches):  Ches):  Ches):	r (C1) s along L lron (C4) in Tilled 7) arks)	Soils (C6	Wat Sed Drift Draits (C3) Dry- Cray ) Satu Sha FAC	er Marks (B1) (Riverine) liment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) /fish Burrows (C8) Iration Visible on Aerial Imagery (C9 llow Aquitard (D3) :-Neutral Test (D5)
Primary Indicato Surface War High Water Saturation ( Water Marks Sediment Do Drift Deposit Surface Soil Inundation V Water-Stain Field Observati Surface Water P Water Table Pre Saturation Prese (includes capillar Describe Record	logy Indicators: rs (minimum of onter (A1) Table (A2) A3) s (B1) (Nonrivering eposits (B2) (Nonrivering Cracks (B6) //isible on Aerial Imed Leaves (B9) ons: resent? yesent? yesent? yesent? yent? yery fringe)	ne) ne) nagery (B7) s N s N	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Thin Muck Other (Exp	(B11)  It (B12)  Vertebrates ( Sulfide Odor  Chizospheres  Of Reduced  In Reduction  Surface (Collain in Remail  Ches):  Ches):  Ches):	r (C1) s along L Iron (C4) in Tilled 7) arks)	Soils (C6	Wat Sed Drift Draits (C3) Dry- Cray ) Satu Sha FAC	er Marks (B1) (Riverine) liment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) /fish Burrows (C8) Iration Visible on Aerial Imagery (C9 llow Aquitard (D3) :-Neutral Test (D5)
Wetland Hydrol Primary Indicato Surface Wat High Water Saturation ( Water Marks Sediment Do Drift Deposit Surface Soil Inundation \ Water-Stain Field Observati Surface Water P Water Table Pre Saturation Prese (includes capillar	logy Indicators: rs (minimum of onter (A1) Table (A2) A3) s (B1) (Nonrivering eposits (B2) (Nonrivering Cracks (B6) //isible on Aerial Imed Leaves (B9) ons: resent? yesent? yesent? yesent? yent? yery fringe)	ne) ne) nagery (B7) s N s N	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Thin Muck Other (Exp	(B11)  It (B12)  Vertebrates ( Sulfide Odor  Chizospheres  Of Reduced  In Reduction  Surface (Collain in Remail  Ches):  Ches):  Ches):	r (C1) s along L Iron (C4) in Tilled 7) arks)	Soils (C6	Wat Sed Drift Draits (C3) Dry- Cray ) Satu Sha FAC	er Marks (B1) (Riverine) liment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) /fish Burrows (C8) Iration Visible on Aerial Imagery (C9 llow Aquitard (D3) :-Neutral Test (D5)
Primary Indicato Surface Wat High Water Saturation ( Water Marks Sediment De Drift Deposit Surface Soil Inundation ( Water-Stain Field Observati Surface Water P Water Table Prese includes capillar Describe Record	logy Indicators: rs (minimum of onter (A1) Table (A2) A3) s (B1) (Nonrivering eposits (B2) (Nonrivering Cracks (B6) //isible on Aerial Imed Leaves (B9) ons: resent? yesent? yesent? yesent? yent? yery fringe)	ne) ne) nagery (B7) s N s N	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Thin Muck Other (Exp	(B11)  It (B12)  Vertebrates ( Sulfide Odor  Chizospheres  Of Reduced  In Reduction  Surface (Collain in Remail  Ches):  Ches):  Ches):	r (C1) s along L Iron (C4) in Tilled 7) arks)	Soils (C6	Wat Sed Drift Draits (C3) Dry- Cray ) Satu Sha FAC	er Marks (B1) (Riverine) liment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) /fish Burrows (C8) Iration Visible on Aerial Imagery (C9 llow Aquitard (D3) :-Neutral Test (D5)
Vetland Hydrol Primary Indicato Surface Wat High Water Saturation ( Water Marks Sediment De Drift Deposit Surface Soil Inundation ( Water-Stain Field Observation Foundation Presencted Capillar Describe Record	logy Indicators: rs (minimum of onter (A1) Table (A2) A3) s (B1) (Nonrivering eposits (B2) (Nonrivering Cracks (B6) //isible on Aerial Imed Leaves (B9) ons: resent? yesent? yesent? yesent? yent? yery fringe)	ne) ne) nagery (B7) s N s N	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Thin Muck Other (Exp	(B11)  It (B12)  Vertebrates ( Sulfide Odor  Chizospheres  Of Reduced  In Reduction  Surface (Collain in Remail  Ches):  Ches):  Ches):	r (C1) s along L Iron (C4) in Tilled 7) arks)	Soils (C6	Wat Sed Drift Draits (C3) Dry- Cray ) Satu Sha FAC	er Marks (B1) (Riverine) liment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) /fish Burrows (C8) Iration Visible on Aerial Imagery (C9 llow Aquitard (D3) :-Neutral Test (D5)

Project/Site: Newport Banning Ranch (Newport J015)	City/County: Newpo	rt Beach/Orange Sampling Date: 715/09
Applicant/Owner: Newfort Banning Ranc	h	State: CA Sampling Point: 15
Investigator(s): Gary Medeiros, Allison Rudalevige	Section, Township, Ra	ange: N/A - "Santiago De Santa Ana" land grant
Landform (hillslope, terrace, etc.): depression	Local relief (concave	convex none): Containe Slope (%):
Subregion (LRR): C	Lat: 33.634449	Long: -117-94368 Dotum: AIAN &
Subregion (LRR): C Soil Map Unit Name: Hyford Sandy laan (	0-2% 5/0008)	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 sig		"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology na		eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map s	•	•
Hydrophytic Vegetation Present? Yes No		, , , , , , , , , , , , , , , , , , , ,
Hydric Soil Present?	is the Samplet	
Wetland Hydrology Present? Yes No	within a Wetlan	nd? Yes X No
Remarks: Vernal pool	<u> </u>	
	Control of the second of the s	
VEGETATION – Use scientific names of plants	3	
	Absolute Dominant Indicator	Dominous Testandeles
Tree Stratum (Plot size:)	% Cover Species? Status	Dominance Test worksheet:  Number of Dominant Species
1		That Are OBL, FACW, or FAC:(A)
2		Total Number of Dominant
3		Species Across All Strata: 2 (B)
4	O = Total Cover	Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: 30×30)		That Are OBL, FACW, or FAC: (A/B)
1. Baccharis Salicifolia Eviminea)	10 Y FACW	Prevalence Index worksheet:
2		Total % Cover of: Multiply by:
3		OBL species x 1 =
4.     5.		FAC species x 2 =
	10 = Total Cover	FAC species x 3 = FACU species x 4 =
Herb Stratum (Plot size: 30×30		UPL species x 5 =
1. <u>Distichlis</u> spicata	90 y FACW	Column Totals: (A) (B)
2. <u>Eremocarpus 'seticerus</u> 3. <u>Polypogon monspeliensis</u>	<1 n uPL	
4. Heliotropium Curassavicum	<1 n FACW	Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:  \( \sum_{\text{Dominance Test is } > 50\% \)
6.		Prevalence Index is ≤3.0¹
7.		Morphological Adaptations¹ (Provide supporting
8		data in Remarks or on a separate sheet)
	93 = Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:)		1 matter and a second s
1 2		Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	7 = Total Cover	Hydrophytic
% Bare Ground in Herb Stratum	f Biotic Crust	Vegetation Present? Yes No
Remarks:	1	
Survey point in patch of Distichli	is; surrounded by	bacchouris.

64	00	B	£
23	<b>L</b> .F	K	E

		3,000
Sampling	Point:	15

Profile Description: (Desc	cribe to the depth	needed to docu	ment the ir	ndicator	or confirm	the absence of inc	dicators.)	
Depth <u>Ma</u> (inches) Color (mois			ox Features		. 2			
		Color (moist)		Type <sup>1</sup>	_Loc²		Remarks	
		104R 5/8	30	<u> </u>	M	silty clay	prominent 1	nottles
2-10 104R 41	3 100	•		-		Silty clay		
						1 1		
- Anna Anna Anna Anna Anna Anna Anna Ann								
<sup>1</sup> Type: C=Concentration, D:	=Depletion, RM=R	educed Matrix, C	S=Covered	or Coate	d Sand Gr	ains <sup>2</sup> l ocation:	PL=Pore Lining, M=N	//atrix
Hydric Soil Indicators: (A							oblematic Hydric So	ils <sup>3</sup> :
Histosol (A1)		Sandy Red	ox (S5)			1 cm Muck (/		
Histic Epipedon (A2)		Stripped Ma					A10) (LRR B)	
Black Histic (A3)		Loamy Muc	ky Mineral	(F1)		Reduced Ver		
Hydrogen Sulfide (A4)		Loamy Gle	/ed Matrix (	F2)			Naterial (TF2)	
Stratified Layers (A5) (L	•	Depleted M				Other (Explai	in in Remarks)	
1 cm Muck (A9) (LRR D		Redox Darl	•	•				
Depleted Below Dark St	` '	Depleted D				3		
Thick Dark Surface (A1: Sandy Mucky Mineral (S	•	X Redox Dep		3)			rophytic vegetation an	d
Sandy Mucky Mineral (S	•	Vernal Pool	s (F9)				ogy must be present,	
Restrictive Layer (if preser						uniess disturbe	d or problematic.	
Type: hardpan	,.							
Depth (inches): 10	, , , , , , , , , , , , , , , , , , , ,	<del></del>					V	
Remarks:						Hydric Soil Prese	nt? Yes X I	/o
HYDROLOGY								
Wetland Hydrology Indicat	OFC.							
Primary Indicators (minimum		shook all that anni	٨					
	rorone required; t						ndicators (2 or more re	quired)
<ul><li>Surface Water (A1)</li><li>High Water Table (A2)</li></ul>		Salt Crust					larks (B1) (Riverine)	
, , ,		Biotic Crus		/D + 0 >			nt Deposits (B2) (Rive	•
<ul><li>Saturation (A3)</li><li>Water Marks (B1) (None</li></ul>	d	_r_ Aquatic III					oosits (B3) (Riverine)	
Sediment Deposits (B2)	,		Sulfide Odc	. ,		_	e Patterns (B10)	
Drift Deposits (B3) (Non	•		Chizosphere				son Water Table (C2)	
Surface Soil Cracks (B6	,		of Reduced				Burrows (C8)	
Inundation Visible on Ae	•		n Reduction		Solis (C6)		on Visible on Aerial Im	agery (C9)
Water-Stained Leaves (I			Surface (C lain in Rem			<del>-</del>	Aquitard (D3)	
Field Observations:	59)	Other (Ext	nam in Rem	arks)		<u>k</u> FAC-Ne	utral Test (D5)	
Surface Water Present?	Vac No	Depth (inc	shoo):					
Water Table Present?		Depth (inc						
Saturation Present?		X Depth (inc					15 V	
(includes capillary fringe)							ent? Yes 🔀	No
Describe Recorded Data (str	eam gauge, monit	oring well, aerial p	hotos, prev	ious insp	ections), it	available:	***************************************	
Remarks:						•		
Fairy shrimp prese	ent during	wet Seaso	n ponc	ling (E	ILA 201	09).		
*	J		•	J				

Project/Site: Newport Banning Ranch (Newport J015	)	City/Coun	ity: <u>Newpo</u> i	rt Beach/Orange	Sampling Date:	7115/09
Applicant/Owner: Newfort Banning Ran	ch			State: <u>CA</u>		
Investigator(s): Gary Medeiros, Allison Rudalevige	,					
Landform (hillslope, terrace, etc.): VCRal Pool						
Subregion (LRR): C	Lat:	33.63	3976	Long: -117.9439	2 Datum	· NAD83
Soil Map Unit Name: My Ford Sandy loan	(0-2	% 51	opes)	NWI classifi	cation:	1. <u>1-210 0 0</u>
Are climatic / hydrologic conditions on the site typical for the	is time of ye	ar? Yes	√ No	(If no, explain in F	Remarks )	
Are Vegetation, Soil, or Hydrology				"Normal Circumstances"		No
Are Vegetation, Soil, or Hydrology				eeded, explain any answe		140
SUMMARY OF FINDINGS - Attach site map						tures, etc.
Hydrophytic Vegetation Present? Yes X	lo					
	lo	l l	he Sampled	_	r	
Wetland Hydrology Present?  Yes N	lo	Wit	hin a Wetla	nd? Yes Y	No	
Remarks:						
Closed depression (Shallow).						
VEGETATION – Use scientific names of plan	te					
The state of the s	Absolute	Dominan	t Indicator	Deminana Tarkan I	of-	
Tree Stratum (Plot size:)	% Cover	Species?	Status	Dominance Test work		
1				Number of Dominant S That Are OBL, FACW,		(A)
2				Total Number of Domin	nant o	
3				Species Across All Stra		(B)
4				Percent of Dominant S	nacias	
Sapling/Shrub Stratum (Plot size:)		= Total Co	over	That Are OBL, FACW,		(A/B)
1. Bacchavis Salicifolia [viminea]	5	V	FACW	Prevalence Index wor	kehoot:	
2.					Multiply b	nv.
3.				OBL species		
4				FACW species		
5				FAC species		
	-	= Total Co	over	FACU species		
Herb Stratum (Plot size:) 1. Frankonia Saling (Grandifolia)	~~			UPL species	x 5 =	
	80	<del></del>	FACW	Column Totals:		
2. Rumex crispus 3. Hemizonia fusciculata	$\frac{\langle \langle \rangle \rangle}{2}$	<u>~~~~</u>	FACW			
4. Polypogen monspeliensis	<1	<u> </u>	WPL FACW	Hydrophytic Vegetation	= B/A =	
5		<u> </u>		Dominance Test is		
6				Prevalence Index is		
7.				l — ·	ptations¹ (Provide su	Innorting
8.				data in Remarks	s or on a separate sh	neet)
	84	= Total Co	over	Problematic Hydro	ohytic Vegetation¹ (E	Explain)
Woody Vine Stratum (Plot size:)						
1.				<sup>1</sup> Indicators of hydric soi be present, unless distu	l and wetland hydrolographic	ogy must
2				be present, unless distr	ined of problematic.	
N .	_0_	= Total Co	over	Hydrophytic Vegetation		
% Bare Ground in Herb Stratum	of Biotic Cr	ust <u>O</u>		Present? Yes	s_ <u>X</u> No	_
Remarks:						

Depth	Matrix		Redr	ox Features	S			
(inches)	Color (moist)	%	Color (moist)	<u> %</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-2	104R413	70_	104R518	30	C	M	silty clay	Prominent molles
2-8	10YR 4/3	100	•	-	•	ъ	Silty clay	
<b>ydric Soil I</b> _ Histosol	oncentration, D=Deplindicators: (Applica	etion, RM=l	Reduced Matrix, CS RRs, unless other Sandy Redo Stripped Ma	rwise note ox (S5)	or Coated	d Sand Gr	Indicators for 1 cm Muc	on: PL=Pore Lining, M=Matrix.  Problematic Hydric Soils <sup>3</sup> : k (A9) (LRR C)
Black Hi			Loamy Muc		(E1)			k (A10) ( <b>LRR B</b> ) Vertic (F18)
Hydroge Stratified 1 cm Mu	n Sulfide (A4) I Layers (A5) (LRR C ck (A9) (LRR D) I Below Dark Surface		Loamy Gley Loamy Gley Depleted Mi Redox Dark Depleted Da	ved Matrix atrix (F3) Surface (F	(F2) F6)		Red Parer	veruc (F18) nt Material (TF2) plain in Remarks)
Thick Da Sandy M Sandy G	rk Surface (A12) lucky Mineral (S1) leyed Matrix (S4) ayer (if present):	(/////	Redox Depr	essions (F			wetland hyd	nydrophytic vegetation and rology must be present, rology must be present, roled or problematic.
	ayer (ii present).							
Type: V	vardonio							
Type: <u>V</u> Depth (inc temarks:	Nardpan Hes): 8						Hydric Soil Pre	esent? Yes Y No
Depth (inclemarks:	hes): \\						Hydric Soil Pre	esent? Yes <u>Y</u> No
Depth (inclemarks:	GY Irology Indicators:							
Depth (inclemarks:  /DROLOG /etland Hydrimary Indic	GY Irology Indicators: ators (minimum of on	e required;					Secondar	y Indicators (2 or more required)
Depth (incomenants:  /DROLOG /etland Hydrimary Indicomenants	GY  Irology Indicators: ators (minimum of on Water (A1)	e required;	Salt Crust (	(B11)			Secondar Wate	y Indicators (2 or more required) r Marks (B1) (Riverine)
Depth (incomercial contents)  /DROLOG /etland Hyderimary Indicomercial contents  _ Surface \( \)  _ High Wat	GY  Irology Indicators: ators (minimum of on Water (A1) ter Table (A2)	e required;	Salt Crust ( Biotic Crus	(B11) t (B12)	(B13)		Secondar Wate Sedir	y Indicators (2 or more required) r Marks (B1) ( <b>Riverine</b> ) nent Deposits (B2) ( <b>Riverine</b> )
Depth (incomments:  "DROLOG"  Vetland Hydrimary Indicomments  — Surface Version High Wat  — Saturatio	GY  Irology Indicators: ators (minimum of on Water (A1) ter Table (A2) n (A3)		Salt Crust ( Biotic Crus ∕ Aquatic Inv	(B11) t (B12) vertebrates			Secondar Wate Sedir Drift [	y Indicators (2 or more required) r Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine)
Depth (incomments:  "DROLOG"  Tetland Hydrimary Indicomments  Surface North High Water May  Water May  Sedimen	GY Irology Indicators: ators (minimum of on Water (A1) ter Table (A2) n (A3) arks (B1) (Nonriverin t Deposits (B2) (Non	ne) riverine)	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen 9 Oxidized R	(B11) t (B12) vertebrates Sulfide Odd thizosphere	or (C1) es along L	iving Roof	<u>Secondar</u> Wate Sedir Drift I Drain is (C3) Dry-S	y Indicators (2 or more required) r Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) Season Water Table (C2)
Depth (inclemarks:  //DROLOG /etland Hydrimary Indic Surface \( \) High Wat Saturatio Water Ma Sedimen Drift Dep	Arks (B1) (Nonriverint Deposits (B2) (Nonrivering is the size of t	ne) riverine)	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R	(B11) t (B12) vertebrates Sulfide Odo thizosphere of Reduced	or (C1) es along L Iron (C4)		Secondar	y Indicators (2 or more required) r Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) Season Water Table (C2) ish Burrows (C8)
Depth (incommends:  "DROLOG"  Tetland Hydrimary Indicommends  High Water Mater	GY Irology Indicators: ators (minimum of on Water (A1) ter Table (A2) n (A3) arks (B1) (Nonriverin t Deposits (B2) (Nonriverin soits (B3) (Nonriverin	ne) riverine) ne)	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence co	(B11)  t (B12)  rertebrates  Sulfide Odo  hizosphere  Reduced  Reduction	or (C1) es along L I Iron (C4) n in Tilled		<u>Secondar</u> Wate Sedir Drift I Drain ss (C3) Dry-S Crayf Satur	y Indicators (2 or more required) r Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) Season Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C
Depth (incommends:  Property (incommends)  Pr	Arks (B1) (Nonriverint Deposits (B2) (Nonrivering is the size of t	ne) riverine) ne)	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence co	(B11) It (B12) Vertebrates Sulfide Odd Chizosphere Of Reduced On Reduction Surface (C	or (C1) es along L I Iron (C4) n in Tilled 57)		Secondar  — Wate — Sedir — Drift I — Drain Is (C3) — Dry-S — Crayf ) — Satur — Shall	y Indicators (2 or more required) r Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) Beason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (Cow Aquitard (D3)
Depth (incomments:  /DROLOG /etland Hydrimary Indicomments  Surface Notes Water May Sedimen Drift Dep Surface Solution Undation Water-St	GY  Irology Indicators: ators (minimum of on Nater (A1) ier Table (A2) n (A3) arks (B1) (Nonriverin t Deposits (B2) (Noni osits (B3) (Nonriverin Goil Cracks (B6) in Visible on Aerial Imained Leaves (B9)	ne) riverine) ne)	Salt Crust ( Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence co Recent Iror	(B11) It (B12) Vertebrates Sulfide Odd Chizosphere Of Reduced On Reduction Surface (C	or (C1) es along L I Iron (C4) n in Tilled 57)		Secondar  — Wate — Sedir — Drift I — Drain Is (C3) — Dry-S — Crayf ) — Satur — Shall	y Indicators (2 or more required) r Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) Season Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C
Depth (incomments:  /DROLOG /etland Hyd rimary Indicomments Surface Note that the sedimen of the sediment of	GY  Irology Indicators: ators (minimum of on Water (A1) ter Table (A2) n (A3) arks (B1) (Nonriverin t Deposits (B2) (Nonriverin soils (B3) (Nonriverin Soil Cracks (B6) in Visible on Aerial Imained Leaves (B9) rations:	ne) riverine) ne) nagery (B7)	Salt Crust ( Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence co Recent Iror	(B11) It (B12) Vertebrates Sulfide Odd Chizosphere Of Reduced In Reduction Surface (Clain in Ren	or (C1) es along L I Iron (C4) n in Tilled e7) narks)	Soils (C6)	Secondar  — Wate — Sedir — Drift I — Drain Is (C3) — Dry-S — Crayf ) — Satur — Shall	y Indicators (2 or more required) r Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) Beason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (Cow Aquitard (D3)
/DROLOG /etland Hydrimary Indic Surface \ High Water Ma Sedimen Drift Dep Surface S Inundation Water-St ield Observ	Arches):  Arches):  Arches):  Arches   Free    Arches   F	ne) riverine) ne) nagery (B7)  s No	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence co Recent Iror Thin Muck Other (Exp	(B11) It (B12) Vertebrates Sulfide Odo Chizosphere Of Reduced On Reduction Surface (C Lain in Ren Ches):	or (C1) es along L I Iron (C4) n in Tilled 57) narks)	Soils (C6)	Secondar  — Wate — Sedir — Drift I — Drain Is (C3) — Dry-S — Crayf ) — Satur — Shall	y Indicators (2 or more required) r Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) Beason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (Cow Aquitard (D3)
Depth (inclemarks:  //DROLOG /etland Hydrimary Indic Surface \\ High Wat Saturatio Water Ma Sedimen Drift Dep Surface \\ _ Inundatio Water-St ield Observ /ater Table for aturation Precludes cap	Arks (B1) (Nonrivering to Deposits (B2) (Nonrivering to Deposits (B3) (Nonrivering to Deposits (	ne) ne) nagery (B7) s No s No	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Thin Muck Other (Exp	(B11) It (B12) Vertebrates Sulfide Odd Ihizosphere Of Reduced On Reduction Surface (C Iain in Ren Sches):	or (C1) es along L I Iron (C4) n in Tilled 67) narks)	Soils (C6)	Secondar  Wate Sedir Drift I Congress Sedir Congress Sedir	y Indicators (2 or more required) r Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) Beason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (Cow Aquitard (D3)
Depth (inclemarks:  //DROLOG /etland Hydrimary Indic Surface \\ High Wat Saturatio Water Ma Sedimen Drift Dep Surface \\ _ Inundatio Water-St ield Observ /ater Table f aturation Princludes capi	Arches):  Arches):  Arches):  Arches   Irology Indicators:  Ators (minimum of on  Water (A1)  Archer (A2)  In (A3)  Arches (B1) (Nonriverin  It Deposits (B2) (Nonriverin  Soil Cracks (B6)  In Visible on Aerial Imained Leaves (B9)  Artions:  In Present?  Yesesent?  Yesesent?  Yesesent?	ne) ne) nagery (B7) s No s No	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Thin Muck Other (Exp	(B11) It (B12) Vertebrates Sulfide Odd Ihizosphere Of Reduced On Reduction Surface (C Iain in Ren Sches):	or (C1) es along L I Iron (C4) n in Tilled 67) narks)	Soils (C6)	Secondar  Wate Sedir Drift I Congress Sedir Congress Sedir	y Indicators (2 or more required) r Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) Season Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (Cow Aquitard (D3) Neutral Test (D5)

Project/Site: Newport Banning Ranch (Newport J015)	City/0	County: Newpor	t Beach/Orange	Sampling Date: 7/16/0
Applicant/Owner: Newport Barning Rance	h		State: CA	Sampling Point: 17
Investigator(s): Gary Medeiros, Allison Rudalevige				
Landform (hillslope, terrace, etc.): drainage	Loca	I relief (concave.	convex none):	Slone (%):
Subregion (LRR): C	Lat: 33,6	3939	Long: -117.9447	0 8 Datum: NAN 8 3
Soil Map Unit Name: Myford Sandy loan (9-3	30% stone	s excded	NIMI classifi	cation: Datum. 17800 3
Are climatic / hydrologic conditions on the site typical for this	time of year?	'es √ No	(If no explain in E	Comarka )
Are Vegetation, Soil, or Hydrology sig				present? Yes ✓ No
Are Vegetation, Soil, or Hydrology na			eeded, explain any answe	
SUMMARY OF FINDINGS – Attach site map s		•		·
Hydrophytic Vegetation Present? Yes X No				
Hydric Soil Present? Yes No		Is the Sampled		
Wetland Hydrology Present? Yes ∑ No	*	within a Wetlar	nd? Yes <u>/</u>	No
Remarks: Designed B. Designed Mod/hooks a	15 CL 1-	esc at	04-0-1	
Drainage B. Defined bed/banks w No open water observed. Could not	r access	drainage	postern for So	il test pit.
Assumed wethend based on vegetation	d hydrole	av.	0011011( 101 11	•
VEGETATION – Use scientific names of plants	).	9/		The state of the s
		inant Indicator	Dominance Test work	sheet:
Tree Stratum (Plot size:)  1. Salix lasiclepis	% Cover Spec		Number of Dominant S	
2. Schinus terchinthitalins	75 Y	<u>FACW</u>	That Are OBL, FACW,	or FAC: (A)
3	······································	y UPL	Total Number of Domin	
4.			Species Across All Stra	ta: (B)
Sapling/Shrub Stratum (Plot size: )	160 = Tot	al Cover	Percent of Dominant Sp That Are OBL, FACW, of	
1. Baccharis salicibalia Svimineas	5 \	E FACW	Prevalence Index wor	
2				Multiply by:
3			t .	x 1 =
4				x 2 =
5				x 3 =
Hash Chartery (District)	= Tot	al Cover	FACU species	x 4 =
Herb Stratum (Plot size:) 1.			UPL species	x 5 =
2			Column Totals:	(A) (B)
3			Prevalence Index	= B/A =
4			Hydrophytic Vegetation	
5			Y Dominance Test is	
6			Prevalence Index is	
7			Morphological Ada	ptations <sup>1</sup> (Provide supporting
8	<i>C</i> >			s or on a separate sheet)
Woody Vine Stratum (Plot size:)	= Tot	al Cover	Problematic Hydrop	ohytic Vegetation <sup>1</sup> (Explain)
1			<sup>1</sup> Indicators of hydric soil	I and wetland hydrology must
2			be present, unless distu	urbed or problematic.
_	= Tot	al Cover	Hydrophytic	
% Bare Ground in Herb Stratum 100 % Cover of	f Biotic Crust	0	Vegetation Present? Yes	s No
1				
"Remarks: "Bare ground" consists of leaf litter. Acacia sp., Cortadoria selloana also	in America			~··· ~ 0
Acacia sp., Cortadoria selloana also	in onsone	ise; Encel	ia Calitornica	on either side of
ripacian strip.				

COLL								17
SOIL								Sampling Point:
1	cription: (Describe t	o the depth nee	ded to docun	nent the i	ndicator (	or confirm	the absence	e of indicators.)
Depth	Matrix			x Features				
(inches)	Color (moist)	<u> % Co</u>	lor (moist)	%	_Type <sup>1</sup>	_Loc <sup>2</sup>	<u>Texture</u>	Remarks
<sup>1</sup> Type: C=C	oncentration, D=Deple	tion, RM=Reduc	ed Matrix CS:	=Covered	or Coated	Sand Gra	vino <sup>2</sup> l o	cation: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applical	ole to all LRRs,	unless other	vise note	d.)	Janu Gra		for Problematic Hydric Soils <sup>3</sup> :
Histoso			Sandy Redox		,			Muck (A9) (LRR C)
Histic E	pipedon (A2)		Stripped Mat					Muck (A10) (LRR B)
	istic (A3)		Loamy Muck	y Mineral	(F1)			ed Vertic (F18)
	en Sulfide (A4)		Loamy Gleye		(F2)			arent Material (TF2)
	d Layers (A5) (LRR C)	***************************************	Depleted Ma				Other	(Explain in Remarks)
	uck (A9) ( <b>LRR D</b> ) d Below Dark Surface	(0.1.1)	Redox Dark	•	,			
	ark Surface (A12)	(A11)	Depleted Dai Redox Depre				3, ,, ,	
	Aucky Mineral (S1)		Vernal Pools	•	8)			of hydrophytic vegetation and
	Gleyed Matrix (S4)	····	, vomai i 0013	(1 0)				hydrology must be present, a sisturbed or problematic.
Restrictive	Layer (if present):						41.1000 4	iotarboa of problematic.
Туре:								
Depth (in	ches):						Hydric Soil	Present? Yes No
Remarks:		^ \						
No acc	ess to bottom	of drain	સ્ત્					
			J					
	CV							
HYDROLO								
	drology Indicators:							
	cators (minimum of one	required; checl	all that apply)				Secon	dary Indicators (2 or more required)
	Water (A1)		_ Salt Crust (E				W	/ater Marks (B1) (Riverine)
	iter Table (A2)	_	_ Biotic Crust				Se	ediment Deposits (B2) (Riverine)
Saturatio			_ Aquatic Inve				Di	rift Deposits (B3) (Riverine)
	arks (B1) (Nonrivering		_ Hydrogen S		, ,			rainage Patterns (B10)
	nt Deposits (B2) (Nonri		_ Oxidized Rh			ving Roots		ry-Season Water Table (C2)
	oosits (B3) ( <b>Nonriverin</b> Soil Cracks (B6)		_ Presence of					rayfish Burrows (C8)
	, ,		_ Recent Iron			Soils (C6)		aturation Visible on Aerial Imagery (C9)
	on Visible on Aerial Ima tained Leaves (B9)	ayery (D/)	_ Thin Muck S	•	,			hallow Aquitard (D3)
Field Observ		-	_ Other (Expla	ain in Kem	narks)		<u>&gt;</u> F/	AC-Neutral Test (D5)
Surface Water	_	N- X	D+=0- 0- 1	> -				
Water Table	_	No _\(\frac{1}{X}\)	Depth (inch			-		
		No X	Depth (inch			-		17
Saturation Pr		No <u>X</u>	Depth (inch	ies):		Wetlan	ıd Hydrology	/ Present? Yes X No

(includes capillary fringe)

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

Remarks:

Wetland Hydrology Present? Yes \_\_\_\_\_ No \_\_\_\_

Project/Site: Newport Banning Ranch (Newp	ort J015)	City/County: Newpo	ort Beach/Orange Sampling Date: 4116/09
Applicant/Owner: Newpost Banni	ng Randi	ony, oddiny. <u>Ivewpo</u>	State: <u>CA</u> Sampling Point: 18
Investigator(s): Gary Medeiros, Allison Rudal	evige	Section Township R	lange: N/A - "Santiago De Santa Ana" land grant
Landform (hillslope, terrace, etc.): drainas	SR.	Local relief (concave	, convex, none): Slope (%):
Subregion (LRR): C	lat. 2	3.628822	1000 -117 94213 D. MANOS
Soil Map Unit Name: My Ford Sandy L	oan (9-30	In Stones en	And Mail elegation DEOA
Are climatic / hydrologic conditions on the site typ	ical for this time of ve	ar? Ves V No	(If no explain in Personal )
Are Vegetation, Soil, or Hydrology	significantly		"Normal Circumstances" present? Yes✓ No
Are Vegetation, Soil, or Hydrology			needed, explain any answers in Remarks.)
		`	locations, transects, important features, etc.
	No_ ¥		
	No <u>}</u>	Is the Sample	_
1	Y No	within a Wetla	and? Yes NoX
Remarks: Brainage C			
District			
VECTATION Harris (C			
VEGETATION – Use scientific names			
Tree Stratum (Plot size:)	Absolute <u>% Cover</u>	Dominant Indicator Species? Status	Dominance Test worksheet:
1. Eucalyptus Sp.	<u> خاد</u>	>	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2. Schinus terebinth failus		Y UPL	Total Number of Dominant
3			Species Across All Strata: (B)
4			Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:	65	= Total Cover	That Are OBL, FACW, or FAC: 25% (A/B)
1. Baccharis pilularis	40	y WPL	Prevalence Index worksheet:
2. Baccharis salicifolia	20		Total % Cover of:Multiply by:
3			OBL species x 1 =
4			FACW species
5			FAC species x 3 =
Herb Stratum (Plot size:)	_60_	= Total Cover	FACU species x 4 =
1			UPL species 105 x 5 = 525
2.			Column Totals: 125 (A) 565 (B)
3			Prevalence Index = B/A = 4.5 2
4.			Hydrophytic Vegetation Indicators:
5			Dominance Test is >50%
6			Prevalence Index is ≤3.0 <sup>1</sup>
7			Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
8			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:	)	= Total Cover	
1			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2			be present, unless disturbed or problematic.
	0	= Total Cover	Hydrophytic
% Bare Ground in Herb Stratum100	% Cover of Biotic Cr	ust0	Vegetation
Remarks:			

	ription: (Describe	to the depth	needed to docui	nent the inc	dicator	or confirm	the absence	ce of indicators.)
Depth	Matrix		Redo	x Features				,
inches)	Color (moist)		Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-20	104R514	100	x		_	~	Sand	
ype: C=Co	ncentration, D=Dep	letion, RM=R	educed Matrix, CS	=Covered o	r Coated	d Sand Gr	ains. <sup>2</sup> Lo	ocation: PL=Pore Lining, M=Matrix.
	ndicators: (Applic	able to all LF			.)		Indicator	s for Problematic Hydric Soils³:
_ Histosol (	, ,		Sandy Redo	. ,				Muck (A9) (LRR C)
Histic Epi Black His	ipedon (A2)		Stripped Ma	. ,	- 43			Muck (A10) (LRR B)
	n Sulfide (A4)		Loamy Mucl Loamy Gley					iced Vertic (F18)
	Layers (A5) (LRR C	<b>:</b> )	Depleted Ma		<b>∠</b> )			Parent Material (TF2)
	ck (A9) (LRR D)	- /	Redox Dark	٠,	:\		Otner	r (Explain in Remarks)
	Below Dark Surface	e (A11)	Depleted Da					
	rk Surface (A12)	( ,	Redox Depr	,	,		3Indicators	s of hydrophytic vegetation and
	ucky Mineral (S1)		Vernal Pools	, ,				d hydrology must be present,
	eyed Matrix (S4)			,				disturbed or problematic.
estrictive La	ayer (if present):							- Proposition
Туре:								
	nes):						Hydric Soi	il Present? Yes No
Depth (incl							Hydric Soi	il Present? Yes No <u>`</u>
Depth (inclemarks:	nes):						Hydric Soi	il Present? Yes No <u>`</u>
Depth (inclemarks:  DROLOGetland Hydi	nes):  SY rology Indicators:			)				
Depth (inclemarks:  DROLOGetland Hydrograph Indicates)	nes):  Y rology Indicators: ators (minimum of or		check all that apply				Seco	endary Indicators (2 or more required)
Depth (inclemarks:  DROLOGetland Hydromary Indica	nes): Fology Indicators: ators (minimum of or Vater (A1)		check all that apply	B11)			<u>Seco</u>	endary Indicators (2 or more required) Water Marks (B1) ( <b>Riverine</b> )
DROLOG etland Hydi mary Indica Surface W High Wate	nes):		check all that apply Salt Crust ( Biotic Crust	B11) : (B12)	212)		Seco	endary Indicators (2 or more required) Water Marks (B1) ( <b>Riverine</b> ) Sediment Deposits (B2) ( <b>Riverine</b> )
DROLOG etland Hydi mary Indica Surface W High Wate Saturation	rology Indicators: ators (minimum of or Vater (A1) er Table (A2)	ne required; c	check all that apply Salt Crust ( Biotic Crust Aquatic Inv	B11) : (B12) ertebrates (E			Seco \ S	endary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine)
DROLOG  ctland Hydinary Indica  Surface W High Wate Saturation Water Ma	rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) rks (B1) (Nonriveri	ne required; c	check all that apply Salt Crust ( Biotic Crust Aquatic Inv	B11) : (B12) ertebrates (E Sulfide Odor	(C1)	iving Root	Seco \ S [	undary Indicators (2 or more required) Water Marks (B1) ( <b>Riverine</b> ) Sediment Deposits (B2) ( <b>Riverine</b> ) Drift Deposits (B3) ( <b>Riverine</b> ) Drainage Patterns (B10)
DROLOG  Partiand Hydrogram  Burface W  High Wate  Saturation  Water Ma  Sediment	rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) rks (B1) (Nonriverir Deposits (B2) (Non	ne required; c ne) nriverine)	check all that apply Salt Crust ( Biotic Crust Aquatic Inv	B11) (B12) ertebrates (E Sulfide Odor nizospheres	(C1) along Li		Seco \ S [ E s (C3) [	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2)
DROLOG etland Hydromary Indica Surface W High Wate Saturation Water Ma Sediment Drift Depo	rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) rks (B1) (Nonriveri	ne required; c ne) nriverine)	check all that apply  Salt Crust ( Biotic Crust Aquatic Involution S Oxidized Ri	B11) (B12) ertebrates (E Sulfide Odor hizospheres f Reduced Ir	(C1) along Li on (C4)		Seco\ S [ S [ S [ S C3) [ S C3]	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
DROLOG  Partiand Hydrogram  Burface W  High Water Ma  Saturation  Water Ma  Sediment  Drift Depo	rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) rks (B1) (Nonriverin Deposits (B2) (Nonriverin osits (B3) (Nonriverin	ne required; c ne) iriverine)	check all that apply Salt Crust ( Biotic Crust Aquatic Inv. Hydrogen S Oxidized RI Presence o	B11)  (B12) ertebrates (Eulfide Odor hizospheres f Reduced Ir Reduction i	(C1) along Li on (C4) in Tilled		Seco\ _	endary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (
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Project/Site: Newport Banning Ranch (Newport J015) City/County: New	port Beach/Orange Sampling Date: 7/16/09
Applicant/Owner: Newport Banning Ranch	State: CA Sampling Point: 19
Investigator(s): Gary Medeiros, Allison Rudalevige Section, Township	p. Range: N/A - "Santiago De Santa Ana" land grant
Local relief (concerning the control of the control	ave. convex none). — Slone (%):/\) — 2
Subregion (LRR): C Lat: 33. 62886	Long: -1/7.94351 Datum: NAD83
Subregion (LRR): C  Soil Map Unit Name: My ford Sandy loam (9-302 Slopes	epoded NWI classification: PEA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	(If no explain in Remarks )
	Are "Normal Circumstances" present? Yes✓ No
	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling poi	
,	, and the second
Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes No Is the Sam within a W	pled Area
Wetland Hydrology Present? Yes No within a Wo	etland? YesNo _X
Remarks:	
Drainage C	
VEGETATION – Use scientific names of plants.	
	4
Absolute Dominant Indicative Species? Statum (Plot size:) Statum	
1. Salix lassiolegis 100 y FAC	-   Number of Dominant Species
2	Total Number of Dominant
3	Species Across All Strata: 2 (B)
4	Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)	That Are OBL, FACW, or FAC: 50% (A/B)
1	Prevalence Index worksheet:
2	Total % Cover of: Multiply by:
3	OBL species 100 x 1 = 100
4	FACW species x 2 = 2
5	FAC species x 3 =
Herb Stratum (Plot size:	FACU species x 4 =
1. Bromus madritorsis sop. rubers 10 y NI°	UPL species 10 x 5 = 50
2. Conium maculatum <1 n FAC	Column Iolais. III (A) IDE (B)
3	Prevalence Index = B/A = 1.31
4	Hydrophytic Vegetation Indicators:
5	Dominance Test is >50%
6	Y Prevalence Index is ≤3.0¹
7	Morphological Adaptations <sup>1</sup> (Provide supporting
8	data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:) = Total Cover	Froblematic Plydrophytic Vegetation (Explain)
1	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2	be present, unless disturbed or problematic.
= Total Cover	Hydrophytic
% Bare Ground in Herb Stratum 90 % Cover of Biotic Crust 0	Vegetation Present?  Yes No
*No indicator (NI) status recorded for species with insulf determine indicator status. Considered UPL for purpos	icient Internation in the region to
determine indicator status. Considered WL for purpos	es of dominance test of prevalence
index.	

SO		E.
200	В	Seen.

(inches) 0-20				K Features	. 2		
7-10	Color (moist)	_ % _	Color (moist)	%Type <sup>1</sup>		exture	Remarks
	LOYR514		<b>*</b>	<u> </u>	<u> </u>	and	
ype: C=Co	ncentration, D=Dep	letion. RM=Re	duced Matrix, CS:	=Covered or Coate	ed Sand Grains	<sup>2</sup> l continue DI	.=Pore Lining, M=Matrix.
dric Soil I	ndicators: (Applic	able to all LR	Rs, unless other	vise noted.)		dicators for Prob	ematic Hydric Soils <sup>3</sup> :
_ Histosol (	A1)		Sandy Redox	x (S5)		_ 1 cm Muck (A9)	
	pedon (A2)		Stripped Mat	rix (S6)	-	_ 2 cm Muck (A10	
_ Black His				y Mineral (F1)		Reduced Vertic	
	Sulfide (A4)		Loamy Gleye			Red Parent Mate	
	Layers (A5) (LRR (	<b>S</b> )	Depleted Ma			Other (Explain ir	
	k (A9) (LRR D)		Redox Dark	, ,		· •	*
	Below Dark Surface	e (A11)		k Surface (F7)			
-	k Surface (A12)		Redox Depre		3In	dicators of hydrop	nytic vegetation and
	icky Mineral (S1)		Vernal Pools	(F9)	1	wetland hydrology	must be present,
	eyed Matrix (S4) eyer (if present):					unless disturbed o	r problematic.
Type:	ayer (ii present).						
			-				
Danth line							
Depth (inchemarks:			_		Hyd	ric Soil Present?	Yes No
marks:					Hyd	ric Soil Present?	Yes No _X_
marks:	iΥ				Hyd	iric Soil Present?	YesNo <sup>X</sup> _
marks:  DROLOG	εΥ ology Indicators:		neck all that apply)		Hyd		
marks:  DROLOG  stland Hydr  mary Indica	i <b>Y</b> ology Indicators: tors (minimum of o				Hyd	Secondary Indic	ators (2 or more required)
DROLOG stland Hydr mary Indica Surface W	ology Indicators: tors (minimum of or vater (A1)		Salt Crust (E		Hyd	Secondary Indic Water Mark	ators (2 or more required) s (B1) (Riverine)
DROLOG tland Hydr mary Indica Surface W High Wate	ology Indicators: tors (minimum of or dater (A1) er Table (A2)		Salt Crust (E	(B12)	Hyd	Secondary Indic Water Mark	ators (2 or more required)
DROLOG tland Hydr mary Indica Surface W High Wate Saturation	ology Indicators: tors (minimum of or fater (A1) er Table (A2) (A3)	ne required; ch	Salt Crust (E Biotic Crust Aquatic Inve	(B12) rtebrates (B13)	Hyd	Secondary Indic  Water Mark  Sediment D Drift Deposi	ators (2 or more required) s (B1) (Riverine) eposits (B2) (Riverine) ts (B3) (Riverine)
DROLOG tland Hydr mary Indica Surface W High Wate Saturation Water Mar	ology Indicators: tors (minimum of or dater (A1) er Table (A2) (A3) rks (B1) (Nonriveri	ne required; ch	Salt Crust (E Biotic Crust Aquatic Inve Hydrogen Si	(B12) rtebrates (B13) ulfide Odor (C1)		Secondary Indic  Water Mark Sediment D Drift Deposi	ators (2 or more required) s (B1) (Riverine) eposits (B2) (Riverine) ts (B3) (Riverine)
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DROLOG stland Hydr mary Indica Surface W High Wate Saturation Water Mar Sediment Drift Depo	ology Indicators: tors (minimum of or tater (A1) er Table (A2) (A3) rks (B1) (Nonriveri Deposits (B2) (Nonsits (B3) (Nonriver	ne required; ch ne) nriverine)	Salt Crust (E Biotic Crust Aquatic Inve Hydrogen St Oxidized Rh Presence of	(B12) rtebrates (B13) ulfide Odor (C1) izospheres along l Reduced Iron (C4	Living Roots (C3)	Secondary Indic  Water Mark Sediment D Drift Deposi	ators (2 or more required) s (B1) (Riverine) eposits (B2) (Riverine) ts (B3) (Riverine) atterns (B10) Water Table (C2)
DROLOG  Itland Hydr  Mary Indica  Surface W  High Wate  Saturation  Water Mar  Sediment  Drift Depo  Surface S	ology Indicators: tors (minimum of or /ater (A1) er Table (A2) (A3) rks (B1) (Nonriveri Deposits (B2) (Nonriveri oil Cracks (B6)	ne required; ch ne) iriverine) ine)	Salt Crust (E Biotic Crust Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron	(B12) rtebrates (B13) ulfide Odor (C1) izospheres along l Reduced Iron (C4 Reduction in Tilled	Living Roots (C3)	Secondary Indic  Water Mark Sediment D Drift Deposi X Drainage Pa Dry-Season Crayfish Bu	ators (2 or more required) s (B1) (Riverine) eposits (B2) (Riverine) ts (B3) (Riverine) atterns (B10) Water Table (C2) rrows (C8)
DROLOG  Itland Hydr  Mary Indica  Surface W  High Wate  Saturation  Water Man  Sediment  Drift Depo  Surface Si  Inundation	ology Indicators: tors (minimum of or tater (A1) er Table (A2) (A3) rks (B1) (Nonriveri Deposits (B2) (Nonriver sits (B3) (Nonriver oil Cracks (B6)	ne required; ch ne) iriverine) ine)	Salt Crust (E Biotic Crust Aquatic Inve Hydrogen St Oxidized Rh Presence of	(B12) rtebrates (B13) ulfide Odor (C1) izospheres along l Reduced Iron (C4 Reduction in Tilled	Living Roots (C3)	Secondary Indic  Water Mark Sediment D Drift Deposi X Drainage Pa Dry-Season Crayfish Bu	ators (2 or more required) s (B1) (Riverine) eposits (B2) (Riverine) ts (B3) (Riverine) atterns (B10) Water Table (C2) rrows (C8) //sible on Aerial Imagery (C8)
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Project/Site: Newport Banning Ranch (Newport J01	5) City/	County: Newpo	rt Beach/Orange	Sampling Date:	7/11/0/09
Applicant/Owner: Newport Banning Ra	nch	-	State: CA	Sampling Point:	20
Investigator(s): Gary Medeiros, Allison Rudalevige	Sect	tion, Township, R	ange: N/A - "Santiago [	De Santa Ana" Ian	d grant
Landform (hillslope, terrace, etc.): depression	Loc	al relief (concave	convey none): A MA	110 Class	- (0/)
Subregion (LRR): C	Lat: 33.0	6402	long: -117.947	50 Siopi	: NAD83
Soil Map Unit Name: Balsa sill loam			NWI classifi		
Are climatic / hydrologic conditions on the site typical for the	nis time of year?	Yes <u>√</u> No	(If no, explain in F	Remarks.)	
Are Vegetation, Soil, or Hydrology	significantly distu		"Normal Circumstances"		No
Are Vegetation, Soil, or Hydrology			eeded, explain any answe		NO
SUMMARY OF FINDINGS – Attach site map		•			tures, etc.
Hydrophytic Vegetation Present? Yes					
		Is the Sample		*	
Hydric Soil Present? Yes   Wetland Hydrology Present? Yes	No X	within a Wetla	nd? Yes	No <u>X</u>	
Remarks:					
VEGETATION – Use scientific names of plan				-	
Tree Stratum (Plot size:)	Absolute Dor % Cover Spe	minant Indicator	Dominance Test work		
1. Salix lasiolepis	50	Y FACW	Number of Dominant S That Are OBL, FACW,	pecies 4	(4)
2		(			(A)
3			Total Number of Domin Species Across All Stra		(D)
4					(B)
	<u>\$0</u> = To	tal Cover	Percent of Dominant Sp That Are OBL, FACW,		(A/B)
Sapling/Shrub Stratum (Plot size:)  1. Baccharis Salicifolia Evininea?	2 - V	Fanlal		-	(A/b)
2.	_ <u></u>		Prevalence Index wor		
3			Total % Cover of:		
4			OBL species		
5.			1	x 2 = x 3 =	
		tal Cover	FACU species		I
Herb Stratum (Plot size:)			UPL species		
1. Malvaja Jepusa	20	FAC FAC	Column Totals:		
2. Salicornia proginica	- <u>2</u>	n OBL			
3. Heliotropium Curassavicum		Y OBL		= B/A =	
4			Hydrophytic Vegetation		
56			Dominance Test is Prevalence Index is		
6 7				s ≤3.0 otations¹ (Provide su	
8				or on a separate sh	
	32 = To	tal Cover	Problematic Hydron	hytic Vegetation¹ (E	xplain)
Woody Vine Stratum (Plot size:)					
1			<sup>1</sup> Indicators of hydric soil be present, unless distu	and wetland hydrolorbed or problematic.	ogy must
		tal Cover	Hydrophytic		
% Bare Ground in Herb Stratum % Cove	r of Biotic Crust	_	Vegetation	7	
Remarks:	i oi diotic cfust _		Present? Yes	sNo	_
Bare Grand: Leaf litter					
and thought and					

60%	531	R	F

Depth (inches)		•	an necoca to aoca	mem me i	nuicator	or contirn	n the absence	of indicators.)
HILLINES	Matrix Color (moist)	%		x Feature:		. 2		
0-2			Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	<u>Texture</u>	Remarks
	organic	-	0.011 - 1.					
2-6	2.54 5/3	70	2.54616	30	<u>C</u>	<u>M</u>	clay	distinct mottles
							•	
				-				
<sup>1</sup> Type: C=Co	ncentration, D=Deple	etion, RM=	=Reduced Matrix, CS	=Covered	or Coated	 I Sand Gr	ains. <sup>2</sup> Loc	ation: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (Applica	ble to all	LRRs, unless other	wise note	d.)			for Problematic Hydric Soils <sup>3</sup> :
Histosol (	(A1)		Sandy Redo	ox (S5)				uck (A9) (LRR C)
Histic Ep	ipedon (A2)		Stripped Ma	atrix (S6)				uck (A10) (LRR B)
Black His	stic (A3)		Loamy Muc	ky Mineral	(F1)			ed Vertic (F18)
	n Sulfide (A4)		Loamy Gley	ed Matrix	(F2)			rent Material (TF2)
	Layers (A5) (LRR C)	)	Depleted Ma					Explain in Remarks)
	ck (A9) (LRR D)		Redox Dark		•		•	•
	Below Dark Surface	(A11)	Depleted Da					
	rk Surface (A12)		Redox Depr		8)			of hydrophytic vegetation and
	ucky Mineral (S1)		Vernal Pools	s (F9)			wetland h	ydrology must be present,®
	eyed Matrix (S4)						unless di	sturbed or problematic.
	ayer (if present): Narch Soll							
								•
Depth (incl	hes):						Hydric Soil I	Present? Yes No
<b>IYDROLOG</b>				-				
	SY rology Indicators:			-				
Wetland Hyd	rology Indicators:	e required	; check all that apply				Second	tary Indicators (2 or more required)
Wetland Hydi Primary Indica	rology Indicators: ators (minimum of one	e required						dary Indicators (2 or more required)
Wetland Hydro Primary Indica Surface V	rology Indicators: ators (minimum of one Vater (A1)	e required	Salt Crust (	(B11)			Wa	ater Marks (B1) ( <b>Riverine</b> )
Wetland Hydi Primary Indica Surface V High Wate	rology Indicators: ators (minimum of one Vater (A1) er Table (A2)	e required	Salt Crust ( Biotic Crus	(B11) t (B12)	(R13)		Wa	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine)
Wetland Hydica Primary Indica Surface V High Wate Saturation	rology Indicators: ators (minimum of one Vater (A1) er Table (A2) n (A3)		Salt Crust ( Biotic Crus Aquatic Inv	(B11) t (B12) rertebrates	, ,		Wa Se Dri	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine)
Wetland Hydromery Indice Surface V High Wate Saturation Water Ma	rology Indicators: ators (minimum of one Vater (A1) er Table (A2) n (A3) urks (B1) (Nonriverin	e)	Salt Crust ( Biotic Crus Aquatic Inv	(B11) t (B12) rertebrates Sulfide Odd	or (C1)	iving Part	Wa Se Dri Dr	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10)
Wetland Hydrometric Primary Indica Surface V High Wate Saturation Water Ma Sediment	rology Indicators: ators (minimum of one Vater (A1) er Table (A2) n (A3) urks (B1) (Nonriverin Deposits (B2) (Nonr	e) riverine)	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R	(B11) t (B12) rertebrates Sulfide Odd hizosphere	or (C1) es along L	iving Roof	Wa Se Dri as (C3) Dr	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2)
Wetland Hydromany Indica Primary Indica Surface V High Wate Saturation Water Ma Sediment Drift Depo	rology Indicators: ators (minimum of one Vater (A1) er Table (A2) n (A3) urks (B1) (Nonriverin Deposits (B2) (Nonriverin osits (B3) (Nonriverin	e) riverine)	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence c	(B11) t (B12) rertebrates Sulfide Odo hizosphere of Reduced	or (C1) es along L I Iron (C4)		Wa Se Dri Dri Cri	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8)
Wetland Hydromany Indica Primary Indica Surface V High Water Saturation Water Ma Sediment Drift Depo	rology Indicators: ators (minimum of one Vater (A1) er Table (A2) n (A3) arks (B1) (Nonriverin Deposits (B2) (Nonriverin soil Cracks (B6)	e) iverine) ne)	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence c	(B11) t (B12) rertebrates Sulfide Odd hizosphere of Reduced n Reductio	or (C1) es along L I Iron (C4) n in Tilled		Wa Se Dri Dri Cr. Sa	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (
Wetland Hydi Primary Indica Surface V High Wate Saturation Water Ma Sediment Drift Depo Surface S Inundation	rology Indicators: ators (minimum of one Vater (A1) er Table (A2) n (A3) urks (B1) (Nonriverin Deposits (B2) (Nonriverin soits (B3) (Nonriverin Coil Cracks (B6) n Visible on Aerial Im	e) iverine) ne)	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Thin Muck	(B11) t (B12) rertebrates Sulfide Odd hizosphere of Reduced n Reduction Surface (C	or (C1) es along L I Iron (C4) n in Tilled C7)		Wa Se Dri Dri Cr. Ca Sa Sh	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery ( allow Aquitard (D3)
Wetland Hydromary Indicate Surface V High Water Saturation Water Ma Sediment Drift Depo Surface S Inundation Water-Sta	rology Indicators: ators (minimum of one Vater (A1) er Table (A2) in (A3) irks (B1) (Nonriverin Deposits (B2) (Nonriverin soil Cracks (B6) in Visible on Aerial Im ained Leaves (B9)	e) iverine) ne)	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence c	(B11) t (B12) rertebrates Sulfide Odd hizosphere of Reduced n Reduction Surface (C	or (C1) es along L I Iron (C4) n in Tilled C7)		Wa Se Dri Dri Cr. Ca Sa Sh	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (
Wetland Hydromary Indica Surface V High Water Saturation Water Ma Sediment Drift Depo Surface S Inundation Water-Sta	rology Indicators: ators (minimum of one Vater (A1) er Table (A2) n (A3) arks (B1) (Nonriverin Deposits (B2) (Nonriverin soil Cracks (B6) n Visible on Aerial Im ained Leaves (B9) ations:	e) riverine) ne) agery (B7	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Thin Muck Other (Exp	(B11) t (B12) rertebrates Sulfide Odd hizosphere of Reduced n Reduction Surface (C	or (C1) es along L I Iron (C4) n in Tilled 67) narks)	Soils (C6)	Wa Se Dri Dri Cr. Ca Sa Sh	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery ( allow Aquitard (D3)
Wetland Hydromary Indica  Surface V High Water Saturation Water Ma Sediment Drift Depo Surface S Inundation Water-Sta Field Observa Surface Water	rology Indicators: ators (minimum of one Vater (A1) er Table (A2) n (A3) urks (B1) (Nonriverin Deposits (B2) (Nonriverin soil Cracks (B6) n Visible on Aerial Im ained Leaves (B9) ations: r Present? Yes	e) riverine) ne) agery (B7	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Thin Muck Other (Exp	(B11) t (B12) rertebrates Sulfide Odd hizosphere of Reduced n Reductio Surface (C lain in Ren	or (C1) es along L I Iron (C4) n in Tilled 67) narks)	Soils (C6)	Wa Se Dri Dri Cr. Ca Sa Sh	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery ( allow Aquitard (D3)
Wetland Hydromary Indica Surface V High Water Saturation Water Ma Sediment Drift Depo Surface S Inundation Water-Sta Field Observe Surface Water Water Table F	rology Indicators: ators (minimum of one Vater (A1) er Table (A2) n (A3) arks (B1) (Nonriverin Deposits (B2) (Nonriverin soil Cracks (B6) n Visible on Aerial Im ained Leaves (B9) ations: r Present? Yes Present? Yes	e) riverine) ne) agery (B7	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Thin Muck Other (Exp	(B11)  t (B12) rertebrates Sulfide Odd hizosphere of Reduced n Reduction Surface (C lain in Ren	or (C1) es along L l Iron (C4) n in Tilled 67) narks)	Soils (C6)	Wa Se Dri Dri Cr. Ca Sa Sh	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery ( allow Aquitard (D3)
Wetland Hydromary Indica  Surface V High Water Saturation Water Ma Sediment Drift Depo Surface S Inundation Water-Sta Field Observa Surface Water Water Table F Saturation Pre (includes capil	rology Indicators: ators (minimum of one Vater (A1) er Table (A2) n (A3) arks (B1) (Nonriverin Deposits (B2) (Nonriverin Soil Cracks (B6) n Visible on Aerial Im ained Leaves (B9) ations: r Present? Present? Yes esent? Yes ellary fringe)	e) riverine) ne) agery (B7	Salt Crust ( Biotic Crust ( Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iror Thin Muck Other (Exp	(B11)  t (B12) rertebrates Sulfide Odd hizosphere of Reduced n Reductio Surface (C lain in Ren ches):	or (C1) es along L l Iron (C4) n in Tilled 67) narks)	Soils (C6)		ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery ( allow Aquitard (D3)
Wetland Hydromary Indica  Surface V High Water Ma Sediment Drift Depo Surface S Inundation Water-Sta  Field Observa Surface Water Water Table F Saturation Pre (includes capil	rology Indicators: ators (minimum of one Vater (A1) er Table (A2) n (A3) arks (B1) (Nonriverin Deposits (B2) (Nonriverin soil Cracks (B6) n Visible on Aerial Im ained Leaves (B9) ations: r Present? Yes esent? Yes	e) riverine) ne) agery (B7	Salt Crust ( Biotic Crust ( Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iror Thin Muck Other (Exp	(B11)  t (B12) rertebrates Sulfide Odd hizosphere of Reduced n Reductio Surface (C lain in Ren ches):	or (C1) es along L l Iron (C4) n in Tilled 67) narks)	Soils (C6)		ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery ( allow Aquitard (D3) C-Neutral Test (D5)
Primary Indica  Surface V High Water Saturation Water Ma Sediment Drift Depo Surface S Inundation Water-Sta  Field Observa Surface Water Water Table P Saturation Pre (includes capil) Describe Reco	rology Indicators: ators (minimum of one Vater (A1) er Table (A2) n (A3) arks (B1) (Nonriverin Deposits (B2) (Nonriverin Soil Cracks (B6) n Visible on Aerial Im ained Leaves (B9) ations: r Present? Present? Yes esent? Yes ellary fringe)	e) riverine) ne) agery (B7	Salt Crust ( Biotic Crust ( Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iror Thin Muck Other (Exp	(B11)  t (B12) rertebrates Sulfide Odd hizosphere of Reduced n Reductio Surface (C lain in Ren ches):	or (C1) es along L l Iron (C4) n in Tilled 67) narks)	Soils (C6)		ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery ( allow Aquitard (D3) C-Neutral Test (D5)
Wetland Hydromary Indica  Surface V High Water Ma Sediment Drift Depo Surface S Inundation Water-Sta  Field Observa Surface Water Water Table F Saturation Pre (includes capil	rology Indicators: ators (minimum of one Vater (A1) er Table (A2) n (A3) arks (B1) (Nonriverin Deposits (B2) (Nonriverin Soil Cracks (B6) n Visible on Aerial Im ained Leaves (B9) ations: r Present? Present? Yes esent? Yes ellary fringe)	e) riverine) ne) agery (B7	Salt Crust ( Biotic Crust ( Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iror Thin Muck Other (Exp	(B11)  t (B12) rertebrates Sulfide Odd hizosphere of Reduced n Reductio Surface (C lain in Ren ches):	or (C1) es along L l Iron (C4) n in Tilled 67) narks)	Soils (C6)		ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery ( allow Aquitard (D3) C-Neutral Test (D5)
Wetland Hydromany Indicated Water Marker Surface Surface Surface Surface Surface Surface Surface Water Table For Surface Saturation Freside Constitution of the Surface Surfac	rology Indicators: ators (minimum of one Vater (A1) er Table (A2) n (A3) arks (B1) (Nonriverin Deposits (B2) (Nonriverin Soil Cracks (B6) n Visible on Aerial Im ained Leaves (B9) ations: r Present? Present? Yes esent? Yes ellary fringe)	e) riverine) ne) agery (B7	Salt Crust ( Biotic Crust ( Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iror Thin Muck Other (Exp	(B11)  t (B12) rertebrates Sulfide Odd hizosphere of Reduced n Reductio Surface (C lain in Ren ches):	or (C1) es along L l Iron (C4) n in Tilled 67) narks)	Soils (C6)		ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery ( allow Aquitard (D3) C-Neutral Test (D5)
Wetland Hydromary Indicated Surface Value High Water May Sediment Drift Deposit Surface Saturation Water-State Water Table For Surface Water Table For Surface Saturation Precincludes capil Describe Recommendation Surface Water Table For Surface Water Table For Surface Precincludes Capil Describe Recommendation Precincludes Capil Describe Recommendation Precincludes Capil Describe Recommendation Surface Water Table For Surface Water Ta	rology Indicators: ators (minimum of one Vater (A1) er Table (A2) n (A3) arks (B1) (Nonriverin Deposits (B2) (Nonriverin Soil Cracks (B6) n Visible on Aerial Im ained Leaves (B9) ations: r Present? Present? Yes esent? Yes ellary fringe)	e) riverine) ne) agery (B7	Salt Crust ( Biotic Crust ( Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iror Thin Muck Other (Exp	(B11)  t (B12) rertebrates Sulfide Odd hizosphere of Reduced n Reductio Surface (C lain in Ren ches):	or (C1) es along L l Iron (C4) n in Tilled 67) narks)	Soils (C6)		ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery ( allow Aquitard (D3) C-Neutral Test (D5)

Project/Site: Newport Banning Ranch (Newport J015)	City/C	County: <u>Newpor</u>	t Beach/Orange	Sampling Date:	7116109
Applicant/Owner: Newfort Banning Ranch			State: <u>CA</u>		
Investigator(s): Gary Medeiros, Allison Rudalevige					
Landform (hillslope, terrace, etc.):	Loca	I relief (concave,	convex, none):	Slope	e (%):
Subregion (LRR): C	at: 33.6	1005583	Long: -117.95	121188 Datum	NA083
Soil Map Unit Name: Bolsa Silt loan			NWI class		
Are climatic / hydrologic conditions on the site typical for this tim			(If no, explain in	n Remarks.)	
Are Vegetation, Soil, or Hydrology signif			"Normal Circumstances		No
Are Vegetation, Soil, or Hydrology natura	ally problema		eeded, explain any ans		
SUMMARY OF FINDINGS – Attach site map sho	wing sam				tures, etc.
Hydrophytic Vegetation Present? Yes X No					
Hydric Soil Present? Yes No	<u> </u>	Is the Sampled		V	
Wetland Hydrology Present? Yes No	7	within a Wetlar	nd? Yes	No	
Remarks:					
VEGETATION – Use scientific names of plants.					
	solute Dom	inant Indicator	Daminana Tark	4	
		inant indicator ies? Status	Dominance Test wo	J.,	
1			Number of Dominant That Are OBL, FACV		(A)
2			Total Number of Don	ninant	
3			Species Across All S		(B)
4	_	al Cover	Percent of Dominant		
Sapling/Shrub Stratum (Plot size:)	, , , ,		That Are OBL, FACV	/, or FAC:	(A/B)
1			Prevalence Index w	orksheet:	
2			Total % Cover of	: Multiply b	ov:
3				x 1 =	
4				x 2 =	
5	^			x 3 =	1
Herb Stratum (Plot size:	<u>0</u> = Tota	al Cover		x 4 =	
1. Frankenia Salina Egrandifolia J	3O Y	1 FACW		x 5 =	
	60 y	/ OBL	Column Totals:	(A)	(B)
3	7		Prevalence Inde	ex = B/A =	
4			Hydrophytic Vegeta		
5			Dominance Test	is >50%	
6.			Prevalence Index		
7			Morphological Adda	daptations <sup>1</sup> (Provide su rks or on a separate sh	ipporting
8	) la			rophytic Vegetation <sup>1</sup> (E	' 1
Woody Vine Stratum (Plot size:)	<u> 40 _</u> = Tota	al Cover	1 10010111410 7 194	opriyao regetation (E	.xpiaiii)
1			<sup>1</sup> Indicators of hydric s	oil and wetland hydrol	oav must
2			be present, unless di	sturbed or problematic	
F	0 = Tota	al Cover	Hydrophytic		
% Bare Ground in Herb Stratum % Cover of Bi			Vegetation	/es <u> </u>	
Remarks:					

S	O		F
w	w	В	L

Profile Des									
Depth	<u>Matrix</u>		Redo	x Feature				•	
(inches)	Color (moist)	%	Color (moist)	%	_Type <sup>1</sup>	_Loc <sup>2</sup>	<u>Texture</u>	Remarks	
0-2	organic								
2-3	257513	80	2.54 6/6	20	C	M	clay	distinct mother	
3-16	2.54413	100						Alsiliter Intollie	۷)
-3 10		<u></u>					Clery		
					-				
<sup>1</sup> Type: C=C	oncentration, D=Deple	etion, RM=F	Reduced Matrix, CS	S=Covered	or Coate	d Sand G	rains. <sup>2</sup> Lo	cation: PL=Pore Lining, M=M	atriy
Hydric Soil	Indicators: (Applica	ble to all L	RRs, unless other	wise note	d.)			for Problematic Hydric Soi	
Histosol	(A1)		Sandy Redo	ox (S5)	·			Muck (A9) (LRR C)	
Histic E	pipedon (A2)		Stripped Ma					Muck (A10) (LRR B)	
Black Hi	istic (A3)		Loamy Muc		(F1)			ed Vertic (F18)	
Hydroge	en Sulfide (A4)		Loamy Gley	ed Matrix	(F2)			arent Material (TF2)	
Stratified	d Layers (A5) ( <b>LRR C</b> )	1	Depleted Ma		` '			(Explain in Remarks)	
1 cm Mu	ıck (A9) ( <b>LRR D</b> )		Redox Dark	Surface (I	<del>-</del> 6)			(==	
	d Below Dark Surface	(A11)	Depleted Da						
	ark Surface (A12)		Redox Depr	essions (F	8)		<sup>3</sup> Indicators	of hydrophytic vegetation and	I
	lucky Mineral (S1)		Vernal Pools	s (F9)				hydrology must be present,	
	Gleyed Matrix (S4)							isturbed or problematic.	
Restrictive I	Layer (if present):								
Туре:									
Depth (inc	ches):						Hydric Soil	Present? Yes N	οX
JVDBOLO	CV								
								w.	
Wetland Hyd	drology Indicators:							×	
Wetland Hyd		e required; (	check all that apply	·)			Secor	idary Indicators (2 or more rec	quired)
Wetland Hyd Primary Indic Surface	drology Indicators: cators (minimum of one Water (A1)	e required; (	check all that apply Salt Crust (		***				quired)
Wetland Hyd Primary Indic Surface	drology Indicators: cators (minimum of one	e required; o	<del>-</del> -	B11)	***************************************		W	/ater Marks (B1) (Riverine)	
Wetland Hyd Primary Indic Surface	drology Indicators: eators (minimum of one Water (A1) ter Table (A2)	e required;	Salt Crust ( Biotic Crust	B11) t (B12)	(B13)		W s	/ater Marks (B1) ( <b>Riverine</b> ) ediment Deposits (B2) ( <b>River</b> i	
Wetland Hyd Primary Indic Surface High Wa Saturatio	drology Indicators: eators (minimum of one Water (A1) ter Table (A2)		Salt Crust ( Biotic Crust Aquatic Inv	B11) t (B12) ertebrates			W s D	/ater Marks (B1) ( <b>Riverine</b> ) ediment Deposits (B2) ( <b>River</b> rift Deposits (B3) ( <b>Riverine</b> )	
Wetland Hyd Primary Indio Surface High Wa Saturatio Water M	drology Indicators: eators (minimum of one Water (A1) ter Table (A2) on (A3)	<b>e</b> )	Salt Crust ( Biotic Crust Aquatic Inv Hydrogen S	B11) t (B12) ertebrates Sulfide Ode	or (C1)	iving Roo	W S D D	/ater Marks (B1) (Riverine) ediment Deposits (B2) (Riveri rift Deposits (B3) (Riverine) rainage Patterns (B10)	
Wetland Hyd Primary Indio Surface High Wa Saturatio Water M Sedimen	drology Indicators: eators (minimum of one Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriverine	e) iverine)	Salt Crust ( Biotic Crust Aquatic Inv Hydrogen S	B11) t (B12) ertebrates Sulfide Odd hizosphere	or (C1) es along L		W S D D ts (C3) D	/ater Marks (B1) (Riverine) ediment Deposits (B2) (Riveri rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2)	
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimen Drift Dep	drology Indicators: cators (minimum of one Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriverina tt Deposits (B2) (Nonr	e) iverine)	Salt Crust ( Biotic Crust Aquatic Inv Hydrogen S Oxidized Ri Presence o	B11) t (B12) ertebrates Sulfide Ode hizosphere	or (C1) es along L Iron (C4)		W S D D ts (C3) D	/ater Marks (B1) (Riverine) ediment Deposits (B2) (Riveri rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8)	ine)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimen Drift Dep Surface	drology Indicators: cators (minimum of one Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriverine the Deposits (B2) (Nonriverine cosits (B3) (Nonriverine Soil Cracks (B6)	e) iverine) ne)	Salt Crust ( Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence o	B11)  if (B12)  ertebrates  Sulfide Ode  hizosphere  if Reducect  Reductio	or (C1) es along L Tron (C4) n in Tilled		W S D D ts (C3) D C	/ater Marks (B1) (Riverine) ediment Deposits (B2) (Riveri rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Ima	ine)
Wetland Hyd Primary India Surface High Wa Saturatic Water M Sedimen Drift Dep Surface Inundation	drology Indicators: cators (minimum of one Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriverine the Deposits (B2) (Nonriverine cosits (B3) (Nonriverine	e) iverine) ne)	Salt Crust ( Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror	B11) if (B12) ertebrates Sulfide Ode hizosphere if Reduced n Reductio Surface (C	or (C1) es along L I Iron (C4) n in Tilled 57)		W S D ds (C3) D C ) S	/ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imahallow Aquitard (D3)	ine)
Wetland Hyd Primary India Surface High Wa Saturatic Water M Sedimen Drift Dep Surface Inundation	drology Indicators: cators (minimum of one Water (A1) Iter Table (A2) Iter Table (A2) Iter Table (B1) (Nonriverine Iter Table (B2) (Nonriverine Iter Table (B3) (Nonriverine Iter Table (B3) (Nonriverine Iter Table (B3) (Nonriverine Iter Table (B4) (Nonriverine Iter Table (B4) Iter Table	e) iverine) ne)	Salt Crust ( Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence o	B11) if (B12) ertebrates Sulfide Ode hizosphere if Reduced n Reductio Surface (C	or (C1) es along L I Iron (C4) n in Tilled 57)		W S D ds (C3) D C ) S	/ater Marks (B1) (Riverine) ediment Deposits (B2) (Riveri rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Ima	ine)
Wetland Hyd Primary Indic Surface High Wa Saturatio Water M Sedimen Drift Dep Surface Inundatio Water-St Field Observ	drology Indicators: cators (minimum of one Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriverine to Deposits (B2) (Nonriverine cosits (B3) (Nonriverine Soil Cracks (B6) on Visible on Aerial Im- tained Leaves (B9) vations:	e) iverine) ne) agery (B7)	Salt Crust ( Biotic Crust ( Aquatic Inv ( Hydrogen S ( Oxidized R ( Presence o ( Recent Iror ( Thin Muck ( Other (Expl	B11) t (B12) ertebrates Sulfide Odd hizosphere f Reduced n Reductio Surface (C	or (C1) es along L Iron (C4) n in Tilled er) narks)	Soils (C6	W S D ds (C3) D C ) S	/ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imahallow Aquitard (D3)	ine)
Primary Indice Surface High Wa Saturatio Water M Sedimen Drift Dep Surface Inundatio Water-St Field Observ Surface Water	drology Indicators: cators (minimum of one Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriverine at Deposits (B2) (Nonriverine soil Cracks (B6) on Visible on Aerial Im- tained Leaves (B9) vations: er Present? Yes	e) iverine) ne) agery (B7)	Salt Crust ( Biotic Crust ( Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Thin Muck S Other (Expl	B11) t (B12) ertebrates Sulfide Odd hizosphere f Reduced Reductio Surface (Clain in Ren	or (C1) es along L Iron (C4) n in Tilled e7) narks)	Soils (C6	W S D ds (C3) D C ) S	/ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imahallow Aquitard (D3)	ine)
Primary Indice Surface High Wa Saturatice Water M Sedimen Drift Dep Surface Inundatice Water-St Field Observ Surface Water Water Table	drology Indicators: cators (minimum of one Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriverine to Deposits (B2) (Nonriverine soil Cracks (B6) on Visible on Aerial Imitatined Leaves (B9) vations: er Present? Yes Present? Yes	e) iverine) ne) agery (B7)	Salt Crust ( Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Thin Muck Other (Expl	B11) t (B12) ertebrates Sulfide Odd hizosphere f Reduced n Reductio Surface (Clain in Ren hes):	or (C1) es along L Iron (C4) n in Tilled 57) narks)	Soils (C6	W S D D C C ) S S	Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imahallow Aquitard (D3) AC-Neutral Test (D5)	gery (C9)
Primary Indice Surface High Wa Saturatio Water M Sedimen Drift Dep Surface Inundatio Water-St Field Observ Surface Water Water Table Saturation Pr	drology Indicators: cators (minimum of one Water (A1) ther Table (A2) on (A3) arks (B1) (Nonriverine the Deposits (B2) (Nonriverine soil Cracks (B6) on Visible on Aerial Imitatined Leaves (B9) vations: er Present? Present? Yes ersent? Yes	e) iverine) ne) agery (B7)	Salt Crust ( Biotic Crust ( Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iror Thin Muck S Other (Expl	B11) t (B12) ertebrates Sulfide Odd hizosphere f Reduced n Reductio Surface (Clain in Ren hes):	or (C1) es along L Iron (C4) n in Tilled 57) narks)	Soils (C6	W S D D C C ) S S	Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Ima hallow Aquitard (D3) AC-Neutral Test (D5)	ine)
Wetland Hyd Primary Indic Surface High Wa Saturatio Water M Sedimen Drift Dep Surface Inundatio Water-St Field Observ Surface Water Table Saturation Pr (includes cap	drology Indicators: cators (minimum of one Water (A1) der Table (A2) on (A3) arks (B1) (Nonriverine at Deposits (B2) (Nonriverine soil Cracks (B6) on Visible on Aerial Im- dained Leaves (B9) vations: er Present? Present? Yes resent? Yes resent? Yes	e) iverine) ne) agery (B7)	Salt Crust ( Biotic Crust ( Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Thin Muck S Other (Expl	B11) t (B12) ertebrates Sulfide Odd hizosphere f Reduced Reductio Surface (Clain in Ren hes): hes):	or (C1) es along L Iron (C4) n in Tilled 67) narks)	Soils (C6	W S D ts (C3) D C ) S S F	Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imahallow Aquitard (D3) AC-Neutral Test (D5)	gery (C9)
Wetland Hyd Primary Indic Surface High Wa Saturatio Water M Sedimen Drift Dep Surface Inundatio Water-St Field Observ Surface Water Table Saturation Pr (includes cap	drology Indicators: cators (minimum of one Water (A1) ther Table (A2) on (A3) arks (B1) (Nonriverine the Deposits (B2) (Nonriverine soil Cracks (B6) on Visible on Aerial Imitatined Leaves (B9) vations: er Present? Present? Yes ersent? Yes	e) iverine) ne) agery (B7)	Salt Crust ( Biotic Crust ( Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Thin Muck S Other (Expl	B11) t (B12) ertebrates Sulfide Odd hizosphere f Reduced Reductio Surface (Clain in Ren hes): hes):	or (C1) es along L Iron (C4) n in Tilled 67) narks)	Soils (C6	W S D ts (C3) D C ) S S F	Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imahallow Aquitard (D3) AC-Neutral Test (D5)	gery (C9)
Primary Indice Surface of High Wa Saturation Water M Sediment Drift Dep Surface of Hundation Water-St Field Observ Surface Water Water Table of Saturation Pr (includes cap	drology Indicators: cators (minimum of one Water (A1) der Table (A2) on (A3) arks (B1) (Nonriverine at Deposits (B2) (Nonriverine soil Cracks (B6) on Visible on Aerial Im- dained Leaves (B9) vations: er Present? Present? Yes resent? Yes resent? Yes	e) iverine) ne) agery (B7)	Salt Crust ( Biotic Crust ( Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Thin Muck S Other (Expl	B11) t (B12) ertebrates Sulfide Odd hizosphere f Reduced Reductio Surface (Clain in Ren hes): hes):	or (C1) es along L Iron (C4) n in Tilled 67) narks)	Soils (C6	W S D ts (C3) D C ) S S F	Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imahallow Aquitard (D3) AC-Neutral Test (D5)	gery (C9)
Primary Indice Surface of High Wa Saturation Water M Sediment Drift Dep Surface of Inundation Water-St Field Observ Surface Water Water Table of Saturation Princludes cap Describe Receivers	drology Indicators: cators (minimum of one Water (A1) der Table (A2) on (A3) arks (B1) (Nonriverine at Deposits (B2) (Nonriverine soil Cracks (B6) on Visible on Aerial Im- dained Leaves (B9) vations: er Present? Present? Yes resent? Yes resent? Yes	e) iverine) ne) agery (B7)	Salt Crust ( Biotic Crust ( Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Thin Muck S Other (Expl	B11) t (B12) ertebrates Sulfide Odd hizosphere f Reduced Reductio Surface (Clain in Ren hes): hes):	or (C1) es along L Iron (C4) n in Tilled 67) narks)	Soils (C6	W S D ts (C3) D C ) S S F	Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imahallow Aquitard (D3) AC-Neutral Test (D5)	gery (C9)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimen Drift Dep Surface Inundatic Water-St Field Observ Surface Water Water Table Saturation Pr (includes cap	drology Indicators: cators (minimum of one Water (A1) der Table (A2) on (A3) arks (B1) (Nonriverine at Deposits (B2) (Nonriverine soil Cracks (B6) on Visible on Aerial Im- dained Leaves (B9) vations: er Present? Present? Yes resent? Yes resent? Yes	e) iverine) ne) agery (B7)	Salt Crust ( Biotic Crust ( Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Thin Muck S Other (Expl	B11) t (B12) ertebrates Sulfide Odd hizosphere f Reduced Reductio Surface (Clain in Ren hes): hes):	or (C1) es along L Iron (C4) n in Tilled 67) narks)	Soils (C6	W S D ts (C3) D C ) S S F	Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imahallow Aquitard (D3) AC-Neutral Test (D5)	gery (C9)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimen Drift Dep Surface Inundatic Water-St Field Observ Surface Water Water Table Saturation Pr (includes cap	drology Indicators: cators (minimum of one Water (A1) der Table (A2) on (A3) arks (B1) (Nonriverine at Deposits (B2) (Nonriverine soil Cracks (B6) on Visible on Aerial Im- dained Leaves (B9) vations: er Present? Present? Yes resent? Yes resent? Yes	e) iverine) ne) agery (B7)	Salt Crust ( Biotic Crust ( Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Thin Muck S Other (Expl	B11) t (B12) ertebrates Sulfide Odd hizosphere f Reduced Reductio Surface (Clain in Ren hes): hes):	or (C1) es along L Iron (C4) n in Tilled 67) narks)	Soils (C6	W S D ts (C3) D C ) S S F	Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imahallow Aquitard (D3) AC-Neutral Test (D5)	gery (C9)

Project/Site: Newport Banning Ranch (Newport J015)	City/County: Newport Beach/Orange Sampling Date: 7116 09
Applicant/Owner: Newport Banning Ranch	State: <u>CA</u> Sampling Point: <u>22</u>
Investigator(s): Gary Medeiros, Allison Rudalevige	Section, Township, Range: N/A - "Santiago De Santa Ana" land grant
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none):
Subregion (LRR): C	33. 639426 Long: -117.95064 Datum: NAD83
Soil Map Unit Name: Bolsa Silt loam	NWI classification: PEMCx
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes V No. (If no explain in Remarks )
Are Vegetation, Soil, or Hydrology significantly	
Are Vegetation, Soil, or Hydrology naturally pn	
	g sampling point locations, transects, important features, etc.
V	
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present?  Wetland Hydrology Present?  Yes No Yes No Yes	<b></b>
Remarks:	
VEGETATION – Use scientific names of plants.	
Absolute   Tree Stratum (Plot size:)	Dominant Indicator Species? Status Number of Persingst Couries 1
1	That Are OBL, FACW, or FAC: (A)
2	Total Number of Dominant
3.       4.	Species Across All Strata: 2 (B)
D	= Total Cover Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)	
1	
3	
4	
5	FAC species x 2 =
Ö	= Total Cover
Herb Stratum (Plot size:)	UPL species x 5 =
1. Frankenia salina (grandifilia) 75	Column Totals: (A) (B)
2. Salicornia virginica 50	<u>4</u> 0151
3. Halvella leprosa 5	Prevalence Index = B/A =
4	
5	
7	Morphological Adaptations <sup>1</sup> (Provide supporting
8	data in Remarks or on a separate sheet)
13 h	= Total Cover Problematic Hydrophytic Vegetation¹ (Explain)
woody vine Stratum (Plot size:)	
1.       2.	1Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	= Total Cover Hydrophytic
% Bare Ground in Herb Stratum % Cover of Biotic Cr	Negetation \
Remarks:	rust   Present?
Tomano.	

Profile Description: (Describe to the o				or confir	n the absence	e of indicators.)
Depth Matrix (inches) Color (moist) %		x Features		. 2		
A ( 0 FV /- :	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
			•		Sit	
4-10 251414 90	2.543/1	10		M	sityetay	distinct mottles
Type: C=Concentration, D=Depletion, R Hydric Soil Indicators: (Applicable to	M=Reduced Matrix, CS	=Covered	or Coate	d Sand Gi		cation: PL=Pore Lining, M=Matrix.
Histosol (A1)			a.)			for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1) Histic Epipedon (A2)	Sandy Redo					Muck (A9) (LRR C)
Black Histic (A3)	Stripped Ma Loamy Muc		(F1)			Muck (A10) (LRR B)
Hydrogen Sulfide (A4)	Loamy Gley					ed Vertic (F18) arent Material (TF2)
Stratified Layers (A5) (LRR C)	Depleted Ma		/			(Explain in Remarks)
1 cm Muck (A9) ( <b>LRR D</b> )	Redox Dark		<sup>-</sup> 6)		331	( ) - production ( )
Depleted Below Dark Surface (A11)	Depleted Da					
Thick Dark Surface (A12)	Redox Depr		8)			of hydrophytic vegetation and
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)	/ Vernal Pools	s (F9)				hydrology must be present,
Restrictive Layer (if present):					unless d	isturbed or problematic.
Type: WWOOW						
Depth (inches): 10						✓.
Remarks:					Hydric Soil	Present? Yes No
YDROLOGY						
Wetland Hydrology Indicators:						
Primary Indicators (minimum of one requi	ed: check all that anniv	)			Sacar	ndary Indicators (2 or more no with a)
Surface Water (A1)	Salt Crust (					ndary Indicators (2 or more required)
High Water Table (A2)	Biotic Crus					/ater Marks (B1) (Riverine)
Saturation (A3)	Aquatic Inv	,	(B13)			ediment Deposits (B2) (Riverine)
Water Marks (B1) (Nonriverine)	Hydrogen S					rift Deposits (B3) ( <b>Riverine</b> ) rainage Patterns (B10)
Sediment Deposits (B2) (Nonriverine				ivina Roo		ry-Season Water Table (C2)
Drift Deposits (B3) (Nonriverine)	Presence o					rayfish Burrows (C8)
Surface Soil Cracks (B6)	Recent Iron	Reduction	n in Tilled	Soils (C6		aturation Visible on Aerial Imagery (C9)
Inundation Visible on Aerial Imagery (	B7) Thin Muck	Surface (C	7)	•		hallow Aquitard (D3)
Water-Stained Leaves (B9)	Other (Expl	ain in Rem	narks)		^	AC-Neutral Test (D5)
ield Observations:						
Surface Water Present? Yes	No 🧏 Depth (inc	hes):		_		
Vater Table Present? Yes	No <u> </u>	hes):		_		٠
ncludes capillary fringe)	No h Depth (inc					y Present? Yes No _ X
rescribe Recorded Data (stream galine, i	nonitoring well, aerial p	hotos, pre	vious insp	ections), i	f available:	
( 3.1.30)						
Remarks:						

Project/Site: Newport Banning Ranch (Newport J01		County: Newpor	rt Beach/Orange	Sampling Date:	7/11/01/09
Applicant/Owner: Newfort Banning Ran			State: <u>CA</u>		
Investigator(s): Gary Medeiros, Allison Rudalevige					
Landform (hillslope, terrace, etc.):	Loc	al relief (concave,	convex, none):	Slone	(%).
Subregion (LRR): C	Lat: _ <b>ვ</b> გ. ს	e39433	_ Long: -117.9501	64 Datum:	
Soil Map Unit Name: T3 olsa Silt loam			NWI classifi	cation: PEMCx	
Are climatic / hydrologic conditions on the site typical for t			(If no, explain in F	Remarks.)	
Are Vegetation, Soil, or Hydrology			"Normal Circumstances"	present? Yes <u>√</u>	_ No
Are Vegetation, Soil, or Hydrology	_ naturally problem	natic? (If ne	eeded, explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS – Attach site may	showing sar	npling point I	locations, transects	s, important featu	ures, etc.
Hydrophytic Vegetation Present?	No				
Hydric Soil Present? Yes	No	Is the Sampled		🗸	
Wetland Hydrology Present? Yes	No 🔀	within a Wetlar	nd? Yes	No <u>×</u> _	
Remarks:					
VEGETATION – Use scientific names of pla	nts.				
		minant Indicator	Dominance Test work	rehoot:	
Tree Stratum (Plot size:)	% Cover Spe	ecies? Status	Number of Dominant S		
1.			That Are OBL, FACW,		(A)
2			Total Number of Domir	ant	
3			Species Across All Stra		(B)
4	6		Percent of Dominant S	necies la d	
Sapling/Shrub Stratum (Plot size:)	= To	tal Cover	That Are OBL, FACW,		(A/B)
1			Prevalence Index wor	ksheet:	
2				Multiply by	:
3			OBL species		
4			FACW species		
5			FAC species	x 3 =	
Herb Stratum (Plot size:)	0 = To	tal Cover	FACU species	x 4 =	·
1. Salicornia Wrginia	50 1		UPL species		
2. Frankenia Salina [granditalia]		y <u>OBL</u> Y FACW	Column Totals:	(A)	(B)
3. Malvesta konsa	- <u>- 5</u>	n FAC	Prevalence Index	= B/A =	
4			Hydrophytic Vegetation		
5			Marinance Test is		
6			Prevalence Index is		
7			Morphological Ada	ptations <sup>1</sup> (Provide sup	porting
8				s or on a separate she	
Woody Vino Stratum (Diet size)	<u>l05</u> = To	tal Cover	Problematic Hydro	ohytic Vegetation' (Ex	plain)
Woody Vine Stratum (Plot size:)			<sup>1</sup> Indicators of hydric soi	l mad south and boots to	
1 2			be present, unless distu	i and wettand nydrolog irbed or problematic.	gy must
	•	tal Cover	Hydrophytic		
9/ Para Cround in Harb Christian		Ô	Vegetation	<b>\</b>	
	er of Biotic Crust _		Present? Ye	s No	
Remarks:					

1Type: C=Concen Hydric Soil Indica Histosol (A1) Histic Epipedo Black Histic (A Hydrogen Sulf	ators: (Applicab	% 1 5 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2.5Y3II	50	Type <sup>1</sup> C	Loc²	Silty clay distin	Remarks  Act Mottles
Type: C=Concen Hydric Soil Indica Histosol (A1) Histic Epipedo Black Histic (A Hydrogen Sulf	tration, D=Depletiators: (Applicable	SD on, RM=F	2.54311	50	<u> </u>	M		ict mottles
<sup>1</sup> Type: C=Concen <b>Hydric Soil Indica</b> — Histosol (A1)  — Histic Epipedo — Black Histic (A — Hydrogen Sulf	tration, D=Depleti	ion, RM=F	2.54311	50	<u> </u>	M	silty day distin	ict mottles
Hydric Soil Indica Histosol (A1) Histic Epipedo Black Histic (A Hydrogen Sulf	ators: (Applicab	on, RM=F						
1 cm Muck (As	A3) fide (A4) ers (A5) (LRR C) 9) (LRR D) w Dark Surface (A rface (A12) Mineral (S1) Matrix (S4) (if present):		RRs, unless othe  Sandy Red  Stripped Ma  Loamy Gley  Depleted M  Redox Dark  Depleted D	rwise noted ox (S5) atrix (S6) cky Mineral (I yed Matrix (F latrix (F3) < Surface (F6 ark Surface (F8) ressions (F8)	F1) F2) 6) (F7)	Sand Gra	nins. <sup>2</sup> Location: PL=Poor Indicators for Problems  1 cm Muck (A9) (LR  2 cm Muck (A10) (LI  Reduced Vertic (F18  Red Parent Material  Other (Explain in Re)  3Indicators of hydrophytic wetland hydrology musunless disturbed or pro	RR C) RR B) B) (TF2) emarks)  c vegetation and st be present,
Depth (inches): emarks:	10						Hydric Soil Present?	Yes_X_ No
YDROLOGY								
Vetland Hydrolog								
Primary Indicators		required;	check all that apply	y)			Secondary Indicator	s (2 or more required)
Surface Water			Salt Crust	. ,			Water Marks (B	1) (Riverine)
High Water Ta			Biotic Crus				Sediment Depo	sits (B2) (Riverine)
Saturation (A3)	•		Aquatic Inv	vertebrates (	B13)		Drift Deposits (E	33) (Riverine)
	B1) (Nonriverine)		Hydrogen				Drainage Patter	ns (B10)
	osits (B2) ( <b>Nonri</b> v	•		Rhizospheres		ing Roots	s (C3) Dry-Season Wa	iter Table (C2)
	(B3) (Nonriverine	·)	Presence of	of Reduced I	ron (C4)		Crayfish Burrow	/s (C8)
_ Surface Soil Ci				n Reduction		oils (C6)	Saturation Visib	le on Aerial Imagery (C9)
	ible on Aerial Imag	gery (B7)		Surface (C7	-		Shallow Aquitar	d (D3)
Water-Stained	` ,		Other (Exp	lain in Rema	arks)		FAC-Neutral Te	st (D5)
ield Observation			~ /					
urface Water Pres			Depth (inc					
Vater Table Presei			X Depth (inc					
aturation Present' ncludes capillary f	?	No	Depth (inc	ches):	· · · · · · · · · · · · · · · · · · ·	i	nd Hydrology Present?	Yes No <u>*</u>
Describe Recorded	Data (stream gai	uge, moni	oring well, aerial p	hotos, previ	ous inspe	ctions), if	available:	
<b>7</b> 1								
Remarks:								
Remarks:								

Project/Site: Newport Banning Ranch (Newport	<u>t J015)</u> Ci	ty/County: Newpor	rt Beach/Orange	Sampling Date:	7/16/09
Applicant/Owner: Newport Banning	Ranch		State: <u>CA</u>	Sampling Point: _	24
Investigator(s): Gary Medeiros, Allison Rudalev			ange: <u>N/A - "Santiago D</u>		
Landform (hillslope, terrace, etc.):	1.	ocal relief (concave	convey none):	Cl	
Subregion (LRR): C	Lat: 33.	638 294	Long: -117.9508	Datum	NAD83
Soil Map Unit Name: tidal Flats			NWI classific	ation PSS Cx	. 1
Are climatic / hydrologic conditions on the site typica			(If no explain in Pe	amorka)	
Are Vegetation, Soil, or Hydrology					
Are Vegetation, Soil, or Hydrology			"Normal Circumstances" p		No
SUMMARY OF FINDINGS – Attach site		,	eeded, explain any answer	•	turas ata
			- ansects,	important lea	tures, etc.
Hydrophytic Vegetation Present? Yes 1		Is the Sampled	d Area		
1	No	within a Wetlar		No_ <u>×</u> _	
Remarks:	No_ <del></del>				
Tomano.					
<b>VEGETATION</b> – Use scientific names of	plants.				
T 01 1 10 11 11	Absolute D	Oominant Indicator	Dominance Test works	heet:	
Tree Stratum (Plot size:)		pecies? Status	Number of Dominant Sp	ecies 🕢	
1			That Are OBL, FACW, o	r FAC: 3	(A)
2			Total Number of Domina	nt 2	
3			Species Across All Strata	a: <u> </u>	(B)
T	0 =	Total Cover	Percent of Dominant Spe	ecies	
Sapling/Shrub Stratum (Plot size:	)	Total Cover	That Are OBL, FACW, or	FAC: 75%	(A/B)
1. Baccharis salicishia Eviminea	<u> 5</u>	Y FACW	Prevalence Index work	sheet:	
2. Baccharis pilularis		in UPL	Total % Cover of:	Multiply b	у:
3. Cortaderia Selloana		Y UPL	OBL species	x 1 =	
4			FACW species		
5	<del></del>		FAC species		
Herb Stratum (Plot size:)	=	Total Cover	FACU species		
1. Salicarnia Virginica	70	y BBL	UPL species		
2. Frankenia salina (grandifolia)	30	Y FACW	Column Totals:	(A)	(B)
3			Prevalence Index :	= B/A =	
4.			Hydrophytic Vegetation		
5			Dominance Test is >		
6			Prevalence Index is		
7			Morphological Adapt	ations <sup>1</sup> (Provide su or on a separate sh	
8			Problematic Hydroph	•	' 1
Woody Vine Stratum (Plot size:)	100 =	Total Cover	Troblemade Tryarepi	iyuc vegetation (E	xpiairi)
1			<sup>1</sup> Indicators of hydric soil a	and wetland hydrolo	an must
2			be present, unless distur	bed or problematic.	ygy maot
		Total Cover	Hydrophytic		
% Bare Ground in Herb Stratum %			Vegetation	<b>V</b>	
Remarks:	2010, Or Diotic Ordsi	·	Present? Yes	No	
					1

0	63	ñ	E
3	w	ĸ	Ē

Depth _	ption: (Describ			ox Features		······································		
(inches)	Color (moist)	%	Color (moist)	%	_Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-1	cropinic							
	104R4/4	40	2.54R 4/L	60	<u> </u>	M	Silty clay	prominent moffles
								<u> </u>
'Type: C=Cond Hydric Soil Inc	centration, D=De	epletion, RM:	=Reduced Matrix, C LRRs, unless othe	S=Covered	or Coate	d Sand G	<del></del>	on: PL=Pore Lining, M=Matrix.
Histosol (A		icable to all			α.)			r Problematic Hydric Soils <sup>3</sup> :
Histosof (A	•		Sandy Red					ck (A9) (LRR C)
Black Histic	, ,		Stripped M	atrix (56) cky Mineral (	/E1\			k (A10) (LRR B)
	Sulfide (A4)			yed Matrix (i				Vertic (F18)
	ayers (A5) (LRR	(C)	Depleted M		1 2)			nt Material (TF2)
	(A9) (LRR D)	<i>,</i>	•	Surface (F	6)		Other (EX	plain in Remarks)
	Below Dark Surfa	ice (A11)		ark Surface	,			
	Surface (A12)	,		ressions (F8			3Indicators of	hydrophytic vegetation and
	ky Mineral (S1)		Vernal Poo		-,			frology must be present,*
Sandy Gley	yed Matrix (S4)		<del></del>	( /				rbed or problematic.
Restrictive Lay	yer (if present):						1	index of problemand.
							1	
Type: _\\\\\\\	rdoan							
	1						Hydric Soil Dr	occupia Ven X
Type: <u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>	1						Hydric Soil Pr	esent? Yes No
Depth (inche Remarks:	es): 14						Hydric Soil Pr	esent? Yes No
Depth (inche Remarks: YDROLOG)	es): 14	:					Hydric Soil Pr	esent? Yes No
Depth (inches Remarks:  YDROLOG) Wetland Hydro	es): 14		l; check all that appl	V)				
Depth (inche Remarks: YDROLOG) Wetland Hydro Primary Indicato	Y Plogy Indicators prs (minimum of		l; check all that appl				Seconda	ry Indicators (2 or more required)
Depth (inches Remarks:  YDROLOGY Wetland Hydro Primary Indicato Surface Wa	Y  Plogy Indicators  ors (minimum of later (A1)		Salt Crust	(B11)			Seconda	ry Indicators (2 or more required) er Marks (B1) ( <b>Riverine</b> )
Depth (inche Remarks: YDROLOGY Wetland Hydro Primary Indicato Surface Wa High Water	ology Indicators ors (minimum of ater (A1)		Salt Crust Biotic Crus	(B11) st (B12)	/D12)		Seconda — Wate — Sedi	ry Indicators (2 or more required) er Marks (B1) ( <b>Riverine</b> ) ment Deposits (B2) ( <b>Riverine</b> )
Depth (inches) Remarks:  YDROLOGY Wetland Hydro Primary Indicate Surface Wa High Water Saturation (	ology Indicators ors (minimum of ater (A1) Table (A2) (A3)	one required	Salt Crust Biotic Crus Aquatic In	(B11) st (B12) vertebrates (	` '		Seconda Wate Sedi Drift	ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine)
Depth (inches) Remarks:  YDROLOG) Wetland Hydro Primary Indicato Surface Wa High Water Saturation ( Water Mark	ology Indicators ors (minimum of ater (A1) Table (A2) (A3) (S (B1) (Nonrive	one required	Salt Crust Biotic Crust Aquatic In Hydrogen	(B11) st (B12) vertebrates ( Sulfide Odo	r (C1)	iving Doo	Seconda Wate Sedi Drift Drain	ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10)
Primary Indicate Surface Water High Water Saturation ( Water Mark Sediment D	Pology Indicators ors (minimum of ater (A1) Table (A2) (A3) (A3) (A6) (A6) (A6) (A6) (A6) (A6) (A6) (A6	one required rine) onriverine)	Salt Crust Biotic Crust Aquatic In: Hydrogen Oxidized F	(B11) st (B12) vertebrates ( Sulfide Odo Rhizosphere:	r (C1) s along L		Seconda  Wate Sedi Drift Drain ts (C3)	ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Geason Water Table (C2)
Primary Indicate Surface Water Saturation ( Water Mark Sediment D Drift Deposi	Pology Indicators ors (minimum of ater (A1) Table (A2) (A3) (A3) (A5) (A5) (A5) (A6) (A6) (A6) (A6) (A7) (A7) (A7) (A8) (A8) (A8) (A9) (A9) (A9) (A9) (A9) (A9) (A9) (A9	one required rine) onriverine)	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F	(B11) st (B12) vertebrates ( Sulfide Odo Rhizospheres of Reduced	r (C1) s along L Iron (C4	)	Seconda  Wate Sedi Drift Drain ts (C3) Cray	ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8)
Primary Indicate Surface Water Mark Water Mark Sediment D Drift Deposi Surface Soi	Pology Indicators Pology Indic	one required rine) onriverine) erine)	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro	(B11) st (B12) vertebrates ( Sulfide Odo Rhizospheres of Reduced in Reduction	r (C1) s along L Iron (C4) i in Tilled	)	Seconda	ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9
Depth (inches Remarks:  YDROLOGY  Wetland Hydro  Primary Indicate Surface Water Saturation ( Water Mark Sediment D Drift Deposi Surface Soi Inundation	Pology Indicators Pology Indicators Pors (minimum of later (A1) Table (A2) (A3) (A3) (A5) (A6) (A6) (A6) (A6) (A6) (A6) (A6) (A6	one required rine) onriverine) erine) Imagery (B7	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck	(B11) st (B12) vertebrates ( Sulfide Odo Rhizosphere: of Reduced in Reduction Surface (C7	r (C1) s along L Iron (C4 i in Tilled 7)	)	Seconda	ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9 ow Aquitard (D3)
Depth (inches Remarks:  YDROLOGY  Wetland Hydro  Primary Indicate Surface Water Saturation ( Water Mark Sediment D Drift Deposition Surface Soit Inundation Water-Stair	Pos): 14  Plogy Indicators Pors (minimum of Pater (A1) Pater (A2) Poeposits (B2) (Nonrive Poeposits (B2) (Nonrive Poeposits (B3) (Nonrive Poeposits (B6) Poeposits (B6) Poeposits (B6) Poeposits (B6)	one required rine) onriverine) erine) Imagery (B7	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck	(B11) st (B12) vertebrates ( Sulfide Odo Rhizospheres of Reduced in Reduction	r (C1) s along L Iron (C4 i in Tilled 7)	)	Seconda	ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9
Print (inches Remarks:  YDROLOG)  Wetland Hydro  Primary Indicate  Surface Wa  High Water  Saturation (  Water Mark  Sediment D  Drift Deposi  Surface Soi  Inundation (  Water-Stair	Pology Indicators ors (minimum of ater (A1) Table (A2) (A3) (A3) (A5) (A5) (A5) (A6) (A6) (A6) (A6) (A6) (A6) (A6) (A6	one required rine) onriverine) erine) Imagery (B7	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp	(B11) st (B12) vertebrates ( Sulfide Odo Rhizosphere: of Reduced on Reduction Surface (C7)	r (C1) s along L Iron (C4 in Tilled 7) arks)	) Soils (C6	Seconda	ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9 ow Aquitard (D3)
Primary Indicate Surface Water Mark Sediment D Drift Deposi Surface Soi Inundation Water-Stair Field Observati Surface Water F	Pology Indicators ors (minimum of ater (A1) Table (A2) (A3) (A3) (A5) (A5) (A5) (A6) (A6) (A6) (A6) (A6) (A6) (A6) (A6	one required rine) porriverine) erine) Imagery (B7	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp	(B11) st (B12) vertebrates ( Sulfide Odo Rhizosphere: of Reduced in Reduction Surface (Cr olain in Rem	r (C1) s along t Iron (C4 in Tilled 7) arks)	) Soils (C6	Seconda	ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9 ow Aquitard (D3)
Depth (inches Remarks:  YDROLOGY  Wetland Hydro  Primary Indicate Surface Water Mark Sediment D Drift Deposi Surface Soi Inundation Water-Stair  Field Observati Surface Water F  Water Table Pre	Pology Indicators ors (minimum of ater (A1) Table (A2) (A3) (A3) (A5) (A5) (A5) (A6) (A6) (A6) (A6) (A6) (A6) (A6) (A6	one required rine) onriverine) erine) Imagery (B7	Salt Crust Biotic Crust Aquatic In: Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp.	(B11) st (B12) vertebrates ( Sulfide Odo Rhizosphere: of Reduced in Reduction Surface (Ci olain in Rem ches):	r (C1) s along L Iron (C4 in Tilled 7) arks)	) Soils (C6	Seconda	ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9 ow Aquitard (D3)
Depth (inches Remarks:  YDROLOG)  Wetland Hydro  Primary Indicate Surface Water Saturation ( Water Mark Sediment D Drift Deposi Surface Soi Inundation ( Water-Stair  Field Observati Surface Water F Water Table Presidentudes capilla	Pology Indicators ors (minimum of ater (A1) Table (A2) (A3) (A3) (A3) (A5) (A5) (A6) (A6) (A6) (A6) (A6) (A6) (A6) (A6	one required rine) conriverine) lmagery (B7  Yes N Yes N	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp	(B11) st (B12) vertebrates ( Sulfide Odo Rhizosphere: of Reduced in Reduction Surface (Cr olain in Rem. ches): ches):	r (C1) s along L Iron (C4 in Tilled 7) arks)	) Soils (C6	Seconda 	ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9 ow Aquitard (D3)
Depth (inches Remarks:  YDROLOG)  Wetland Hydro  Primary Indicate Surface Water Saturation ( Water Mark Sediment D Drift Deposi Surface Soi Inundation ( Water-Stair  Field Observati Surface Water F Water Table Presidentudes capilla	Pology Indicators ors (minimum of ater (A1) Table (A2) (A3) (A3) (A3) (A5) (A5) (A6) (A6) (A6) (A6) (A6) (A6) (A6) (A6	one required rine) conriverine) lmagery (B7  Yes N Yes N	Salt Crust Biotic Crust Aquatic In: Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp.	(B11) st (B12) vertebrates ( Sulfide Odo Rhizosphere: of Reduced in Reduction Surface (Cr olain in Rem. ches): ches):	r (C1) s along L Iron (C4 in Tilled 7) arks)	) Soils (C6	Seconda 	ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9 ow Aquitard (D3) Neutral Test (D5)
Depth (inches Remarks:  YDROLOG)  Wetland Hydro  Primary Indicate Surface Water Saturation ( Water Mark Sediment D Drift Deposi Surface Soi Inundation ( Water-Stair  Field Observati Surface Water F Water Table Presidentudes capilla	Pology Indicators ors (minimum of ater (A1) Table (A2) (A3) (A3) (A3) (A5) (A5) (A6) (A6) (A6) (A6) (A6) (A6) (A6) (A6	one required rine) conriverine) lmagery (B7  Yes N Yes N	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp	(B11) st (B12) vertebrates ( Sulfide Odo Rhizosphere: of Reduced in Reduction Surface (Cr olain in Rem. ches): ches):	r (C1) s along L Iron (C4 in Tilled 7) arks)	) Soils (C6	Seconda 	ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9 ow Aquitard (D3) Neutral Test (D5)
Depth (inches Remarks:  YDROLOGY  Wetland Hydro  Primary Indicate Surface Water Saturation ( Water Mark Sediment D Drift Deposi Surface Soi Inundation Water-Stair  Field Observati Surface Water F Water Table Present Control Contro	Pology Indicators ors (minimum of ater (A1) Table (A2) (A3) (A3) (A3) (A5) (A5) (A6) (A6) (A6) (A6) (A6) (A6) (A6) (A6	one required rine) conriverine) lmagery (B7  Yes N Yes N	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp	(B11) st (B12) vertebrates ( Sulfide Odo Rhizosphere: of Reduced in Reduction Surface (Cr olain in Rem. ches): ches):	r (C1) s along L Iron (C4 in Tilled 7) arks)	) Soils (C6	Seconda 	ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9 ow Aquitard (D3) Neutral Test (D5)
Depth (inches Remarks:  YDROLOGY  Wetland Hydro  Primary Indicate Surface Water Saturation ( Water Mark Sediment D Drift Deposi Surface Soi Inundation Water-Stair  Field Observati Surface Water F Water Table Present Control of the	Pology Indicators ors (minimum of ater (A1) Table (A2) (A3) (A3) (A3) (A5) (A5) (A6) (A6) (A6) (A6) (A6) (A6) (A6) (A6	one required rine) conriverine) lmagery (B7  Yes N Yes N	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp	(B11) st (B12) vertebrates ( Sulfide Odo Rhizosphere: of Reduced in Reduction Surface (Cr olain in Rem. ches): ches):	r (C1) s along L Iron (C4 in Tilled 7) arks)	) Soils (C6	Seconda 	ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9 ow Aquitard (D3) Neutral Test (D5)

Project/Site: Newport Banning Ranch (Newport J015	City/0	County: Newpor	rt Beach/Orange	Sampling Date: 7/16/19
Applicant/Owner: Wwgost-Banning Rang	ch		State: CA	Sampling Point: 25
Investigator(s): Gary Medeiros, Allison Rudalevige				
Landform (hillslope, terrace, etc.):	Loca	I relief (concave,	convex, none):	Slope (%):
Subregion (LRR): C	Lat: 33. 6	38335	Long: -117.950	Datum: NAD83
Soil Map Unit Name: <u>tidal Plats</u>			NWI classific	
Are climatic / hydrologic conditions on the site typical for thi	is time of year? Y	es <u>√</u> No _	(If no, explain in R	Remarks.)
Are Vegetation, Soil, or Hydrologys				oresent? Yes _ ✓ No
Are Vegetation, Soil, or Hydrologyr	naturally problema	atic? (If n	eeded, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sam	ıpling point l	ocations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes N	lo			
1	lo	Is the Sample		
Wetland Hydrology Present? Yes N	lo	within a Wetla	nd? Yes	No
Remarks:				
VEGETATION – Use scientific names of plan	ts.			
T 0/ / (D) / /	Absolute Dom	inant Indicator	Dominance Test work	sheet:
Tree Stratum (Plot size:)	% Cover Spec		Number of Dominant Sp	pecies 3
1			That Are OBL, FACW, o	or FAC: (A)
2			Total Number of Domina	ant o
3			Species Across All Stra	ant ta: <u>3</u> (B)
4	_	al Cover	Percent of Dominant Sp	pecies or FAC: (50% (A/B)
Sapling/Shrub Stratum (Plot size:)			That Are OBL, FACW, o	, ,
1. Bacchanis salicibilia	2 4	<u>FACW</u>	Prevalence Index work	
				Multiply by:
3				x1 =
4			i e	x 2 =
5	2 = Tot	al Cover	1	x 3 =
Herb Stratum (Plot size:)		ai Cover	I .	x 4 = x 5 =
1. Frankenia Salina Egrandifolia	<u>60 4</u>	FACW		1
2. Salicaroia Virginica	40 y	<u> </u>	Column Fotals.	(A) (B)
3. Pulicaria paludosa	<u>~                                    </u>	LIPL	Prevalence Index	= B/A =
4. Malvella le prosa	<u>5</u> <u>n</u>	FAC	Hydrophytic Vegetatio	
5. Cirsium vulgare	10 ~	<u>facu</u>	Dominance Test is	
6.			Prevalence Index is	
7				otations <sup>1</sup> (Provide supporting or on a separate sheet)
8	1112			Phytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:)	= Tota	al Cover	,	
1			<sup>1</sup> Indicators of hydric soil	and wetland hydrology must
2			be present, unless distu	rbed or problematic.
	= Tota	al Cover	Hydrophytic	
	of Biotic Crust	0	Vegetation Present? Yes	s_ <u>\forall^C</u> No
Remarks:				

9	6		8
v	w	ь	E

Profile Des	cription: (Describe t	the dep	th needed	to docur	nent the i	ndicator	or confirn	n the absence of i	ndicators.)	• • • • • • • • • • • • • • • • • • • •
Depth	Matrix	· · · · · · · · · · · · · · · · · · ·	-		x Feature				,	
(inches)	Color (moist)	<u>%</u>	Color (r	noist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-3	35YR 613	100						-sa+		
3-6	2.5Y 513	60	2.5 YR	814	40	<u>c</u>	M	Siltycky	prominent	moffles
6-9	2.5 4 5/3	100						Silty day	4.2	
9-12	2.5 Y 5/3	90	2.54	8/1	10	$\mathbb{D}$	M	Silty clay		
								, ,		
<sup>1</sup> Type: C=Co	oncentration, D=Deple	tion, RM=	Reduced N	Matrix. CS	=Covered	or Coate		ains <sup>2</sup> l contion	n: PL=Pore Lining, M	I_8.4_4
Hydric Soil I	Indicators: (Applicat	ole to all I	RRs, unle	ss other	wise note	ed.)	a cana ch		Problematic Hydric	Soils <sup>3</sup>
Histosol	(A1)			ndy Redo		•			(A9) (LRR C)	30113 .
Histic Ep	oipedon (A2)			ipped Ma					(A10) (LRR B)	
Black Hi	stic (A3)				ky Mineral	(F1)		Reduced V		
	n Sulfide (A4)				ed Matrix (				Material (TF2)	
Stratified	Layers (A5) (LRR C)			pleted Ma					ain in Remarks)	
1 cm Mu	ick (A9) ( <b>LRR D</b> )				Surface (F	<del>-</del> 6)		on or (Expt	Nomanaj	
Depleted	Below Dark Surface	(A11)			rk Surface					
Thick Da	ark Surface (A12)				essions (F			<sup>3</sup> Indicators of hy	drophytic vegetation	and
Sandy M	lucky Mineral (S1)			nal Pools		,			logy must be presen	
	leyed Matrix (S4)				, ,				ped or problematic.	å.
Restrictive L	ayer (if present):								, , , , , , , , , , , , , , , , , , ,	
Type:										
Depth (inc	ches):							Hydric Soil Pres	ent? Yes	No
Remarks:										
IVDDOL O										
HYDROLOG										
	Irology Indicators:									
	ators (minimum of one	required;						Secondary	Indicators (2 or more	required)
	Water (A1)		Sa	ılt Crust (I	311)			Water	Marks (B1) (Riverine	)
	ter Table (A2)		Bio	otic Crust	(B12)				ent Deposits (B2) (Ri	•
Saturatio			Aq	juatic Inve	ertebrates	(B13)			posits (B3) (Riverin	
Water Ma	arks (B1) ( <b>Nonriverin</b> e	<del>)</del> )	Ну	drogen S	ulfide Odd	or (C1)			ge Patterns (B10)	-,
Sediment	t Deposits (B2) (Nonri	verine)	Ox	didized Rh	nizosphere	es along Li	iving Root		ason Water Table (C	2)
Drift Depo	osits (B3) ( <b>Nonriverin</b>	<b>e</b> )			Reduced				h Burrows (C8)	<i>-</i> /
∠ Surface S	Soil Cracks (B6)					٠,	Soils (C6)		tion Visible on Aerial	lmagony (CO)
Inundatio	n Visible on Aerial Ima	gery (B7)			Surface (C		(00)	<del></del>	v Aguitard (D3)	magery (Ca)
	ained Leaves (B9)				ain in Rem				eutral Test (D5)	
Field Observ	rations:									
Surface Wate	r Present? Yes	N	o <u> </u>	epth (inch	nes):		_			
Water Table F	Present? Yes	N	o <u> </u>	epth (inch	nes):				٠. ٨	
Saturation Pre (includes capi	,	N	0 <u>X</u> D	epth (inch	nes):		Wetla	nd Hydrology Pre	sent? Yes	No
	orded Data (stream ga	iuge, mon	itoring well	, aerial ph	otos, prev	/ious insp	 ections). if	available:		
	_		-	,	,,		,, 11			
Remarks:										

Project/Site: Newport Banning Ranch (Newport J015)	City/C	ounty: Newpor	rt Beach/Orange	Sampling Date:	71110/09
Applicant/Owner: Newfort Banning Rang			State: CA		
Investigator(s): Gary Medeiros, Allison Rudalevige		on, Township, Ra	ange: N/A - "Santiago [	)e Santa Ana" lanc	dorant
Landform (hillslope, terrace, etc.):	Local	relief (concave.	convex none).	Slone	. (0/.).
Subregion (LRR): C	Lat: 33.6	38212	Long: -117.949:	] T	1/0)
Soil Map Unit Name: Tidal Flats			NWI classific	cation: PSSC	()//(D82
Are climatic / hydrologic conditions on the site typical for this til	me of year? Y	es ✓ No	(If no, explain in R	Remarks )	
Are Vegetation, Soil, or Hydrology sign			"Normal Circumstances" p		No
Are Vegetation, Soil, or Hydrology natu			eeded, explain any answe		140
SUMMARY OF FINDINGS – Attach site map sh		•		•	ures, etc.
		Is the Sampled		r	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		within a Wetlar	nd? Yes	No	
Remarks:					
VEGETATION – Use scientific names of plants.	-				
		nant Indicator	Dominance Test work	sheet:	
	6 Cover Spec		Number of Dominant Sp		
1			That Are OBL, FACW, o	or FAC:	(A)
2			Total Number of Domina	ant 3	
3			Species Across All Strat	ta:	(B)
,	= Tota	al Cover	Percent of Dominant Sp		
Sapling/Shrub Stratum (Plot size:)			That Are OBL, FACW, o	or FAC:	(A/B)
	20 y	- FACW	Prevalence Index work	csheet:	
2			1	Multiply by	
3			OBL species		
4			FACW species		
5	20 = Tota		FAC species		1
Herb Stratum (Plot size:)	= Tota	al Cover	FACU species		
1. Juneus Sp.	50 y	OBLEFFACI	UPL species		
2. Heliotopium curassavicum	30 y	DBL	Column Totals:	(A)	(B)
3. Majvalla leprosa	10 n	~ A ~	Prevalence Index	= B/A =	
3. Majvolla leprosa 4. Pulicaria paludosa	<u> </u>		Hydrophytic Vegetatio		
5			Dominance Test is:	>50%	
6			Prevalence Index is		
7			Morphological Adap	otations <sup>1</sup> (Provide sup or on a separate she	oporting
8	91 = Tota			on a separate sno hytic Vegetation¹ (E)	,
Woody Vine Stratum (Plot size:)	= Tota	l Cover	i iobiematic riyarop	mytic vegetation (E)	xpiairi)
1			<sup>1</sup> Indicators of hydric soil	and wetland hydrolc	av must
2			be present, unless distu	rbed or problematic.	gy must
	O = Tota	I Cover	Hydrophytic		
% Bare Ground in Herb Stratum % Cover of	Biotic Crust	_	Vegetation	<b>9</b>	
Remarks:	DIONG CIUSI		Present? Yes	s No	

Profile Description: (Describe to the dep	un needed to doct	ament the	molearor	or comir	m the absence o	
Depth Matrix		ox Feature				. maidatoro.,
(inches) Color (moist) %	Color (moist)	%	_Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-10 DYR414 70	104R 618	30	C	M	Silty clay	prominent nottles
10-16 104R5/3 100	5~	-	•	~	(1) 11/	Promote (1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-
					Sity clay	
			-			
	_					
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, C	S=Covered	d or Coated	d Sand G		ion: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all	LRRs, unless othe	erwise not	ed.)		Indicators fo	r Problematic Hydric Soils³:
Histosol (A1)	Sandy Red	. ,			1 cm Mu	ck (A9) ( <b>LRR C</b> )
Histic Epipedon (A2)	Stripped M	, ,				ck (A10) (LRR B)
Black Histic (A3)	Loamy Mu					Vertic (F18)
Hydrogen Sulfide (A4)	Loamy Gle		(F2)			nt Material (TF2)
Stratified Layers (A5) (LRR C)	Depleted N				Other (E)	plain in Remarks)
1 cm Muck (A9) (LRR D) Depleted Below Dark Surface (A11)	Redox Dar					
Depleted Below Dark Surface (ATT) Thick Dark Surface (A12)	Depleted D Z Redox Dep		` '		31	
Sandy Mucky Mineral (S1)	Vernal Poo		-6)			hydrophytic vegetation and
Sandy Gleyed Matrix (S4)	vernar roo	15 (1 5)				drology must be present, and a strong trology must be present, and a strong trology must be seen to be seen the strong trology and the strong trology are strong trology and the strong trology and trology and the strong trology an
Restrictive Layer (if present):					unless disti	irbed or problematic.
Type:						
Depth (inches):						X
Remarks:					Hydric Soil Pr	esent? Yes No
IYDROLOGY						
Wetland Hydrology Indicators:	; check all that appl	y)			Seconda	ry Indicators (2 or more required)
Wetland Hydrology Indicators:						ry Indicators (2 or more required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1)	Salt Crust	(B11)			Wate	er Marks (B1) (Riverine)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1)	Salt Crust Biotic Crus	(B11) st (B12)	s (B13)		Wate Sedi	er Marks (B1) ( <b>Riverine</b> ) ment Deposits (B2) ( <b>Riverine</b> )
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required;  Surface Water (A1)  High Water Table (A2)  Saturation (A3)	Salt Crust Biotic Crust Aquatic In	(B11) st (B12) vertebrates			Wate Sedi Drift	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)	Salt Crust Biotic Crust Aquatic In Hydrogen	(B11) st (B12) vertebrates Sulfide Od	or (C1)	iving Roo	Wate Sedi Drift Drain	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F	(B11) st (B12) vertebrates Sulfide Od Rhizospher	or (C1) es along L		Wate Sedi Drift Drain sts (C3) Dry-	er Marks (B1) ( <b>Riverine</b> ) ment Deposits (B2) ( <b>Riverine</b> ) Deposits (B3) ( <b>Riverine</b> ) nage Patterns (B10) Season Water Table (C2)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F	(B11) st (B12) vertebrates Sulfide Od Rhizospher of Reducee	or (C1) es along L d Iron (C4)		Wate Sedi Drift Drain ats (C3) Dry-	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro	(B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduced n Reduction	or (C1) es along L d Iron (C4) on in Tilled		Wate Sedi Drift Drain sts (C3) Dry Cray Satu	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck	(B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduced n Reductic	or (C1) es along L d Iron (C4) on in Tilled C7)		Wate Sedi Drift Drain ts (C3) Dry Cray Satu Shal	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) low Aquitard (D3)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck	(B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduced n Reduction	or (C1) es along L d Iron (C4) on in Tilled C7)		Wate Sedi Drift Drain ts (C3) Dry Cray Satu Shal	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp	(B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduces in Reductic s Surface (Colain in Red	or (C1) es along L d Iron (C4) on in Tilled C7) marks)	Soils (C6	Wate Sedi Drift Drain ts (C3) Dry Cray Satu Shal	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) low Aquitard (D3)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes N	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp	(B11) st (B12) vertebrates Sulfide Od Rhizospher of Reducete on Reductic Surface (Colain in Reduction	or (C1) es along L d Iron (C4) on in Tilled C7) marks)	Soils (C6	Wate Sedi Drift Drain ts (C3) Dry Cray Satu Shal	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) low Aquitard (D3)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes N	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp	(B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduced on Reduction Surface (Colain in Reduction ches):	or (C1) es along L d Iron (C4) on in Tilled C7) marks)	Soils (C6	Wate Sedi Drift Drain ets (C3) Dry Cray Satu Shal FAC	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) low Aquitard (D3) -Neutral Test (D5)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes N  Water Table Present? Yes N  Saturation Present? Yes N	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp	(B11) st (B12) vertebrates Sulfide Od Rhizospher of Reducete on Reductic Surface (Colain in Reduction	or (C1) es along L d Iron (C4) on in Tilled C7) marks)	Soils (C6	Wate Sedi Drift Drain ets (C3) Dry Cray Satu Shal FAC	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) low Aquitard (D3)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes N  Water Table Present? Yes N  Saturation Present? Yes N  Saturation Present? Yes N	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp	(B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduceto n Reductio : Surface (Colain in Rer ches): ches):	or (C1) es along L d Iron (C4) on in Tilled C7) marks)	Soils (C6	Wate Sedi Drift Drain ats (C3) Dry Cray Satu Shal FAC	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) low Aquitard (D3) -Neutral Test (D5)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes N  Water Table Present? Yes N  Saturation Present? Yes N  Saturation Present? Yes N	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp	(B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduceto n Reductio : Surface (Colain in Rer ches): ches):	or (C1) es along L d Iron (C4) on in Tilled C7) marks)	Soils (C6	Wate Sedi Drift Drain ats (C3) Dry Cray Satu Shal FAC	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) low Aquitard (D3) -Neutral Test (D5)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes N  Water Table Present? Yes N  Saturation Present? Yes N  Signal Surface (Signal Surface)  Surface Could Data (Stream gauge, more	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp	(B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduceto n Reductio : Surface (Colain in Rer ches): ches):	or (C1) es along L d Iron (C4) on in Tilled C7) marks)	Soils (C6	Wate Sedi Drift Drain ats (C3) Dry Cray Satu Shal FAC	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) low Aquitard (D3) -Neutral Test (D5)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes N	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp	(B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduceto n Reductio : Surface (Colain in Rer ches): ches):	or (C1) es along L d Iron (C4) on in Tilled C7) marks)	Soils (C6	Wate Sedi Drift Drain ats (C3) Dry Cray Satu Shal FAC	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) low Aquitard (D3) -Neutral Test (D5)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes N Water Table Present? Yes N Saturation Present? Yes N Signal Control of the Market Stained C	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp	(B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduceto n Reductio : Surface (Colain in Rer ches): ches):	or (C1) es along L d Iron (C4) on in Tilled C7) marks)	Soils (C6	Wate Sedi Drift Drain ats (C3) Dry Cray Satu Shal FAC	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) low Aquitard (D3) -Neutral Test (D5)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)  Field Observations: Surface Water Present? Yes N Water Table Present? Yes N Saturation Present? Yes N Saturation Present? Yes N Conceptible Recorded Data (stream gauge, more	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp	(B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduceto n Reductio : Surface (Colain in Rer ches): ches):	or (C1) es along L d Iron (C4) on in Tilled C7) marks)	Soils (C6	Wate Sedi Drift Drain ats (C3) Dry Cray Satu Shal FAC	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) low Aquitard (D3) -Neutral Test (D5)

Project/Site: Newport Banning Ranch (Newport J015	,	Newport Beach/Orange Sampling Date: 7//(0/06
Applicant/Owner: Newport Banning Ran		State: <u>CA</u> Sampling Point: 27
Investigator(s): Gary Medeiros, Allison Rudalevige		ship, Range: N/A - "Santiago De Santa Ana" land grant
		oncave, convex, none): Slope (%):
Subregion (LRR): C	Lat: 33.63775(	e Long: -117.94922 Datum: NAD 83
Soil Map Unit Name: 4dal flats		NWI classification: PSCx
Are climatic / hydrologic conditions on the site typical for th	is time of year? Yes ✓	
Are Vegetation, Soil, or Hydrology		Are "Normal Circumstances" present? Yes ✓ No
Are Vegetation, Soil, or Hydrology		(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sampling r	ooint locations, transects, important features, etc.
^		The state of the s
	ls the S	ampled Area
	lowithin a	a Wetland? Yes No
Remarks:	10	
VEGETATION – Use scientific names of plan	its.	
Tree Stratum (Plot size:)	Absolute Dominant Ind % Cover Species? St	4-4
		Number of Dominant Species 2
1.		That Are OBL, FACW, or FAC: (A)
3	_	Total Number of Dominant Species Across All Strata: (B)
4		Species Across All Strata: (B)
	95 = Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size:  1. Bosecharis Salicifolia [jimporea]	20 V EA	
2. Cartadoria seloana		Prevalence Index worksheet:
	- 3 4 M	Total % Cover of: Multiply by:
3 4		OBL species x 1 =
5.		FACW species x 2 = FAC species x 3 =
	= Total Cover	FACU species x 4 =
Herb Stratum (Plot size:)	10141 00701	UPL species x 5 =
1. Malvella lopresa	<u> </u>	Column Totals:         (A)         (B)
3		Prevalence Index = B/A =
4		Hydrophytic Vegetation Indicators:  Dominance Test is >50%
5		'1
6		Prevalence Index is ≤3.0'  Morphological Adaptations¹ (Provide supporting
7 8		data in Remarks or on a separate sheet)
	= Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:)	Total Gove	
1		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2		be present, unless disturbed or problematic.
• .	= Total Cover	Hydrophytic Vogetation
% Bare Ground in Herb Stratum <u> </u>	r of Biotic Crust	Vegetation Present? Yes No
Remarks:		

MPP distribution and residence and residence area.
Loc <sup>2</sup> Texture Remarks
M clay distinct mottles
d Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Indicators for Problematic Hydric Soils <sup>3</sup> :
1 cm Muck (A9) (LRR C)
2 cm Muck (A10) (LRR B)
Reduced Vertic (F18)
Red Parent Material (TF2)
Other (Explain in Remarks)
3
<sup>3</sup> Indicators of hydrophytic vegetation and
wetland hydrology must be present, aunless disturbed or problematic.
unless disturbed of problematic.
Hydric Soil Present? Yes X
Hydric Soil Present? Yes _ No
Secondary Indicators (2 or more required)
Water Marks (B1) (Riverine)
<pre>Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)</pre>
<ul><li>Water Marks (B1) (Riverine)</li><li>Sediment Deposits (B2) (Riverine)</li><li>Drift Deposits (B3) (Riverine)</li></ul>
<ul> <li>Water Marks (B1) (Riverine)</li> <li>Sediment Deposits (B2) (Riverine)</li> <li>Drift Deposits (B3) (Riverine)</li> <li>Drainage Patterns (B10)</li> </ul>
Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) ving Roots (C3) Dry-Season Water Table (C2)
Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) ving Roots (C3) Crayfish Burrows (C8)
Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) ving Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery (C9)
Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Ving Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) ving Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery (C9)
— Water Marks (B1) (Riverine) — Sediment Deposits (B2) (Riverine) — Drift Deposits (B3) (Riverine) — Drainage Patterns (B10) ving Roots (C3) — Dry-Season Water Table (C2) — Crayfish Burrows (C8) Soils (C6) — Saturation Visible on Aerial Imagery (C9) — Shallow Aquitard (D3)  ✓ FAC-Neutral Test (D5)
Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ving Roots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Soils (C6)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  ★ FAC-Neutral Test (D5)
Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ving Roots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Soils (C6) Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Ving Roots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Soils (C6)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  ★ FAC-Neutral Test (D5)
Water Marks (B1) (Riverine)     Sediment Deposits (B2) (Riverine)     Drift Deposits (B3) (Riverine)     Drainage Patterns (B10)  ving Roots (C3)    Dry-Season Water Table (C2)     Crayfish Burrows (C8)  Soils (C6)    Saturation Visible on Aerial Imagery (C9)     Shallow Aquitard (D3)     FAC-Neutral Test (D5)  ■ Canada    Shallow Aquitard (D5)
Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Ving Roots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Soils (C6)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  ★ FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes ★ No
Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Ving Roots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Soils (C6)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  ★ FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes ★ No
Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Ving Roots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Soils (C6)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  ★ FAC-Neutral Test (D5)
Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Ving Roots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Soils (C6)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  ★ FAC-Neutral Test (D5)

Project/Site: Newport Banning Ranch (Newport J015)	City/County: Newport Beach/Orange Sampling Date:			
Applicant/Owner: Newyort Banning Rand	1 State: <u>CA</u> Sampling Point: <u>28</u>			
Investigator(s): Gary Medeiros, Allison Rudalevige	Section, Township, Range: N/A - "Santiago De Santa Ana" land grant			
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none):			
Subregion (LRR): C Lat	33.63760438 Long: -117.94914348 Datum: NAD83			
Soil Map Unit Name: Haal Aak	NWI classification: PSCx			
Are climatic / hydrologic conditions on the site typical for this time				
Are Vegetation, Soil, or Hydrology signific				
Are Vegetation, Soil, or Hydrology natural				
SUMMARY OF FINDINGS - Attach site map show	ving sampling point locations, transects, important features, etc.			
Hydrophytic Vegetation Present? Yes No				
Hydric Soil Present? Yes Y No	is the Sampled Area			
Wetland Hydrology Present? Yes NoX				
Remarks:				
VEGETATION Lies scientific names of plants				
VEGETATION – Use scientific names of plants.	-			
Abso	over Species? Status			
1. Salix gooddingii 90	Number of Dominant Species			
2. Salix lasiolepis 5	n FACW			
3	Total Number of Dominant			
4				
Sapling/Shrub Stratum (Plot size:	Percent of Dominant Species That Are OBL, FACW, or FAC: $50^{\circ}$ (A/B)			
	Prevalence Index worksheet:			
2	Total % Cover of: Multiply by:			
3				
4				
5	FAC species x 3 =			
9	<b>b</b> = Total Cover FACU species x 4 =			
Herb Stratum (Plot size:)	UPL species <u>SO</u> x 5 = <u>450</u>			
2	— — Column Totals: <u>190</u> (A) <u>555</u> (B)			
3	Prevalence Index = B/A = 2.92			
4	Hydrophytic Vegetation Indicators:			
5	Dominance Test is >50%			
6				
7.	Morphological Adaptations <sup>1</sup> (Provide supporting			
8	data in Remarks or on a separate sheet)			
Woody Vine Stratum (Plot size:)	= Total Cover Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)			
1	lndicators of hydric soil and wetland hydrology must			
2	be present, unless disturbed or problematic.			
	= Total Cover Hydrophytic			
% Bare Ground in Herb Stratum % Cover of Biol	Vegetation			
Remarks:	ic Crust Present? Yes No			

			needed to docu	mem me	muicator	or contirn	the absence o	of indicators.)	
Depth	Matrix			x Feature				······································	
(inches)	Color (moist)		Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	6.
0-4	organic								
4-7	107R 413	50	104R5/6	50	C	M	Clay	distinct r	noffles
7-10	104R513	100							vie THUS
	1 1 10						Sandyclo	Ψ	
				-					
				-				A CONTRACTOR OF THE CONTRACTOR	
<sup>1</sup> Type: C=Co	encentration, D=Deple	tion RM=R	educed Matrix CS	S=Covered	or Coate	d Sand Cr		fiem. Di mDana i inin	NA NA L
Hydric Soil I	ndicators: (Applical	ole to all LR	Rs, unless other	wise note	ed.)	u Sanu Gra		tion: PL=Pore Lining, or Problematic Hydric	
Histosol			Sandy Red		,			ck (A9) (LRR C)	ouis.
	ipedon (A2)		Stripped Ma					ck (A10) (LRR B)	
Black His			Loamy Muc		(F1)			Vertic (F18)	
-	n Sulfide (A4)		Loamy Gley					ent Material (TF2)	
	Layers (A5) (LRR C)		Depleted M					xplain in Remarks)	
	ck (A9) (LRR D)		Redox Dark	•	•		,	•	
	Below Dark Surface	(A11)	Depleted Da						
	rk Surface (A12)		Redox Depr		<sup>7</sup> 8)			hydrophytic vegetatio	
	ucky Mineral (S1) leyed Matrix (S4)		Vernal Pool	s (F9)				drology must be prese	ent,
	ayer (if present):						unless dist	urbed or problematic.	
Type:									
Depth (inc			<del></del>					~	
Remarks:	1163).						Hydric Soil P	resent? Yes	_ No
YDROLOG	2V								
	rology Indicators:								
	ators (minimum of one	required; c		()					
	Vater (A1)						Seconda	ary Indicators (2 or mo	re required)
-	er Table (A2)		Salt Crust	(B11)			Wat	er Marks (B1) ( <b>Riveri</b> r	ne)
	, ,		Biotic Crus	(B11) t (B12)			Wat		ne)
Saturation	n (A3)	,	Biotic Crus Aquatic Inv	(B11) t (B12) ertebrates			Wat Sed	er Marks (B1) ( <b>Riveri</b> r	ne) Riverine)
Water Ma	n (A3) arks (B1) ( <b>Nonriverin</b> e		Biotic Crus Aquatic Inv	(B11) t (B12) ertebrates Sulfide Od	or (C1)		Wat Sed Drift Dra	er Marks (B1) ( <b>Riverir</b> iment Deposits (B2) ( <b>F</b> Deposits (B3) ( <b>Riveri</b> nage Patterns (B10)	ne) Riverine) ne)
Water Ma Sediment	n (A3) arks (B1) ( <b>Nonriverin</b> a : Deposits (B2) ( <b>Nonr</b> i	verine)	Biotic Crus Aquatic Inv Hydrogen S Oxidized R	(B11) t (B12) rertebrates Sulfide Od hizospher	or (C1) es along L		Wat Sed Driff Drais s (C3) Dry-	er Marks (B1) (Riverin iment Deposits (B2) (F Deposits (B3) (Riverinage Patterns (B10) Season Water Table (	ne) Riverine) ne)
Water Ma Sediment Drift Depo	n (A3) arks (B1) ( <b>Nonriverin</b> Deposits (B2) ( <b>Nonr</b> i osits (B3) ( <b>Nonriveri</b> n	verine)	Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence of	(B11) t (B12) rertebrates Sulfide Od hizospher	or (C1) es along L l Iron (C4)		Wat Sed Driff Dran s (C3) Dry Cra	er Marks (B1) ( <b>Riverir</b> iment Deposits (B2) ( <b>F</b> Deposits (B3) ( <b>Riverir</b> nage Patterns (B10) Season Water Table ( yfish Burrows (C8)	ne) Riverine) ne) C2)
Water Ma Sediment Drift Depo	n (A3) nrks (B1) (Nonriverine Deposits (B2) (Nonri osits (B3) (Nonriverin Goil Cracks (B6)	iverine) e)	Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence co	(B11) t (B12) ertebrates Sulfide Od hizospher of Reduced Reductio	or (C1) es along L I Iron (C4) n in Tilled		Wat Sed Driff Drais s (C3) Dry Crai Satu	er Marks (B1) (Rivering iment Deposits (B2) (File Deposits (B3) (Rivering Patterns (B10)). Season Water Table (Ca) prish Burrows (C8) pration Visible on Aeria	ne) Riverine) ne) C2)
Water Ma Sediment Drift Depo Surface S	n (A3) Irks (B1) ( <b>Nonriverine</b> Deposits (B2) ( <b>Nonri</b> Osits (B3) ( <b>Nonriverin</b> Goil Cracks (B6) In Visible on Aerial Ima	iverine) e)	Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence co Recent Iron Thin Muck	(B11) t (B12) ertebrates Sulfide Od hizospher of Reduceo n Reductio Surface (C	or (C1) es along L d Iron (C4) n in Tilled C7)		Wat Sed Drift Draits s (C3) Craits Satu Sha	er Marks (B1) (Rivering iment Deposits (B2) (File Deposits (B3) (Rivering Patterns (B10)). Season Water Table (Captish Burrows (C8) paration Visible on Aeria (D3)	ne) Riverine) ne) C2)
Water Ma Sediment Drift Depo Surface S Inundation Water-Sta	n (A3)  Arks (B1) (Nonrivering  Deposits (B2) (Nonrivering  Soil Cracks (B6)  In Visible on Aerial Image  Jained Leaves (B9)	iverine) e)	Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence co	(B11) t (B12) ertebrates Sulfide Od hizospher of Reduceo n Reductio Surface (C	or (C1) es along L d Iron (C4) n in Tilled C7)		Wat Sed Drift Draits s (C3) Craits Satu Sha	er Marks (B1) (Rivering iment Deposits (B2) (File Deposits (B3) (Rivering Patterns (B10)). Season Water Table (Ca) prish Burrows (C8) pration Visible on Aeria	ne) Riverine) ne) C2)
Water Ma Sediment Drift Depo Surface S Inundation Water-Sta	n (A3)  Arks (B1) (Nonrivering Deposits (B2) (Nonrivering Desits (B3) (Nonrivering Desits (B6)  To Visible on Aerial Impained Leaves (B9)  ations:	verine) e) agery (B7)	Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Thin Muck Other (Exp	(B11) t (B12) ertebrates Sulfide Od hizospher of Reduced n Reductio Surface (C	or (C1) es along L i Iron (C4) n in Tilled C7) narks)	Soils (C6)	Wat Sed Drift Draits s (C3) Craits Satu Sha	er Marks (B1) (Rivering iment Deposits (B2) (File Deposits (B3) (Rivering Patterns (B10)). Season Water Table (Captish Burrows (C8) paration Visible on Aeria (D3)	ne) Riverine) ne) C2)
Water Ma Sediment Drift Depo Surface S Inundation Water-Sta Field Observa	n (A3)  Trks (B1) (Nonrivering Deposits (B2) (Nonrivering Coil Cracks (B6)  To Visible on Aerial Impained Leaves (B9)  ations:  The Present?  The Present Pres	verine) agery (B7)	Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Thin Muck Other (Exp	(B11) t (B12) ertebrates Sulfide Od hizospher of Reduced n Reductio Surface (C lain in Rer	or (C1) es along L I Iron (C4) n in Tilled C7) narks)	Soils (C6)	Wat Sed Drift Draits s (C3) Craits Satu Sha	er Marks (B1) (Rivering iment Deposits (B2) (File Deposits (B3) (Rivering Patterns (B10)). Season Water Table (Captish Burrows (C8) paration Visible on Aeria (D3)	ne) Riverine) ne) C2)
Water Ma Sediment Drift Depo Surface S Inundation Water-Sta Field Observ Surface Water	n (A3)  Irks (B1) (Nonriverine Deposits (B2) (Nonriverine Desits (B3) (Nonriverine Desits (B3) (Nonriverine Desits (B6) In Visible on Aerial Imagined Leaves (B9)	verine) e) agery (B7) No	Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Thin Muck Other (Exp	(B11) t (B12) rertebrates Sulfide Od hizospher of Reduceo n Reductio Surface (C lain in Rer ches):	or (C1) es along L i Iron (C4) n in Tilled C7) narks)	Soils (C6)	Wat Sed Drift Drai s (C3) Dry Cra _ Sati _ Sha _ FAC	er Marks (B1) (Rivering iment Deposits (B2) (Figure 1) (Rivering Patterns (B10)). Season Water Table (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	ne) Riverine) ne) C2) al Imagery (C9)
Water Ma Sediment Drift Depo Surface S Inundation Water-Sta Field Observ Surface Water Water Table F Saturation Pre	n (A3)  arks (B1) (Nonriverine Deposits (B2) (Nonriverine Desits (B3) (Nonriverine Desits (B3) (Nonriverine Desits (B6)  n Visible on Aerial Imagined Leaves (B9)  ations:  ar Present?  Yes Present?  Yes Present?  Yes	verine) e) agery (B7) No	Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Thin Muck Other (Exp	(B11) t (B12) rertebrates Sulfide Od hizospher of Reduceo n Reductio Surface (C lain in Rer ches):	or (C1) es along L i Iron (C4) n in Tilled C7) narks)	Soils (C6)	Wat Sed Drift Drai s (C3) Dry Cra _ Sati _ Sha _ FAC	er Marks (B1) (Rivering iment Deposits (B2) (File Deposits (B3) (Rivering Patterns (B10)). Season Water Table (Captish Burrows (C8) paration Visible on Aeria (D3)	ne) Riverine) ne) C2) al Imagery (C9)
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Project/Site: Newport Banning Ranch (Newport J015	5)	City/Cou	unty: Newpo	rt Beach/Orange Sampling Date: 7116109
Applicant/Owner: Newport Banning Ra	nch	-		State: CA Sampling Point: 29
Investigator(s): Gary Medeiros, Allison Rudalevige		Section,	, Township, R	ange: N/A - "Santiago De Santa Ana" land grant
Landform (hillslope, terrace, etc.):				
Subregion (LRR): C	Lat: 33	3.636	0254	Long: ~117.94776 Datum: NADS
Soil Map Unit Name: Bolsa Silt loam				NWI classification:
Are climatic / hydrologic conditions on the site typical for thi	is time of yea	ar? Yes	√ No	(If no explain in Remarks )
Are Vegetation, Soil, or Hydrology				"Normal Circumstances" present? Yes ✓ No
Are Vegetation, Soil, or Hydrology				eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map			`	•
r		- I	mig point	
	lo	Is	s the Sampled	d Area
Hydric Soil Present? Yes N	10	1	ithin a Wetla	
Wetland Hydrology Present? Yes N	lo <u>X</u>		The state of the s	165
VEGETATION – Use scientific names of plan				-
Tree Stratum (Plot size:)	Absolute <u>% Cover</u>	Domina Species	ant Indicator	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC:  (A)
2				
3				Total Number of Dominant Species Across All Strata:  2 (B)
4				
Sapling/Shrub Stratum (Plot size:)		= Total (	Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
1. Baccharis Salicifolia	20	_4_	FACW	Prevalence Index worksheet:
2				Total % Cover of: Multiply by:
3				OBL species x 1 =
4				FACW species x 2 =
5				FAC species x 3 =
Herb Stratum (Plot size:)	20	= Total (	Cover	FACU species x 4 =
1. Bassia hyssepifolia	15	<b>5</b> 0	FAC	UPL species x 5 =
2 Distichlis Spicata	105	<u> </u>	FACW	Column Totals: (A) (B)
3. Heliotropium curasavicum	. 5	~\-	OBL	Prevalence Index = B/A =
4. Frankenia Salina Igrandifolia J	10		FACW	Hydrophytic Vegetation Indicators:
5. Mayella leprosa	2	- N	FAC	✓ Dominance Test is >50%
6				Prevalence Index is ≤3.0 <sup>1</sup>
7.				Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
Woody Vine Stratum (Plot size:)	C. (**)	= Total 0	Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2				be present, unless disturbed or problematic.
	of Biotic Cru	= Total ( ust(	_	Hydrophytic Vegetation Present? Yes No
Remarks:				

	F	R	0	63
	ŧ.	ij	( )	60

Depth	cription: (Describe	······································	Redox Features		
(inches)	Color (moist)		Color (moist) % Type <sup>1</sup> L	oc <sup>2</sup> Texture	Remarks
0-12	104R4/3	100		clay	
12-13	164K3/1	100		_ clay _	
	-				
		-			
Type: C=Co	oncentration, D=Depl	etion, RM=F	Reduced Matrix, CS=Covered or Coated Sa	and Grains. <sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
		ble to all L	RRs, unless otherwise noted.)	Indicators for P	roblematic Hydric Soils <sup>3</sup> :
_ Histosol	• /		Sandy Redox (S5)	1 cm Muck (	49) ( <b>LRR C</b> )
	ipedon (A2)		Stripped Matrix (S6)	2 cm Muck (	
_ Black His	, ,		Loamy Mucky Mineral (F1)	Reduced Ve	
	n Sulfide (A4)	`	Loamy Gleyed Matrix (F2)		Material (TF2)
	Layers (A5) (LRR C	)	Depleted Matrix (F3)	Other (Expla	in in Remarks)
	ck (A9) ( <b>LRR D</b> ) l Below Dark Surface	(811)	Redox Dark Surface (F6)		
	г Беюж Багк Suпасе rk Surface (A12)	(A11)	Depleted Dark Surface (F7)	31 11	
	ucky Mineral (S1)		Redox Depressions (F8) Vernal Pools (F9)		rophytic vegetation and
	leyed Matrix (S4)		Vernai Poois (F9)		ogy must be present,
	-			uniess disturbe	ed or problematic.
strictive L	.aver (if present):				
	ayer (if present):				
Туре: <u>Vv</u>	uspan				<b>A</b> .c
Type: <u>\vc</u> Depth (inc	uspan		<del></del>	Hydric Soil Prese	nt? Yes No_X
Type: <u>Vo</u> Depth (inc emarks:	uspan hes): 13			Hydric Soil Prese	nt? Yes No_X
Type: <u>Voc</u> Depth (inc emarks:	hes): 13			Hydric Soil Prese	nt? Yes No_X
Type: <u>Voc</u> Depth (inc emarks: DROLOG etland Hyd	hes): 13	e required:	check all that apply)		
Type: <u>Voc</u> Depth (inc emarks:  DROLOG etland Hyd imary Indic	ars pan hes): 13  GY rology Indicators: ators (minimum of on	e required;		Secondary li	ndicators (2 or more required)
Depth (incomarks:  DROLOGetland Hydemary Indicates)  Surface V	Hes): 13  GY  Tology Indicators: ators (minimum of on Water (A1)	e required;	Salt Crust (B11)	Secondary Iı Water M	ndicators (2 or more required) larks (B1) ( <b>Riverine</b> )
DROLOG  etland Hyd  mary Indica  Surface V  High Wat	hes): 13  GY  rology Indicators: ators (minimum of on Water (A1) er Table (A2)	e required;	Salt Crust (B11) Biotic Crust (B12)	Secondary II Water M Sedimei	ndicators (2 or more required) larks (B1) ( <b>Riverine</b> ) nt Deposits (B2) ( <b>Riverine</b> )
DROLOG  Type: Voc  DROLOG  Type: Voc  Type:	arca pan thes): 13  For Indicators: ators (minimum of on Water (A1) arr Table (A2) n (A3)		Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13)	Secondary II Water M Sedimei	ndicators (2 or more required) larks (B1) ( <b>Riverine</b> )
DROLOG  etland Hyd imary Indica  Surface V  High Wat  Saturatio  Water Ma	hes): 13  Frology Indicators: ators (minimum of on Nater (A1) er Table (A2) n (A3) arks (B1) (Nonriverin	ne)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Secondary II  Water M Sedimei Drift Dej	ndicators (2 or more required) larks (B1) ( <b>Riverine</b> ) nt Deposits (B2) ( <b>Riverine</b> )
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Depth (incommarks:  DROLOG  etland Hyd  imary Indica  Surface V  High Wat  Saturatio  Water Ma  Sediment  Drift Dep	hes): \{\frac{3}{5}\}  rology Indicators: ators (minimum of on Vater (A1) er Table (A2) n (A3) arks (B1) (Nonriverin t Deposits (B2) (Nonriverin posits (B3) (Nonriverin	ne) riverine)	<ul> <li>Salt Crust (B11)</li> <li>Biotic Crust (B12)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living</li> <li>Presence of Reduced Iron (C4)</li> </ul>	Secondary II  Water M Sedimer Drift Der Drainag Roots (C3) Crayfish	ndicators (2 or more required) larks (B1) (Riverine) nt Deposits (B2) (Riverine) posits (B3) (Riverine) e Patterns (B10)
Depth (incommarks:  DROLOG  etland Hyd  imary Indica  Surface V  High Wat  Saturatio  Water Ma  Sediment  Drift Dept  Surface S	hes): \{\frac{3}{5}\\  rology Indicators: ators (minimum of on Vater (A1) er Table (A2) n (A3) arks (B1) (Nonriverin t Deposits (B2) (Noni posits (B3) (Nonriverin Soil Cracks (B6)	ne) riverine) ne)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living	Secondary II  Water M Sedimer  Drift Der Drainag Roots (C3) Crayfish	ndicators (2 or more required) larks (B1) (Riverine) nt Deposits (B2) (Riverine) posits (B3) (Riverine) e Patterns (B10) son Water Table (C2)
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Type: No. Depth (inclemarks:  DROLOG  Toronto Inclemary Indication Surface Vater Ma Sediment Drift Depo Surface Seld Observ Urface Water Attention Proceedings of the Includes capital	hes): \{\frac{\zeta}{\zeta}\)  Frology Indicators:  ators (minimum of on Nater (A1)  for Table (A2)  for (A3)  for (A3)  for (B1) (Nonrivering to Deposits (B2) (Nonrivering to Deposits (B3) (Nonrivering to Deposits (B3) (Nonrivering to Deposits (B4))  for (B1) (Nonrivering to Deposits (B4) (Nonrivering to Deposits (B4))  for (B2) (Nonrivering to Deposits (B4) (Nonrivering to Deposits (B4))  for (B4) (Nonrivering to Deposits (B4) (Nonrivering to Deposits (B4))  for (B4) (Nonrivering t	ne) ne) nagery (B7) s No s No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches):	Secondary II  Water M Sedimel Drift Del Drainag Roots (C3) Dry-Sea Crayfish s (C6) Saturation Shallow FAC-Ne	ndicators (2 or more required) larks (B1) (Riverine) nt Deposits (B2) (Riverine) posits (B3) (Riverine) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) Aquitard (D3) utral Test (D5)
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Project/Site: Newport Banning Ranch (Newport J015)	City/County: Newpor	t Beach/Orange Sampling Date: 711609
Applicant/Owner: Newport Banning Ran		State: <u>CA</u> Sampling Point: <u>3</u> 5
Investigator(s): Gary Medeiros, Allison Rudalevige	Section, Township, Ra	ange: <u>N/A - "Santiago De Santa</u> Ana" land grant
Landform (hillslope, terrace, etc.):		
Subregion (LRR): C	Lat: <u>33.6366</u>	Long: -117.94789 Datum: NAD83
Soil Map Unit Name: Bolsa Silt loam		NWI classification: PSSCx
Are climatic / hydrologic conditions on the site typical for this til		
Are Vegetation, Soil, or Hydrology sign		"Normal Circumstances" present? Yes <u>√</u> No
Are Vegetation, Soil, or Hydrology natu		eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map sh	owing sampling point l	ocations, transects, important features, etc.
		, , , , , , , , , , , , , , , , , , , ,
	Is the Sampled	
Wetland Hydrology Present? Yes No	within a Wetlar	nd? Yes NoX
Remarks:		
VECETATION Has a lower		
VEGETATION – Use scientific names of plants.		#
	bsolute Dominant Indicator Cover Species? Status	Dominance Test worksheet:
1. Salix gooddingii	70 4 BBL	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2		
3		Total Number of Dominant Species Across All Strata: (B)
4		(-/
Sapling/Shrub Stratum (Plot size:)	90 = Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
1		Prevalence Index worksheet:
2		Total % Cover of: Multiply by:
3		OBL species x 1 =
4		FACW species x 2 =
5		FAC species x 3 =
	= Total Cover	FACU species x 4 =
Herb Stratum (Plot size:)		UPL species x 5 =
2		Column Totals: (A) (B)
3		Prevalence Index = B/A =
4		Hydrophytic Vegetation Indicators:
5		✓ Dominance Test is >50%
6.		Prevalence Index is ≤3.0 <sup>1</sup>
7		Morphological Adaptations <sup>1</sup> (Provide supporting
8		data in Remarks or on a separate sheet)
W1 V/- 0/- / (5) - 1	7 = Total Cover	Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:)		1
1		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2	= Total Cover	Hydrophytic
-		Vegetation
	Biotic Crust	Present? Yes No
Remarks:		

Profile Description: (Describe to the Depth Matrix		luicator or confirm the	ansence or indicators )
	Redox Features		assence of maleators.)
(inches) Color (moist) %	Color (moist) %		exture Remarks
0-8 164R413 Ga	104R 6/6 40	<u>C M c</u>	lay distinct mottles
		,	
	***************************************		
	-		
Type: C=Concentration, D=Depletion, F	RM=Reduced Matrix, CS=Covered	or Coated Sand Grains	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
lydric Soil Indicators: (Applicable to	all LRRs, unless otherwise note		dicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)		_ 1 cm Muck (A9) (LRR C)
Histic Epipedon (A2)	Stripped Matrix (S6)		_ 2 cm Muck (A10) (LRR B)
Black Histic (A3)	Loamy Mucky Mineral		Reduced Vertic (F18)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (	F2)	Red Parent Material (TF2)
Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)	-	_ Other (Explain in Remarks)
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F	,	
Depleted Below Dark Surface (A11)	Depleted Dark Surface		
Thick Dark Surface (A12) Sandy Mucky Mineral (S1)	Redox Depressions (F8	,	ndicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)	Vernal Pools (F9)		wetland hydrology must be present,
estrictive Layer (if present):			unless disturbed or problematic.
Type:			
Depth (inches):		ши	dric Soil Present? Yes K No
demarks:			
/DROLOGY			
etland Hydrology Indicators:	red: check all that apply)		Secondary Indicators (2 or more required)
etland Hydrology Indicators: rimary Indicators (minimum of one requi			Secondary Indicators (2 or more required)
etland Hydrology Indicators: imary Indicators (minimum of one requi _ Surface Water (A1)	Salt Crust (B11)		Water Marks (B1) (Riverine)
fetland Hydrology Indicators: rimary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2)	Salt Crust (B11) Biotic Crust (B12)	/R13)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Tetland Hydrology Indicators: rimary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates		Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine)
Tetland Hydrology Indicators: rimary Indicators (minimum of one requi  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odo	r (C1)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)
Tetland Hydrology Indicators: rimary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odo Oxidized Rhizosphere	r (C1) s along Living Roots (C3	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2)
Vetland Hydrology Indicators:  rimary Indicators (minimum of one requi  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odo Oxidized Rhizosphere Presence of Reduced	r (C1) s along Living Roots (C3 Iron (C4)	<ul> <li>Water Marks (B1) (Riverine)</li> <li>Sediment Deposits (B2) (Riverine)</li> <li>Drift Deposits (B3) (Riverine)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> </ul>
Tetland Hydrology Indicators:  rimary Indicators (minimum of one requi  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odo Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction	r (C1) s along Living Roots (C3 Iron (C4) in Tilled Soils (C6)	<ul> <li>Water Marks (B1) (Riverine)</li> <li>Sediment Deposits (B2) (Riverine)</li> <li>Drift Deposits (B3) (Riverine)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> </ul>
retland Hydrology Indicators: rimary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odo Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction (B7) Thin Muck Surface (C	r (C1) s along Living Roots (C3 Iron (C4) in Tilled Soils (C6) 7)	<ul> <li>Water Marks (B1) (Riverine)</li> <li>Sediment Deposits (B2) (Riverine)</li> <li>Drift Deposits (B3) (Riverine)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Shallow Aquitard (D3)</li> </ul>
Tetland Hydrology Indicators: rimary Indicators (minimum of one requi  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Water-Stained Leaves (B9)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odo Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction	r (C1) s along Living Roots (C3 Iron (C4) in Tilled Soils (C6) 7)	<ul> <li>Water Marks (B1) (Riverine)</li> <li>Sediment Deposits (B2) (Riverine)</li> <li>Drift Deposits (B3) (Riverine)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> </ul>
Tetland Hydrology Indicators: rimary Indicators (minimum of one requi  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Water-Stained Leaves (B9)  eld Observations:	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odo Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction (B7) Thin Muck Surface (C) Other (Explain in Rem	r (C1) s along Living Roots (C3 Iron (C4) in Tilled Soils (C6) 7) arks)	<ul> <li>Water Marks (B1) (Riverine)</li> <li>Sediment Deposits (B2) (Riverine)</li> <li>Drift Deposits (B3) (Riverine)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Shallow Aquitard (D3)</li> </ul>
Vetland Hydrology Indicators: rimary Indicators (minimum of one requi  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Water-Stained Leaves (B9)  veld Observations:  urface Water Present?  Yes	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odo Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction Thin Muck Surface (C) Other (Explain in Rem	r (C1) s along Living Roots (C3 Iron (C4) in Tilled Soils (C6) 7) arks)	<ul> <li>Water Marks (B1) (Riverine)</li> <li>Sediment Deposits (B2) (Riverine)</li> <li>Drift Deposits (B3) (Riverine)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Shallow Aquitard (D3)</li> </ul>
Vetland Hydrology Indicators: rimary Indicators (minimum of one requi  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Water-Stained Leaves (B9)  Vetladd Observations:  urface Water Present?  Yes  aturation Present?  Yes  aturation Present?  Yes	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odo e) Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction (B7) Thin Muck Surface (C' Other (Explain in Rem	r (C1) s along Living Roots (C3 lron (C4) in Tilled Soils (C6) 7) arks)	<ul> <li>Water Marks (B1) (Riverine)</li> <li>Sediment Deposits (B2) (Riverine)</li> <li>Drift Deposits (B3) (Riverine)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Shallow Aquitard (D3)</li> </ul>
Vetland Hydrology Indicators: rimary Indicators (minimum of one requi  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Water-Stained Leaves (B9)  Veter Table Present?  Ves  Jaturation Present?  Activation Present?  Ves  Jaturation Present?  Ves  Jaturation Present?  Ves  Jaturation Present?  Ves  Jacurdad Present?  Ves  Jaturation Present?  Ves  Jacurdad Present Pres	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odo Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction Thin Muck Surface (Context) Other (Explain in Rem	r (C1) s along Living Roots (C3 Iron (C4) in Tilled Soils (C6) 7) arks)  Wetland H	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Vetland Hydrology Indicators: rimary Indicators (minimum of one requi  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Water-Stained Leaves (B9)  ield Observations:  urface Water Present?  Yes  vater Table Present?  Yes  aturation Present?  Yes  includes capillary fringe)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odo Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction Thin Muck Surface (Context) Other (Explain in Rem	r (C1) s along Living Roots (C3 Iron (C4) in Tilled Soils (C6) 7) arks)  Wetland H	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Water-Stained Leaves (B9) ield Observations: urface Water Present? Yes //dter Table Present?	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odo Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction Thin Muck Surface (Context) Other (Explain in Rem	r (C1) s along Living Roots (C3 Iron (C4) in Tilled Soils (C6) 7) arks)  Wetland H	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)  ydrology Present? Yes No
Vetland Hydrology Indicators: rimary Indicators (minimum of one requi  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Water-Stained Leaves (B9)  Vetlad Observations:  Urface Water Present?  Ves  Vater Table Present?  Ves  Vaturation Present?  Ves  Includes capillary fringe)  escribe Recorded Data (stream gauge,	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odo Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction Thin Muck Surface (Context) Other (Explain in Rem	r (C1) s along Living Roots (C3 Iron (C4) in Tilled Soils (C6) 7) arks)  Wetland H	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)  ydrology Present? Yes No
retland Hydrology Indicators: rimary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Water-Stained Leaves (B9) eld Observations: urface Water Present? Yes ater Table Present? Yes aturation Present? Yes Includes capillary fringe) Presented Attream gauge, Presented A	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odo Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction Thin Muck Surface (Context) Other (Explain in Rem	r (C1) s along Living Roots (C3 Iron (C4) in Tilled Soils (C6) 7) arks)  Wetland H	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Vetland Hydrology Indicators: rimary Indicators (minimum of one requi  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Water-Stained Leaves (B9)  Vetlad Observations:  Veter Table Present?  Ves  Saturation Present?  Ves  Satura	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odo Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction Thin Muck Surface (Context) Other (Explain in Rem	r (C1) s along Living Roots (C3 Iron (C4) in Tilled Soils (C6) 7) arks)  Wetland H	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)

Project/Site: Newport Banning Ranch (Newport J015)	City/County: Newpor	t Beach/Orange Sampling Date: 子 しり
Applicant/Owner: Newpost Banning Ranc	h	State: <u>CA</u> Sampling Point: <u>3</u> I
		ange: <u>N/A - "Santiago De Santa Ana" land grant</u>
Landform (hillslope, terrace, etc.):	Local relief (concave,	convex, none): Slope (%):
Subregion (LRR): C	Lat: 33.636599	Long: -117.95028 Datum: NAD83
Soil Map Unit Name: BdSa Silt Ican		NWI classification: PEMCx
Are climatic / hydrologic conditions on the site typical for this		
Are Vegetation, Soil, or Hydrology sig		"Normal Circumstances" present? Yes _ ✓ _ No
Are Vegetation, Soil, or Hydrology na		eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map s	howing sampling point I	ocations transects important features etc
Hydrophytic Vegetation Present?  Yes You No No No	Is the Sampled within a Wetlar	Area
	Absolute Dominant Indicator	Dominance Test worksheet:
1.		Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3		Total Number of Dominant Species Across All Strata: (B)
4	= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
1		Prevalence Index worksheet:
2		Total % Cover of: Multiply by:
3		OBL species x 1 =
4		FACW species x 2 =
5	_	FAC species x 3 =
Herb Stratum (Plot size:)	= Total Cover	FACU species x 4 =
1. Salicoenia Majnica	85 Y 6BL	UPL species x 5 = Column Totals: (A) (B)
1. Salicornia Maginica 2. Frantenia Salina Igrandifidia	2 n FACW	Column Totals: (A) (B)
3		Prevalence Index = B/A =
4		Hydrophytic Vegetation Indicators:
5		Dominance Test is >50% Prevalence Index is ≤3.0¹
6		Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
8	07	Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:)	87 = Total Cover	(Explain)
1		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	Total Cover	Hydrophytic
% Bare Ground in Herb Stratum % Cover of	Biotic Crust	Vegetation Present? Yes No
Remarks:		

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.   Location: PL=Pore Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)   Indicators for Problematic	5.)		
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.   *Location: PL=Pore Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted.)   Indicators for Problemating the Indicators of Problemating (Applicable to all LRRs, unless otherwise noted.)   Indicators for Problemating (Applicable to all LRRs, unless otherwise noted.)   Indicators for Problemating (Applicable to all LRRs, unless otherwise noted.)   Indicators for Problemating (Applicable to all LRRs, unless otherwise noted.)   Indicators for Problemating (Applicable to all LRRs, unless otherwise noted.)   Indicators for Problemating (Applicable to Applicable to all LRRs, unless otherwise noted.)   Indicators for Problemating (Applicable to Applicable to App	Remarks		
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.   *Location: PL=Pore Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)   Indicators for Problematir	at mottles		
**Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. **Location: PL=Pore Hydric Soil Indicators: (Applicable to all LRRs, unless ofherwise noted.) Indicators for Problematic Hydric Soil Indicators (Applicable to all LRRs, unless ofherwise noted.) Indicators for Problematic Hydrogen Suffice (A2) Stripped Matrix (S6)			
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)  Histosol (A2)  Sandy Redox (S5)  Loamy Mucky Mineral (F1)  Hydrogen Sulfide (A4)  Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1)  Hydrogen Sulfide (A4)  Hydrogen Sulfide (A4)  Loamy Gleyed Matrix (F2)  Reduced Vertic (F18)  Hydrogen Sulfide (A4)  Loamy Gleyed Matrix (F2)  Redox Dark Surface (F3)  Depleted Below Dark Surface (A11)  Depleted Below Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Restrictive Layer (if present):  Type: \( \text{\capacity} \) \( \capac			
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)  Histosol (A2)  Histosol (A2)  Sandy Redox (S5)  Loamy Mucky Mineral (F1)  Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1)  Hydrogen Sulfide (A4)  Hydrogen Sulfide (A4)  Loamy Gleyed Matrix (F2)  Reduced Vertic (F18)  Hydrogen Sulfide (A4)  Loamy Gleyed Matrix (F2)  Redox Deressions (F3)  Depleted Below Dark Surface (A11)  Depleted Below Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Restrictive Layer (if present):  Type: \( \text{V} \text{A} \text{Q} \text{A} \text{N}  Depleted Below Dark (A1)  Depth (inches):  Primary Indicators (minimum of one required; check all that apply)  Secondary Indicators:  Pyprimary Indicators (minimum of one required; check all that apply)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Diff Deposits (B2) (Nonriverine)  Diff Deposits (B2) (Nonriverine)  Diff Deposits (B2) (Nonriverine)  Diff Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Saturation (Visible on Aerial Imagery (B7)  Think Dark Surface (A1)  Water Stained Leaves (B9)  Other (Explain in Remarks)  Metand Hydrology indicators:  Hydric Soil Present? Yes  Motified Odor (C1)  Diff Deposits (B3) (Nonriverine)  Diff Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Craylish Burrows (  Saturation Visible on Aerial Imagery (B7)  Think Dark Surface (C7)  Water-Stained Leaves (B9)  Other (Explain in Remarks)  Wetland Hydrology Present? Yes  No \( \text{Depth (inches):} \)  Wetland Hydrology Present? Yes  No \( \text{Depth (inches):} \)  Wetland Hydrology Present? Yes  Includes capillary fringe)			
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)			
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)  Histosol (A2)  Sandy Redox (S5)  Loamy Mucky Mineral (F1)  Black Histic (A3)  Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1)  Stratified Layers (A5) (LRR C)  Depleted Matrix (F2)  Red Parent Material (T  Stratified Layers (A5) (LRR C)  Depleted Matrix (F3)  Depleted Below Dark Surface (A11)  Depleted Below Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Restrictive Layer (if present):  Type: \tag{Cas}  Depth (inches):  Primary Indicators (minimum of one required; check all that apply)  Sardy Mucky Mineral (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Dirit Deposits (B3) (Nonriverine)  Dirit Deposits (B3) (Nonriverine)  Surface Soil Crack (B6)  Dirit Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Surface Soil Crack (B6)  Surface Soil Crack (B6)  Surface (B1)  Water Stained Leaves (B9)  Other (Explain in Remarks)  Wetland Hydrology Indicators:  Hydric Soil Present? Yes  Surface Water (A1)  Secondary Indicators (Minimum of one required; check all that apply)  Secondary Indicators (Minimum of one required; check all that apply)  Secondary Indicators (Minimum of one required; check all that apply)  Secondary Indicators (Minimum of one required; check all that apply)  Secondary Indicators (Minimum of one required; check all that apply)  Secondary Indicators (Minimum of one required; check all that apply)  Secondary Indicators (Minimum of one required; check all that apply)  Secondary Indicators (Minimum of one required; check all that apply)  Secondary Indicators (Minimum of one required; check all that apply)  Secondary Indicators (Minimum of one required; check all that apply)  Secondary Indicators (Minimum of one required; check all that apply)  Secondary Indicators (Minimum of one required; check all that apply)  Sec			
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)  Histosol (A2)  Histosol (A2)  Sandy Redox (S5)  Loamy Mucky Mineral (F1)  Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1)  Hydrogen Sulfide (A4)  Hydrogen Sulfide (A4)  Loamy Gleyed Matrix (F2)  Reduced Vertic (F18)  Hydrogen Sulfide (A4)  Loamy Gleyed Matrix (F2)  Redox Deressions (F3)  Depleted Below Dark Surface (A11)  Depleted Below Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Restrictive Layer (if present):  Type: \( \text{V} \text{A} \text{Q} \text{A} \text{N}  Depleted Below Dark (A1)  Depth (inches):  Primary Indicators (minimum of one required; check all that apply)  Secondary Indicators:  Pyprimary Indicators (minimum of one required; check all that apply)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Diff Deposits (B2) (Nonriverine)  Diff Deposits (B2) (Nonriverine)  Diff Deposits (B2) (Nonriverine)  Diff Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Saturation (Visible on Aerial Imagery (B7)  Think Dark Surface (A1)  Water Stained Leaves (B9)  Other (Explain in Remarks)  Metand Hydrology indicators:  Hydric Soil Present? Yes  Motified Odor (C1)  Diff Deposits (B3) (Nonriverine)  Diff Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Craylish Burrows (  Saturation Visible on Aerial Imagery (B7)  Think Dark Surface (C7)  Water-Stained Leaves (B9)  Other (Explain in Remarks)  Wetland Hydrology Present? Yes  No \( \text{Depth (inches):} \)  Wetland Hydrology Present? Yes  No \( \text{Depth (inches):} \)  Wetland Hydrology Present? Yes  Includes capillary fringe)			
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)  Histosol (A2)  Histosol (A2)  Sandy Redox (S5)  Loamy Mucky Mineral (F1)  Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1)  Hydrogen Sulfide (A4)  Hydrogen Sulfide (A4)  Loamy Gleyed Matrix (F2)  Reduced Vertic (F18)  Hydrogen Sulfide (A4)  Loamy Gleyed Matrix (F2)  Redox Deressions (F3)  Depleted Below Dark Surface (A11)  Depleted Below Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Restrictive Layer (if present):  Type: \( \text{V} \text{A} \text{Q} \text{A} \text{N}  Depleted Below Dark (A1)  Depth (inches):  Primary Indicators (minimum of one required; check all that apply)  Secondary Indicators:  Pyprimary Indicators (minimum of one required; check all that apply)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Diff Deposits (B2) (Nonriverine)  Diff Deposits (B2) (Nonriverine)  Diff Deposits (B2) (Nonriverine)  Diff Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Saturation (Visible on Aerial Imagery (B7)  Think Dark Surface (A1)  Water Stained Leaves (B9)  Other (Explain in Remarks)  Metand Hydrology indicators:  Hydric Soil Present? Yes  Motified Odor (C1)  Diff Deposits (B3) (Nonriverine)  Diff Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Craylish Burrows (  Saturation Visible on Aerial Imagery (B7)  Think Dark Surface (C7)  Water-Stained Leaves (B9)  Other (Explain in Remarks)  Wetland Hydrology Present? Yes  No \( \text{Depth (inches):} \)  Wetland Hydrology Present? Yes  No \( \text{Depth (inches):} \)  Wetland Hydrology Present? Yes  Includes capillary fringe)			
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)			
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)			
Histosol (A1) Sandy Redox (S5) 1 cm Muck (A9) (LRR of Histic Epipedon (A2) Stripped Matrix (S6) 2 cm Muck (A10) (LRR of Black Histic (A3) 2 cm Muck (A10) (LRR of Black Histic (A3) 2 cm Muck (A10) (LRR of Black Histic (A3) 3 cm Mucky Mineral (F1) Reduced Vertic (F18) Red Parent Material (T1) Reduced Vertic (F18) Quality (F2) Red Parent Material (T2) Red Parent Material (T3) Stratified Layers (A5) (LRR of D3) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Depleted Dark Surface (F1) Depleted Dark Surface (A12) Redox Derrossions (F8) Period (F9) Period (	re Lining, M=Matrix.		
Histic Epipedon (A2) Stripped Matrix (S6) 2 cm Muck (A10) (LRR Black Histic (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Red Parent Material (T1) Stratified Layers (A5) (LRR C) Depleted Matrix (F2) Red Parent Material (T1) Chrer (Explain in Reme 1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) Depleted Bark Surface (F6) Depleted Bark Surface (F6) Depleted Bark Surface (F7) Thick Dark Surface (A11) Period Depleted Dark Surface (F8) Wetland hydrology must be unless disturbed or proble (F9) Wetland Hydrology must be unless disturbed or proble (F9) Wetland Hydrology Indicators (F9) Wetland Hydrology Indicators (F9) Wetland Hydrology Indicators (F9) Present? Yes Remarks:    YPROLOGY   Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (Material Present) Section (A3) Surface Water (A1) Salt Crust (B11) Water Marks (B1) Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Dirit Deposits (B3) Dirit Deposits (B3) Dirit Deposits (B3) (Nonriverine) Adultation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Surface Soil Cracks (B6) Seturation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquilard (Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (F8) Surface Water Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Dept			
Black Histic (A3)	,		
Hydrogen Sulfide (A4)			
Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Other (Explain in Remain In Muck (A9) (LRR D) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (A12) Redox Depressions (F8) Indicators of hydrophytic versions (F9) Wetland hydrology must to unless disturbed or problem in the problem of th			
1 cm Muck (A9) (LRR D)			
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)  Restrictive Layer (if present): Type: \( \text{\text{LaQCAN}} \) Depth (inches): \( \text{\t			
Sandy Mucky Mineral (S1)			
Sandy Gleyed Matrix (S4)  Restrictive Layer (if present):  Type: \( \frac{\text{VLASQCA}}{\text{CASQCA}} \)  Depth (inches): \( \frac{\text{SQCA}}{\text{CASQCA}} \)  Depth (inches): \( \frac{\text{SQCA}}{\text{CASQCA}} \)  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Secondary Indicators (\text{Soil Present? Yes}  Surface Water (A1)	vegetation and		
Restrictive Layer (if present):  Type: \( \text{VLBQDM} \) Depth (inches): \( \frac{1}{2} \) Remarks:    Hydric Soil Present? Yes   Hydric Soil Present? Yes	wetland hydrology must be present,		
Type:	blematic.		
Pyprology  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Secondary Indicators (Company Indicators)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B3)  Water Marks (B1)  Sediment Deposits (B3)  Presence of Reduced Iron (C4)  Surface Soil Cracks (B6)  Recent Iron Reduction in Tilled Soils (C6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Other (Explain in Remarks)  Water Area Table Present?  Yes  No  Depth (inches):  Water Table Present?  Yes  No  Depth (inches):  Wetland Hydrology Present?  Yes  Includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Primary Indicators (minimum of one required; check all that apply)  Secondary Indicators (primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Satt Crust (B11)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Hydrogen Sulfide Odor (C1)  Drainage Patterns  Sediment Deposits (B2) (Nonriverine)  Oxidized Rhizospheres along Living Roots (C3)  Dry-Season Water  Drift Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Surface Soil Cracks (B6)  Recent Iron Reduction in Tilled Soils (C6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Other (Explain in Remarks)  FAC-Neutral Test of Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  Saturation P	\$7		
YDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)       Secondary Indicators (         Surface Water (A1)       Salt Crust (B11)       Water Marks (B1)         High Water Table (A2)       Biotic Crust (B12)       Sediment Deposits (B3)         Saturation (A3)       Aquatic Invertebrates (B13)       Drift Deposits (B3)         Water Marks (B1) (Nonriverine)       Hydrogen Sulfide Odor (C1)       Drainage Patterns         Sediment Deposits (B2) (Nonriverine)       Oxidized Rhizospheres along Living Roots (C3)       Dry-Season Water         Drift Deposits (B3) (Nonriverine)       Presence of Reduced Iron (C4)       Crayfish Burrows (         Surface Soil Cracks (B6)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Shallow Aquitard (         Water-Stained Leaves (B9)       Other (Explain in Remarks)       FAC-Neutral Test of Field Observations:         Surface Water Present?       Yes       No       Depth (inches):       Wetland Hydrology Present?       Yes         Saturation Present?       Yes       No       Depth (inches):       Wetland Hydrology Present?       Yes         Saturation Present?       Yes       No       Depth (inches):       Wetland Hydrology Present?       Yes	es No		
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B3)  Drift Deposits (B3)  Crayfish Burrows (Casurface Soil Cracks (B6)  Recent Iron Reduction in Tilled Soils (C6)  Saturation Visible on Aerial Imagery (B7)  Thin Muck Surface (C7)  Water-Stained Leaves (B9)  Other (Explain in Remarks)  FAC-Neutral Test of Saturation Present?  Water Table Present?  Yes  No  Depth (inches):  Wetland Hydrology Present? Yes (Includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)       Secondary Indicators ()         Surface Water (A1)       Salt Crust (B11)       Water Marks (B1)         High Water Table (A2)       Biotic Crust (B12)       Sediment Deposits         Saturation (A3)       Aquatic Invertebrates (B13)			
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)       Secondary Indicators ()         Surface Water (A1)       Salt Crust (B11)       Water Marks (B1)         High Water Table (A2)       Biotic Crust (B12)       Sediment Deposits         Saturation (A3)       Aquatic Invertebrates (B13)			
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)       Secondary Indicators (mainimum of one required; check all that apply)         Surface Water (A1)       Salt Crust (B11)       Water Marks (B1)         High Water Table (A2)       Biotic Crust (B12)       Sediment Deposits         Saturation (A3)       Aquatic Invertebrates (B13)       Drift Deposits (B3)         Water Marks (B1) (Nonriverine)       Hydrogen Sulfide Odor (C1)       Drainage Patterns         Sediment Deposits (B2) (Nonriverine)       Oxidized Rhizospheres along Living Roots (C3)       Dry-Season Water         Drift Deposits (B3) (Nonriverine)       Presence of Reduced Iron (C4)       Crayfish Burrows (C4)         Surface Soil Cracks (B6)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Shallow Aquitard (C7)       Shallow Aquitard (C7)       Shallow Aquitard (C7)       FAC-Neutral Test of FAC-Ne			
Surface Water (A1) Salt Crust (B11) Water Marks (B1) High Water Table (A2) Biotic Crust (B12) Sediment Deposits Saturation (A3) Aquatic Invertebrates (B13) Drift Deposits (B3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B2) (Nonriverine) Presence of Reduced Iron (C4) Crayfish Burrows (Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (Water-Stained Leaves (B9) Other (Explain in Remarks)  Water Table Present? Yes No Depth (inches):  Saturation Present? Yes No Depth (inches): Saturati			
Surface Water (A1) Salt Crust (B11) Water Marks (B1) Sediment Deposits (B2) Saturation (A3) Aquatic Invertebrates (B13) Drift Deposits (B3) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Crayfish Burrows (C3) Dry-Season Water Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Crayfish Burrows (C4) Crayfish Burrows (C5) Saturation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (C7) Shallow Aquitard (C7)	2 (2 or more required)		
High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B3)  Water Marks (B2) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Other (Explain in Remarks)  Field Observations:  Surface Water Present?  Water Table Present?  Yes  No  Depth (inches):  Wetland Hydrology Present? Yes  No  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Saturation (A3)			
Water Marks (B1) (Nonriverine)			
Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Surface Water Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  Saturatio			
Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)  Other (Explain in Remarks)  Surface Water Present?  Water Table Present?  Yes No Depth (inches):  Saturation Present?  Yes No Depth (inches):  Seturation Present?  Yes No Depth (inches):  Yes No Depth (inches):  Yes No Depth (inches):  Yes No Depth (in	, ,		
Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test Face Water Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Saturation Present? Yes No Pepth (inches):  S	, ,		
Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard ( Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test  Field Observations:  Surface Water Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Saturation Present? Yes No Depth (inches):  Security Depth (in			
Water-Stained Leaves (B9)  Other (Explain in Remarks)  FAC-Neutral Test of FAC-Neutral			
Field Observations:  Surface Water Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Surface Water Present? Yes No Depth (inches):	, (DO)		
Water Table Present?  Yes No Depth (inches):  Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	. 8		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	es No		
Remarks:			

Project/Site: Newport Banning Ranch (Newport J015	<u>5)</u>	City/Co	unty: Newpo	ort Beach/Orange	Sampling Date:	7/11/10/00
Applicant/Owner: Newport Barning Rance	h			State: CA	_ Sampling Date	37
Investigator(s): Gary Medeiros, Allison Rudalevige		Section	. Township R	lange: N/A - "Santiago (	_ Sampling Folit	od munich
Landform (hillslope, terrace, etc.):		Localin	oliof /poppos			
Subregion (LRR): C	Lat: 3	3.63	7099	Long: -117 95	Slop	oe (%):
Soil Map Unit Name: Bolsa Silt loam			<u>-:</u>	NWI classifi	PSSC.	n: <u>1971)8 3</u>
Are climatic / hydrologic conditions on the site typical for the	is time of v	ear? Yes	. √ No	/If no analytic to E	cation: 1 230x	
Are Vegetation, Soil, or Hydrology	sionificantly	disturbe				,
Are Vegetation, Soil, or Hydrology				"Normal Circumstances"		No
SUMMARY OF FINDINGS – Attach site map			,	eeded, explain any answe locations, transects	ers in Remarks.) s <b>. important fe</b> a	ifiires etc
Hydrophytic Vegetation Present? YesN				,	,	
Hydric Soil Present? Yes N	0 ×		the Sample			
Wetland Hydrology Present? Yes N	o X	W	ithin a Wetla	nd? Yes	NoX	i
Remarks:						
VEGETATION – Use scientific names of plan	ts.					# # #
	Absolute	Domina	int Indicator	Dominance Test works	-ills	
Tree Stratum (Plot size:)	% Cover	Species	Status	Number of Dominant Sp	ooloo .	
1. Salix gooddingii	10	-4	- OBL	That Are OBL, FACW, o	or FAC:	(A)
			<u> </u>	Total Number of Domina	ant _	
3				Species Across All Strat		(B)
	10	= Total (	Cover	Percent of Dominant Sp	ecies ( , , )	,
Sapling/Shrub Stratum (Plot size:	T // a	· Total (	50V61	That Are OBL, FACW, o	or FAC: 100/	(A/B)
1. Baccharis Salicifolia [vimenea]	J <u>40</u>	<u>y</u>	FACW	Prevalence Index work	sheet:	
2				Total % Cover of:		
3				OBL species		
5				FACW species		
	40	= Total (		FAC species		
Herb Stratum (Plot size:)				LIDI possina	-	
1. Salicornia virginica 2. Frankenia salina Egrandifolia]		<del></del>	_ OBL_	Column Totals:		—— (B)
3. Enthania occidentalis	30	<del>-</del>	- FACW			(D)
4.	_50_	<del>y</del>	<u> 0BL</u>	Prevalence Index		
5				Hydrophytic Vegetation  Dominance Test is:		
6				Prevalence Index is		
7	*			Morphological Adap		Innorting
8				data in Remarks	or on a separate sh	neet)
Manager	95	= Total (	Cover	Problematic Hydrop	hytic Vegetation <sup>1</sup> (E	xplain)
Woody Vine Stratum (Plot size:)				1		į
1				<sup>1</sup> Indicators of hydric soil be present, unless distu	and wetland hydrolerbed or problematic	ogy must
	0	= Total (	Cover	Hydrophytic	,	
% Bare Ground in Herb Stratum % Cover	of Biotic Cr			Vegetation   Present? Yes	No	
Remarks:				165	<u> </u>	

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5.216.2	11 15

Finding Description: (Describe to the depth needed to document the Indicator or confinit the absence of Indicators.)  Depth Matrix (Inches) Color (mole) % Color (mole) % Color (mole) (March & Tope) (Log ** Toxium** Remarks.*  C—I & J. V.R. 4/13 7.5	Direction (C)	Sampling Point: 32
Depth   Main'x   Remains   Color finates   Supple   Loc   Texture   Remains   Color finates   Color finates   Texture   T	Profile Description: (Describe to the depth needed to document the in	ndicator or confirm the absence of indicators.)
Depth   Dept	Depth Matrix Redox Features	S
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. **Location: PL=Pore Lining, M=Matrix, Plydric Soil Indicators (Applicable to all LRRs, unless otherwise noted.)  Indicators for Problematic Hydric Soils*:  Indicators of Whuck (A9) (LRR C)  Stratified Layers (A5) (LRR C)  Stratified Layers (A5) (LRR C)  Depleted Matrix (F3)  Depleted Balow Dark Surface (A11)  Depleted Balow Dark Surface (A12)  Sandy Muckly Milneral (S1)  Sandy Gleyed Matrix (S4)  Sandy Gleyed Matrix (S4)  Vernal Pools (F9)  **Indicators of hydrophytic vegetation arrived water of hydrophytic vegetation arrived vegetation arrived water (A11)  Type:  Depth (Inches):  Balic Crust (B11)  High Water Table (A2)  Solic Crust (B11)  High Water Table (A2)  Solic Crust (B11)  Sectional Deposits (B2) (Riverine)  Drift Deposits (B2) (Monriverine)  Drift Deposits (B3) (Monriv	78	A Montains
Histosot (At) Sandy Redox (S5) 1 midicators for Problematic Hydric Soils*:  Histosot (At) Sandy Redox (S5)	- 107N413 13 107N 614 L3	cay taint mottles
Black Histic (A3)	Histosol (A1) Sandy Redox (S5) Histic Epipedon (A2) Stripped Matrix (S6)	d.) Indicators for Problematic Hydric Soils³:  1 cm Muck (A9) (LRR C)
Coarny Gleyed Matrix (F2)	Black Histic (A3) Loamy Mucky Mineral (	
Depleted Matrix (F3) I cm Muck (A9) (LRR D) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sestrictive Layer (if present):  Type: Depth (inches): Below Depressions (F3)  Depth (inches): Below Depressions (F3)  Depth (inches): Below	Loanly Cloyed Matrix (	
Depleted Below Dark Surface (A11)	( )	Other (Explain in Remarks)
Pepth (inches):	Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface Redox Depressions (F8 Vernal Pools (F9)	(F7) 3 Indicators of hydrophytic vegetation and wetland hydrology must be present,
PROLOGY  etland Hydrology Indicators: imary Indicators (minimum of one required: check all that apply)  Surface Water (A1)  Sulf Crust (B11)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Riverine)  Sediment Deposits (B2) (Riverine)  Sediment Deposits (B2) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Sediment Deposits (B3) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Oxidized Rhizospheres along Living Roots (C3)  Drift Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Surface Soil Cracks (B6)  Recent Iron Reduction in Tilled Soils (C6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Eld Observations:  urface Water Present?  Yes No Depth (inches):  startation Present?  Yes No Depth (inches):  Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sedim	Type:	
etland Hydrology Indicators: imary Indicators (minimum of one required: check all that apply)  Surface Water (A1)  Sulf Crust (B11)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Riverine)  Sediment Deposits (B2) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Sediment Deposits (B2) (Nonriverine)  Oxidized Rhizospheres along Living Roots (C3)  Drift Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Crayfish Burrows (C8)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Depth (inches):  Indee Water Present?  Yes No Depth (inches):  Inturation Present?  Yes No Depth (inches):  Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Drift Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)	Depth (inches):	15-11-0-115
efland Hydrology Indicators:  imary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Riverine)  Aquatic Invertebrates (B13)  Water Marks (B1) (Nonriverine)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B2) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Other (Explain in Remarks)  Depth (inches):  Inface Water Present?  Yes  No  Depth (inches):  Inturation Present?  Yes  No  No  No  No  No  No  No  No  No  N	emarks:	nydric Soil Present? Yes No
	Jetland Hydrology Indicators:         rimary Indicators (minimum of one required; check all that apply)         Surface Water (A1)       Salt Crust (B11)         High Water Table (A2)       Biotic Crust (B12)         Saturation (A3)       Aquatic Invertebrates (Hydrogen Sulfide Odor         Water Marks (B1) (Nonriverine)       Hydrogen Sulfide Odor         Sediment Deposits (B2) (Nonriverine)       Oxidized Rhizospheres	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)  (B13) — Drift Deposits (B3) (Riverine)  r (C1) — Drainage Patterns (B10) s along Living Roots (C3) — Dry-Season Water Table (C2)
Recent Iron Reduction in Tilled Soils (C6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Other (Explain in Remarks)  FAC-Neutral Test (D5)  Depth (inches):  atter Table Present?  Yes No Depth (inches):  atturation Present?  Yes No Depth (inches):  Coludes capillary fringe)  Wetland Hydrology Present? Yes No Secribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Drift Deposits (B3) (Nonriverine) Presence of Reduced I	Iron (C4) Cravfish Burrows (C8)
Water-Stained Leaves (B9)  Water-Stained Leaves (B9)  Other (Explain in Remarks)  FAC-Neutral Test (D5)  Depth (inches):  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Depth (inches):  Staturation Present?  Yes No Depth (inches):  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No Secribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	The state of the s	in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
eld Observations:  urface Water Present? Yes No Depth (inches): ater Table Present? Yes No Depth (inches): aturation Present? Yes No Depth (inches): urface Water Present? Yes No Depth (inches): aturation Present? Yes No Depth (inches): urface Water Present? Yes No Depth (inches): aturation Present? Yes No No Depth (inches): urface Water Present? Yes No Depth (inches): aturation Present? Yes No No Depth (inches): urface Water Present? Yes No Depth (inches): aturation Present? Yes No No Depth (inches): urface Water Present? Yes No Depth (inches): aturation Present? Yes No No Depth (inches): urface Water Present? Yes No No Depth (inches): urface Water Present? Yes No No No No No No urface Water Present? Yes No No No No No	10/-1	7) Shallow Aguitard (D3)
ater Table Present? Yes No Depth (inches): aturation Present? Yes No Depth (inches): aturation Present? Yes No Depth (inches): aturation Present? Yes No No No Depth (inches): acturation Present? Yes No No No bescribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		arks) $\nearrow$ FAC-Neutral Test (D5)
ater Table Present? Yes No Depth (inches):	. ~	
sturation Present? Yes No _X Depth (inches): Wetland Hydrology Present? Yes No _X Secribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Boput (moties).	
escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	No Z Deput (motes).	
	ncludes capillary fringe)	100 /
emarks:	escribe Recorded Data (stream gauge, monitoring well, aerial photos, previ	ious inspections), if available:
FINGINS.	amarko:	
	smarks.	

Project/Site: Newport Banning Ranch (Newport Ju	015) City	/County: Newno	ort Reach/Orango	7/11/109
Applicant/Owner: Newport Banning Ranch				Sampling Date: 11401
Investigator(s): Gary Medeiros, Allison Rudalevige	Sec	tion. Township F	Pange: N/A - "Santiago [	o Santa Anal land
Landform (hillslope, terrace, etc.):	Loc	al relief (concave	CORVEY POPO):	76 Santa Ana Tanu grant
Landform (hillslope, terrace, etc.):  Subregion (LRR): C	Lat: 33;	637	1 ong: ~117.9519	Slope (%):
Soil Map Unit Name: hda flats		· · · · · · · · · · · · · · · · · · ·	NWI classific	Datum: NAD 83
Are climatic / hydrologic conditions on the site typical for	r this time of year?	Yes & No.	INVVI Classific	Sation: Territox
Are Vegetation, Soil, or Hydrology	significantly distu			
Are Vegetation, Soil, or Hydrology				oresent? Yes _ V No
SUMMARY OF FINDINGS – Attach site ma		•	needed, explain any answe	rs in Remarks.)  , important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Remarks:	No	Is the Sample within a Wetla	d Area	
VEGETATION – Use scientific names of pl	ants.			# # #
<u>Tree Stratum</u> (Plot size:)	Absolute Don	ninant Indicator	Dominance Test works	sheet:
1	% Cover Spe		Number of Dominant Sp That Are OBL, FACW, o	pecies 2 (A)
2			Total Number of Domina	, ,
3			Species Across All Strat	ia: <u>2</u> (B)
4	= Tot		Percent of Dominant Sp That Are OBL, FACW, o	ecies or FAC: 100/0 (A/B)
1			Prevalence Index work	
3.			3	Multiply by:
4.				x1=
5				x 2 =
	= Tot	tal Cover		x 3 = x 4 =
Herb Stratum (Plot size:)			UPL species	_
1. Salicornia Virginica 2. Frankenia Salina Egrandifilia J	- 40 y	- BL FACW	Column Totals:	
3	60y	FACW	Prevalence Index	
4			Hydrophytic Vegetation	
5			Dominance Test is	
6			Prevalence Index is	
7			Morphological Adap	otations <sup>1</sup> (Provide supporting
8			data in Remarks	or on a separate sheet)
Woody Vine Stratum (Plot size:)	= Tot	tal Cover	Problematic Hydrop	hytic Vegetation <sup>1</sup> (Explain)
1 2			<sup>1</sup> Indicators of hydric soil be present, unless distu	and wetland hydrology must rbed or problematic.
	 ○ = Tot	tal Cover	Hydrophytic	
	ver of Biotic Crust _		Vegetation Present? Yes	. No
Remarks:		<u> </u>		

Profile Description: (Describe to the de	anth mandad to decre				Sampling Point: 33
Profile Description: (Describe to the de	shar needed to docur	nent the Indicator	or confirm	the absence o	of indicators.)
(inches) Color (moist) %	Color (moist)	x Features % Type <sup>1</sup>	Loc <sup>2</sup>	Tt	
0-1 BYR413 90	104R614	10 C	M	<u>Texture</u>	Remarks
1-16 104R413 100	10/1/0/1			clay	taint mottles
10/14/19 100				day	
				/	
			_		
<del></del>					
F					
Type: C=Concentration, D=Depletion, RM lydric Soil Indicators: (Applicable to all	=Reduced Matrix, CS=	Covered or Coate	d Sand Grain		ion: PL=Pore Lining, M=Matrix.
Histosol (A1)				Indicators fo	r Problematic Hydric Soils³:
_ Histic Epipedon (A2)	Sandy Redox Stripped Mati				ck (A9) ( <b>LRR C</b> )
Black Histic (A3)	Surpped Made				ck (A10) (LRR B)
Hydrogen Sulfide (A4)	Loamy Gleye				Vertic (F18)
_ Stratified Layers (A5) (LRR C)	Depleted Mat				nt Material (TF2)
_ 1 cm Muck (A9) (LRR D)	Redox Dark S			Other (E)	plain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Dar	k Surface (F7)			A.
_ Thick Dark Surface (A12)	Redox Depre			3Indicators of	hydrophytic vegetation and
_ Sandy Mucky Mineral (S1) _ Sandy Gleyed Matrix (S4)	Vernal Pools	(F9)		wetland hyd	drology must be present,
estrictive Layer (if present):				unless distu	rbed or problematic.
Type:					
Depth (inches):					
emarks:			ŀ	lydric Soil Pre	esent? Yes No 🔨
/DROLOGY					
etland Hydrology Indicators:					
imary Indicators (minimum of one required	h check all that apply)				
_ Surface Water (A1)	Salt Crust (B	14)		Secondar	y Indicators (2 or more required)
_ High Water Table (A2)	Biotic Crust (B				er Marks (B1) (Riverine)
Saturation (A3)	Aquatic Inver				ment Deposits (B2) (Riverine)
Water Marks (B1) (Nonriverine)	Hydrogen Su				Deposits (B3) (Riverine)
Sediment Deposits (B2) (Nonriverine)		zospheres along L	halaan Daart (		nage Patterns (B10)
Drift Deposits (B3) (Nonriverine)	Presence of	Reduced Iron (C4)	iving Roots (	-	Season Water Table (C2)
Surface Soil Cracks (B6)		Reduction in Tilled			fish Burrows (C8)
Inundation Visible on Aerial Imagery (B7	Thin Muck St		Solis (Co)		ration Visible on Aerial Imagery (C
Water-Stained Leaves (B9)		n in Remarks)			ow Aquitard (D3)
eld Observations:		······································	<del></del>	X FAC-	Neutral Test (D5)
rface Water Present? Yes N	√o Depth (inche	es):			
ater Table Present? Yes N	lo X Depth (inche	es):	-		
uturation Present?  Cludes capillary fringe)	lo X Depth (inche	es):	_ Wetland	Hydrology P	resent? Yes No _X_
escribe Recorded Data (stream gauge, mo	nitoring well, aerial pho	otos, previous insp	ections), if a	vailable:	
			- /, α		
emarks:					

Project/Site: Newport Banning Ranch (Newport JO	15) City	/County: Newn	ort Beach/Orange	Committee of Dist	71110100
Applicant/Owner: New port Barning Ray	rch	<u> </u>	State: CA	_ Sampling Date: _	34 24
Investigator(s): Gary Medeiros, Allison Rudalevige	Sec	tion Township F	Panne: N/A - "Santiago I	_ Sampling Point: _	<u> </u>
Landrorm (nilisiope, ferrace, etc.):	1.00	al rollof (company)			
Subregion (LRR): C	Lat. 33. le	37037	e, convex, none): Long: <u>-117, 9519</u>	Slop	e (%):
Soil Map Unit Name: had fats			Long:13 [*]	Datun	n: <u>NAD83</u>
Are climatic / hydrologic conditions on the site typical for t	this time of year?	1	NWI classific	,	-
Are Vegetation, Soil, or Hydrology			(If no, explain in R	•	
Are Vegetation, Soil, or Hydrology			"Normal Circumstances" p		No
SUMMARY OF FINDINGS – Attach site map			needed, explain any answe	rs in Remarks.)	
į		inhinia hotut	locations, transects	, important fea	tures, etc.
Hydrophytic Vegetation Present? Yes		Is the Sample	d Area		
Hydric Soil Present? Yes Wetland Hydrology Present? Yes	No _ ½	within a Wetla		NoX	
Wetland Hydrology Present? Yes	No			NO	
·					
					-G-
VEGETATION – Use scientific names of pla	nts.				3.
Tree Stratum (Plot size:)	Absolute Dom	ninant Indicator	Dominance Test works	sheet:	
1	% Cover Spe	cies? Status	Number of Dominant Sp	ecies 2	
2			That Are OBL, FACW, o	11 AU.	(A)
3			Total Number of Domina	int 2	
4			Species Across All Strat		(B)
Sapling/Shrub Stratum (Plot size:)	= Tot	al Cover	Percent of Dominant Spe That Are OBL, FACW, o	ecies r FAC: 100	<u>h</u> (A/B)
1			Prevalence Index work		(,,,,
2			Total % Cover of:		,,.
3.			OBL species		
4			FACW species		
5			FAC species		
Herb Stratum (Plot size:)	= Tot	al Cover	FACU species	x 4 =	
1. Salvornia Virginica	_ 40 y	OBL	UPL species	x 5 =	
2. Frankenia Salina Egranditalia J	60	FACIN	Column Totals:	(A)	(B)
3			Prevalence Index	= B/A =	
4	-		Hydrophytic Vegetation		
5.			Dominance Test is >	·50%	
6			Prevalence Index is		
7			Morphological Adap	tations¹ (Provide su or on a separate sh	pporting
	lob = Tot		Problematic Hydropl		
Woody Vine Stratum (Plot size:)	= 10t	al Cover	Tradiamana Tryutopi	Tytic vegetation (L.	Apiaiii)
1			<sup>1</sup> Indicators of hydric soil	and wetland hydrolo	ogy must
2			be present, unless distur	bed or problematic.	37
	= Tota	al Cover	Hydrophytic		
% Bare Ground in Herb Stratum % Cove	er of Biotic Crust	0	Vegetation   Present? Yes	<u> No</u>	
Remarks:			1	<del>/</del> 100	

63	a	0.0
100	er na	114

Profile Description: (Describe to t	be cloudly were the fit of	Sampling Point:
Depth Matrix	he depth needed to document the indicator o	r confirm the absence of indicators.)
Depth <u>Matrix</u> (inches) Color (moist)	Redox Features  Color (moist) % Type¹	
0-2 10xR4/3 70		Loc <sup>2</sup> Texture Remarks
* .		M clay faint mottles
2-16 104R413 11	50	Clay
·		
Type: C=Concentration, D=Depletion	n, RM=Reduced Matrix, CS=Covered or Coated	Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
yone soil indicators: (Applicable	to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
_ Histosol (A1)	Sandy Redox (S5)	1 cm Muck (A9) (LRR C)
_ Histic Epipedon (A2)	Stripped Matrix (S6)	2 cm Muck (A10) (LRR B)
_ Black Histic (A3)	Loamy Mucky Mineral (F1)	Reduced Vertic (F18)
_ Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Red Parent Material (TF2)
_ Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)	Other (Explain in Remarks)
_ 1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6)	, , , , , , , , , , , , , , , , , , , ,
_ Depleted Below Dark Surface (A1	(	
_ Thick Dark Surface (A12) _ Sandy Mucky Mineral (S1)	Redox Depressions (F8)	³Indicators of hydrophytic vegetation aṇdd
Sandy Gleyed Matrix (S4)	Vernal Pools (F9)	wetland hydrology must be present,
estrictive Layer (if present):		unless disturbed or problematic.
Type:		
Depth (inches):		
emarks:		Hydric Soil Present? Yes No
'DROLOGY		
etland Hydrology Indicators:		
imary Indicators (minimum of one red	quired; check all that apply)	Cocondon Indianton (O
_ Surface Water (A1)	Salt Crust (B11)	Secondary Indicators (2 or more required)
High Water Table (A2)	Biotic Crust (B12)	Water Marks (B1) (Riverine)
Saturation (A3)	Aquatic Invertebrates (B13)	Sediment Deposits (B2) (Riverine)
Water Marks (B1) (Nonriverine)		Drift Deposits (B3) (Riverine)
Sediment Deposits (B2) (Nonriver	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Drift Deposits (B3) (Nonriverine)	i i i i i i i i i i i i i i i i i i i	
Surface Soil Cracks (B6)	Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Inundation Visible on Aerial Image	Recent Iron Reduction in Tilled So	oils (C6) Saturation Visible on Aerial Imagery (C9
Water-Stained Leaves (B9)	(-1)	Shallow Aquitard (D3)
eld Observations:	Other (Explain in Remarks)	FAC-Neutral Test (D5)
	×	
otor Table Dura (2	No Y Depth (inches):	
	No Depth (inches):	
turation Present? Yes	No Depth (inches):	Wetland Hydrology Present? Yes No X
Ciddes capillaly [[[[de]	,	
Rocorded Data (Stream gaug	e, monitoring well, aerial photos, previous inspec	ctions), if available:
ve a dec		
emarks:		

Applicant/Owner: Name	Project/Site: Newport Banning Ranch (Newport JO	15)	City/County: Newpo	ort Beach/Orange Sampling Date: 711617
Investigator(s): Sarry Mederics, Allison Rudalevige   Saction, Township, Range: N/A = "Santiago De Santa Ana" land grant	Applicant/Owner: Newport Barning	Ranch		State: CA Sempling Point: 35
Landorm (hillslope, ferrace, etc.):  Local relief (concave, convex, none):  Slope (%):  Storregion (LRR): C  Lat: 23. 6 3 6 2 7 8 Long: 117.95291 Datum: DAT  Soll Map Unit Name: 1044 Add  Are climatic / hydrologic conditions on the site typical for this time of year? Yes V  No (If no, explain in Remarks.)  Are Vegetation Soil or Hydrology significantly disturbed?  Are 'Normal Circumstances' present? Yes V  No (If no explain in Remarks.)  SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, thydrophytic Vegetation Present?  Yes No (If no explain any answers in Remarks.)  SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, within a Wetland?  Yes No (If no explain any answers in Remarks.)  SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, within a Wetland?  Yes No (If no explain any answers in Remarks.)  It the Sampled Area within a Wetland?  Yes No (If no explain any answers in Remarks.)  Summary of pominant Species (If no explain any answers in Remarks.)  Summary of Dominant Species (If no explain any answers in Remarks.)  Summary of Dominant Species (If no explain any answers in Remarks.)  Summary of Dominant Species (If no explain any answers in Remarks.)  Summary of Dominant Species (If no explain any answers in Remarks.)  Summary of Dominant Species (If no explain any answers in Remarks.)  Summary of Dominant Species (If no explain any answers in Remarks.)  Summary of Dominant Species (If no explain any answers in Remarks.)  Summary of Dominant Species (If no explain any answers in Remarks.)  Summary of Dominant Species (If no explain any answers in Remarks.)  Summary of Dominant Species (If no explain any answers in Remarks.)  Summary of Dominant Species (If no explain any answers in Remarks.)  Summary of Dominant Species (If no explain any answers in Remarks.)  Summary of Dominant Species (If no explain any answers in Remarks.)  Summary of Dominant Specie	investigator(s): Gary Medeiros, Allison Rudalevige		Section, Township, F	Range: N/A - "Santiago De Santa Ana" land grant
Detum: MAL Substitution (Like): Lat: 35. 6 36 2 78	Landform (hillslope, terrace, etc.):		Local relief (concave	CORNOY mama)
No   Continue   New   No   No   No   No   No   No   No   N	Subregion (LRR): C	Lat: _2	3.636278	long: -117,95791 Detum 114D 8
we climatic / hydrologic conditions on the site typical for this time of year? Yes No	Soil Map Unit Name: 104 Aats			NWI classification: PFMCx
re Vegetation Soil or Hydrology naturally problematic?	re climatic / hydrologic conditions on the site typical for	this time of ye	ear? Yes   ✓ No.	(If no explain in Remarks )
Within a Wetland?   Soli   Continue	re Vegetation, Soil, or Hydrology	_ significantly		
UMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, 1-lydrophytic Vegetation Present? Yes				
Is the Sampled Area				locations, transects, important features, etc.
Septing/Shrub Stratum (Plot size:				
Remarks:    Cover   Species   Status   Dominant Indicator   Species   Status   Species Across All Strata:   Cover	Hydric Soil Present? Yes			
Absolute Species? Status (Plot size:) Absolute Species? Status   Dominant Indicator Species? Status   Dominant Species That Are OBL, FACW, or FAC: (A)		No X	within a Wetla	and? Yes No
Absolute % Cover Species? Status    Dominant Indicator Species? Status	temarks:			
Absolute % Cover Species? Status    Dominant Indicator Species? Status				
Absolute % Cover Species? Status    Dominant Indicator Species? Status				#- #
Number of Dominant Species That Are OBL, FACW, or FAC:    Total Number of Dominant Species That Are OBL, FACW, or FAC:   Z (A)	EGETATION – Use scientific names of pla			de de
Number of Dominant Species That Are OBL, FACW, or FAC:    Total Number of Dominant Species   Total Number of Dominant Species Across All Strata:   Z   (B)	ree Stratum (Plot size:)		Dominant Indicator	, m
Total Number of Dominant Species Across All Strata:  Description of Dominant Species That Are OBL, FACW, or FAC:    Prevalence Index worksheet:			openios: Ciatas	1 70 1 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Species Across All Strata:    D				(A)
Percent of Dominant Species That Are OBL, FACW, or FAC:    Prevalence Index worksheet:   Total % Cover of: Multiply by:				
That Are OBL, FACW, or FAC:    Prevalence Index worksheet:   Total % Cover of:   Multiply by:				(5)
Prevalence Index worksheet:  Total % Cover of: Multiply by:  OBL species x1 = FACW species x2 = FAC species x3 = FACU species x4 = UPL species x5 = Column Totals: (A) (E)  Prevalence Index species x4 = Hydrophytic Vegetation Indicators:  Dominance Test is >50%  Prevalence Index is <3.01  Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)	apling/Shrub Stratum (Plot size:)		= Total Cover	That Are OBL, FACW, or FAC: 100/b (A/B)
Total % Cover of: Multiply by:  OBL species				Prevalence Index worksheet:
OBL species x1 = FACW species x2 = FAC species x3 = FAC species x4 = UPL species x5 = Column Totals: (A) (Expression and East of the Stratum				
FAC species x3 =  FAC species x3 =  FACU species x4 =  UPL species x5 =  Column Totals: (A) (E  Prevalence Index = B/A =  Hydrophytic Vegetation Indicators:  Dominance Test is >50%  Prevalence Index is ≤3.0¹  Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  The species x3 =  FACU species x4 =  UPL species x5 =  Column Totals: (A) (E  Prevalence Index = B/A =  Hydrophytic Vegetation Indicators:  Dominance Test is >50%  Prevalence Index is ≤3.0¹  Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)				
Stratum   (Plot size:				
Salicaria Virginica  Franceira Saling Egrandifolia 30  Franceira Saling E				
Francenia Salva Egrandifolia 30	erb Stratum (Plot size:)		= Total Cover	
Prevalence Index = B/A =    Hydrophytic Vegetation Indicators:   Dominance Test is >50%     Prevalence Index is ≤3.0¹     Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)     Dominance Test is >50%     Prevalence Index is ≤3.0¹     Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)     Problematic Hydrophytic Vegetation¹ (Explain)	Salicornia Virginica		Y OBL	
Hydrophytic Vegetation Indicators:  Dominance Test is >50%  Prevalence Index is ≤3.0¹  Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  The state Cover Problematic Hydrophytic Vegetation¹ (Explain)	Frankenia Saling Igranditolia J	<u> 30                                    </u>		Column Totals:(A)(B)
Dominance Test is >50%  Prevalence Index is ≤3.0¹  Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  The state Cover Problematic Hydrophytic Vegetation¹ (Explain)				
Prevalence Index is ≤3.0¹  Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  The state Cover — Problematic Hydrophytic Vegetation¹ (Explain)				
Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  The state Cover and the supporting data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)				1.7
data in Remarks or on a separate sheet)  Total Cover Problematic Hydrophytic Vegetation¹ (Explain)				
Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)				data in Remarks or on a separate sheet)
oody Vine Stratum (Plot size:		110	= Total Cover	
Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
		- <u></u>	T ( 10	
Vogostation	Raya Cround in Harb Obert			
Bare Ground in Herb Stratum		er of Biotic Cri	ust <i>V</i>	

Profile Description: (Describe to the do	epth needed to docum	GIN HIGH		we summer be	n une ausenc	G ON INVITEDIONS I
Depth <u>Matrix</u>	Redox	Features				5 4. managara.,
(inches) Color (moist) %	Color (moist)	%	_Tvpe <sup>1</sup> _	Loc <sup>2</sup>	Texture	Remarks
6-14 104R4/3 100					clay	
14-16 104R413 80	104R5/6	20	<u> </u>	PL	clay	distinct mottles
Type: C=Concentration, D=Depletion, RM ydric Soil Indicators: (Applicable to all Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR C) 1 cm Muck (A9) (LRR D) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1)	l=Reduced Matrix, CS= LRRs, unless otherw Sandy Redox Stripped Matri Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark St Depleted Dark Redox Depres Vernal Pools (I	ise noted (S5) x (S6) Mineral ( I Matrix (F ix (F3) urface (F0 Surface sions (F8	F1) F2) 6) (F7)	Sand Gra	Indicators  1 cm N 2 cm N Reduce Red Pa Other (	cation: PL=Pore Lining, M=Matrix.  for Problematic Hydric Soils <sup>3</sup> :  Muck (A9) (LRR C)  Muck (A10) (LRR B)  ed Vertic (F18)  arent Material (TF2)  (Explain in Remarks)  of hydrophytic vegetation and hydrology must be present,
_ Sandy Gleyed Matrix (S4)					unless di	sturbed or problematic.
_ Sandy Gleyed Matrix (S4)					unless di	sturbed or problematic.
Sandy Gleyed Matrix (S4) estrictive Layer (if present):					unless di Hydric Soil	
Sandy Gleyed Matrix (S4) estrictive Layer (if present):  Type: Depth (inches):	Salt Crust (B1 Biotic Crust (E Aquatic Invert Hydrogen Sult Oxidized Rhiz Presence of R	312) ebrates (l fide Odor ospheres Reduced I	(C1) along Liv ron (C4)		Second  Second  Second  Dr  Cr  CC3)  Cr	dary Indicators (2 or more required) ater Marks (B1) (Riverine) addiment Deposits (B2) (Riverine) iff Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8)
Sandy Gleyed Matrix (S4) estrictive Layer (if present):  Type: Depth (inches): emarks:  DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required _ Surface Water (A1) _ High Water Table (A2) _ Saturation (A3) _ Water Marks (B1) (Nonriverine) _ Sediment Deposits (B2) (Nonriverine) _ Drift Deposits (B3) (Nonriverine) _ Surface Soil Cracks (B6) _ Inundation Visible on Aerial Imagery (B7)	Salt Crust (B1 Biotic Crust (E Aquatic Invert Hydrogen Sult Oxidized Rhiz Presence of R Recent Iron R	312) ebrates (lefide Odor cospheres Reduced I eduction rface (C7	(C1) s along Liveron (C4) in Tilled S		Second	dary Indicators (2 or more required) ater Marks (B1) (Riverine) addiment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C
Sandy Gleyed Matrix (S4) estrictive Layer (if present): Type: Depth (inches): emarks:  DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	Salt Crust (B1 Biotic Crust (E Aquatic Invert Hydrogen Sult Oxidized Rhiz Presence of R Recent Iron R	312) ebrates (lefide Odor cospheres Reduced I eduction rface (C7	(C1) s along Liveron (C4) in Tilled S		Second	dary Indicators (2 or more required) ater Marks (B1) (Riverine) addiment Deposits (B2) (Riverine) iff Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8)
Sandy Gleyed Matrix (S4) estrictive Layer (if present): Type: Depth (inches): emarks:  DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7 Water-Stained Leaves (B9) eld Observations:	Salt Crust (B1 Biotic Crust (E Aquatic Invert Hydrogen Sult Oxidized Rhiz Presence of R Recent Iron R Thin Muck Sur Other (Explain	312) ebrates (lifide Odor cospheres Reduced I deduction rface (C7	(C1) s along Liv ron (C4) in Tilled S ) arks)	Soils (C6)	Second	dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (Catallow Aquitard (D3)
Sandy Gleyed Matrix (S4) estrictive Layer (if present):  Type:	Salt Crust (B1 Biotic Crust (E Aquatic Invert Hydrogen Sult Oxidized Rhiz Presence of R Recent Iron R Thin Muck Su Other (Explain	312) ebrates (lifide Odor cospheres Reduced I eduction rface (C7 n in Rema	(C1) s along Liv ron (C4) in Tilled S ()	Soils (C6)	Second	dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (Catallow Aquitard (D3)
Sandy Gleyed Matrix (S4) estrictive Layer (if present):  Type: Depth (inches): emarks:  DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required for the sequence of t	Salt Crust (B1 Biotic Crust (E Aquatic Invert Hydrogen Sult Oxidized Rhiz Presence of R Recent Iron R Thin Muck Sur Other (Explain No Depth (inches	ebrates (I fide Odor cospheres Reduced I reduction rface (C7 n in Remans): s): s):	(C1) s along Liveron (C4) in Tilled S ) arks)	Soils (C6)	Second  Second  Second  Second  Second  Cond  Co	dary Indicators (2 or more required) ater Marks (B1) (Riverine) addiment Deposits (B2) (Riverine) iff Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (Catallow Aquitard (D3) AC-Neutral Test (D5)
Sandy Gleyed Matrix (S4) estrictive Layer (if present):  Type: Depth (inches): emarks:  DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required for the sequence of t	Salt Crust (B1 Biotic Crust (E Aquatic Invert Hydrogen Sult Oxidized Rhiz Presence of R Recent Iron R Thin Muck Sur Other (Explain No Depth (inches	ebrates (I fide Odor cospheres Reduced I reduction rface (C7 n in Remans): s): s):	(C1) s along Liveron (C4) in Tilled S ) arks)	Soils (C6)	Second  Second  Second  Second  Second  Cond  Co	dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (Catallow Aquitard (D3)
Sandy Gleyed Matrix (S4) estrictive Layer (if present):  Type: Depth (inches):	Salt Crust (B1 Biotic Crust (E Aquatic Invert Hydrogen Sult Oxidized Rhiz Presence of R Recent Iron R Thin Muck Sur Other (Explain No Depth (inches	ebrates (I fide Odor cospheres Reduced I reduction rface (C7 n in Remans): s): s):	(C1) s along Liveron (C4) in Tilled S ) arks)	Soils (C6)	Second  Second  Second  Second  Second  Cond  Co	dary Indicators (2 or more required) ater Marks (B1) (Riverine) addiment Deposits (B2) (Riverine) iff Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (Catallow Aquitard (D3) AC-Neutral Test (D5)

Project/Site: Newport Banning Ranch (Newport 10:	City/County:	Newport Beach/Orange Sampling Date: 7/16/DG
Applicant/Owner: Newpost Earning Ran		State: <u>CA</u> Sampling Point: 36
Investigator(s): Gary Medeiros, Allison Rudalevige		nship, Range: N/A - "Santiago De Santa Ana" land grant
Landform (hillslope, terrace, etc.):	Local relief (c	concave convey none).
Subregion (LRR): C	Lat: 33.6367	58 Long: 117, 95279 Datum: NAD83
Soil Map Unit Name: tidal flats		NWI classification: PEMCx
Are climatic / hydrologic conditions on the site typical for t	his time of year? Yes ✓	No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology		(****) September 1. Normania.)
Are Vegetation, Soil, or Hydrology		Are "Normal Circumstances" present? Yes No
		(If needed, explain any answers in Remarks.)  point locations, transects, important features, etc.
1	1	inportant reatures, etc.
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes		Sampled Area
Wetland Hydrology Present? Yes		a Wetland? Yes NoX
Remarks:		
VEGETATION – Use scientific names of pla		# # #
Tree Stratum (Plot size:)	Absolute Dominant Inc.  % Cover Species? S	tatus
1		That Are ORL EACW or EAC:
2		(4)
J		Total Number of Dominant Species Across All Strata:  (B)
4	= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: 1000/0 (A/B)
1		Prevalence Index worksheet:
2		Total % Cover of: Multiply by:
34		
5		
	= Total Cover	
Herb Stratum (Plot size:) 1. Frankenia salina Egranditalia)		LIDI
2. Salicocnia visginica	30 Y 1	Column Totals: (A)
3	- <del>- 10</del> - <del>y</del> - <del>c</del>	15L
4		Prevalence Index = B/A =
5		Dominance Test is >50%
6.		Prevalence Index is ≤3.0¹
7 8		Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
	= Total Cover	
Woody Vine Stratum (Plot size:)		
1 2		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	= Total Cover	,,,,,,,, .
% Bare Ground in Herb Stratum % Cove	r of Biotic CrustO	Vegetation Present? Yes No
ivemans.		

7	1.
$\supset$	Q

						Sampling Point:
Profile Description: (Describe to the depth	needed to docum	ent the i	ndicator o	or confirm	the absence	of indicators.)
Depth <u>Matrix</u> (inches) Color (moist) %	Redox	<u>Features</u>				
	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
<u> </u>	. 1.0				clay	
12-16 104R5/2 80 1	048518	40	C	M	clay	prominent moffle
						- Francisco Parro
				·	· · · · · · · · · · · · · · · · · · ·	
					····	
Type: C=Concentration D-Donotion BM-Do	du					
Type: C=Concentration, D=Depletion, RM=Rei lydric Soil Indicators: (Applicable to all LRF	duced Matrix, CS=	Covered o	or Coated	Sand Gra		ation: PL=Pore Lining, M=Matrix.
Histosol (A1)			1.)		Indicators f	or Problematic Hydric Soils³:
Histic Epipedon (A2)	<ul><li>Sandy Redox</li><li>Stripped Matri</li></ul>					uck (A9) (LRR C)
Black Histic (A3)	Loamy Mucky		E4\			ıck (A10) (LRR B)
Hydrogen Sulfide (A4)	Loamy Gleyed					d Vertic (F18)
Stratified Layers (A5) (LRR C)	Depleted Matr		<i>-)</i>			ent Material (TF2)
1 cm Muck (A9) (LRR D)	Redox Dark S		3)		Onler (E	explain in Remarks)
_ Depleted Below Dark Surface (A11)	Depleted Dark	Surface	, (F7)			-\$- e
_ Thick Dark Surface (A12)	Redox Depres	ssions (F8	)		<sup>3</sup> Indicators of	f hydrophytic vegetation and
_ Sandy Mucky Mineral (S1)	Vernal Pools (	F9)			wetland hy	/drology must be present,
Sandy Gleyed Matrix (S4) estrictive Layer (if present):						turbed or problematic.
- · · · · · · · · · · · · · · · · · · ·						
Type:						,
Depth (inches):	<u>.                                    </u>				Hydric Soil P	resent? Yes No
/DROLOGY						
/etland Hydrology Indicators:						
rimary Indicators (minimum of one required; che	ack all that apply					
_ Surface Water (A1)		4.43	· · · · · · · · · · · · · · · · · · ·			ary Indicators (2 or more required)
_ High Water Table (A2)	Salt Crust (B					ter Marks (B1) (Riverine)
Saturation (A3)	Biotic Crust (I		2.401			liment Deposits (B2) ( <b>Riverine</b> )
_ Water Marks (B1) (Nonriverine)	Aquatic Inversion Hydrogen Sul					t Deposits (B3) (Riverine)
_ Sediment Deposits (B2) (Nonriverine)						inage Patterns (B10)
_ Drift Deposits (B3) (Nonriverine)	<ul><li>Oxidized Rhiz</li><li>Presence of F</li></ul>	cosbueres	along Liv	ing Roots		-Season Water Table (C2)
_ Surface Soil Cracks (B6)	Recent Iron F			)-il- (Oo)		yfish Burrows (C8)
_ Inundation Visible on Aerial Imagery (B7)	Thin Muck Su	irface (C7	ni ineu s V	olis (Cb)		uration Visible on Aerial Imagery (C9)
_ Water-Stained Leaves (B9)	Other (Explain	-	•		√ Sha	illow Aquitard (D3)
eld Observations:		- TOTTE	11/2)	1		C-Neutral Test (D5)
urface Water Present? Yes No _	X Depth (inche	ie).				
ater Table Present? Yes No	Depth (inche					
		:5)	-	1		
ioludes capitally fillige)	√ Depth (inche			1		Present? Yes No 🔨
escribe Recorded Data (stream gauge, monitor	ing well, aerial pho	tos, previ	ous inspe	ctions), if	available:	
			-	,-		
emarks:						

Project/Site: Newport Banning Ranch (Newport J015)	City/C	ounty: Newpor	t Beach/Orange	Sampling Date:	Alliotra
Applicant/Owner: Newpost Bourning Ranc	Vi		State: CA	Sampling Point:	37
Investigator(s): Gary Medeiros, Allison Rudalevige	Section	on, Township, Ra	ange: N/A - "Santiago D	e Santa Ana" lar	nd grant
Landform (hillslope, terrace, etc.):	Local	relief (concave.	convex. none):	Slor	ne (%).
Subregion (LRR): C	at:	,	Long:	Datur	n·
Soil Map Unit Name:			NWI classific	ation:	11.
Are climatic / hydrologic conditions on the site typical for this time	e of vear? Y	es √ No	(If no, evolain in P	emarke )	
Are Vegetation, Soil, or Hydrology signifi			"Normal Circumstances" p		, No
Are Vegetation, Soil, or Hydrology natura			eeded, explain any answe		NO
SUMMARY OF FINDINGS – Attach site map sho		•	· · · · · · · · · · · · · · · · · · ·	,	atures, etc.
Hydrophytic Vegetation Present?  Yes Y  No  Hydric Soil Present?  Yes Y  No		Is the Sampled	Area	No ×	
Wetland Hydrology Present? Yes No  Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum         (Plot size:)         % (           1	Cover Spec	nant Indicator ies? Status	Dominance Test works  Number of Dominant Sp That Are OBL, FACW, o	ecies	) (A)
2			Total Number of Domina	unt C	
3			Species Across All Strat	a: <u>3</u>	(B)
Sapling/Shrub Stratum (Plot size:	<b>O</b> = Tota		Percent of Dominant Sp That Are OBL, FACW, o		7 <u>(A/B)</u>
1. Bacharis Salicitolia [vimina] 4	D y	6-ACIU	Prevalence Index work	sheet:	
2			Total % Cover of:		by:
3			OBL species		
4			FACW species	x 2 =	
5			FAC species	x 3 =	
Herb Stratum (Plot size:	<u>0</u> = Tota	ıl Cover	FACU species		
	10 y	FACW	UPL species	x 5 =	
2. Salicornia Virginica 2	0 7	OBL	Column Totals:	(A)	(B)
3			Prevalence Index	= B/A =	
4			Hydrophytic Vegetation		
5			# Dominance Test is >	<del>-</del> 50%	
6.			Prevalence Index is	≤3.0 <sup>1</sup>	
7.       8.				or on a separate s	heet)
Woody Vine Stratum (Plot size:)	<u>&gt;0</u> = Tota		Problematic Hydropi	hytic Vegetation <sup>1</sup> (I	Explain)
1.       2.			<sup>1</sup> Indicators of hydric soil be present, unless distur	and wetland hydro bed or problematio	logy must
_6	) = Tota	l Cover	Hydrophytic		
% Bare Ground in Herb Stratum % Cover of Bio	otic Crust	ତ	Vegetation Present? Yes	<u>≻</u> No	
Remarks:					

Project/Site: Newport Banning Ranch (Newport J01	5)	City/0	County Newn	ort Beach/Orange	Committee of Date	71/6/1
Applicant/Owner: Newport Banning Ran	ch	_		State: CA	_ Sampling Date: _	30
Investigator(s): Gary Medeiros, Allison Rudalevige		Section	on. Township	Range: N/A - "Santiago	_ Sampling Point: _	
Landform (hillslope, terrace, etc.):		Local	relief (concav	a convoy ronal:	De Santa Ana Tar	io grant
Subregion (LRR): C	Lat: 3	3 , La	35327	22 Long:	Slop	oe (%):
Soil Map Unit Name: tidal flats				Long: 11 - 13	D920Ce Datum	n: <u>MAD 8</u>
Are climatic / hydrologic conditions on the site typical for the	is time of ve	ar? V	/	NWI classif		<u> </u>
Are Vegetation, Soil, or Hydrology				(If no, explain in I		_
Are Vegetation, Soil, or Hydrology				e "Normal Circumstances"		No
SUMMARY OF FINDINGS – Attach site map			V	needed, explain any answ	ers in Remarks.)	
		,	ping poni	iocations, transect	s, important rea	itures, etc
Hydrophytic Vegetation Present?  Yes Yes N	· ——		Is the Sample	ed Area		
Hydric Soil Present? Yes N Wetland Hydrology Present? Yes N	10 <del>- \( \)</del>	Į	within a Wetl		No_X	
Remarks:	10			hand the same of t		
/EGETATION Use scientific names of plan  Tree Stratum (Plot size:)  1)	Absolute % Cover	Speci	nant Indicator ies? Status	Dominance Test work  Number of Dominant S That Are OBL, FACW,	sheet:	
2						(A)
3				Total Number of Domin Species Across All Stra		(B)
4			l Cover	Percent of Dominant Sp That Are OBL, FACW, o	or FAC:( <i>D</i>	0/ <sub>0</sub> (A/B)
1 2				Prevalence Index work		
3				Total % Cover of:		
4.		-		OBL species		
5				FAC species		
Harh Stratum (Diet sine)	O	= Tota	l Cover	FACU species		
Herb Stratum (Plot size:) 1. Sali cornia Virginica	COD		0BL	UPL species		
2. Frankenia Salina Egrandifolia)	-5	-7	FACIO	Column Tatala		(B)
3. Mesembry anthemum Crystallinum	2_	~~~~		Prevalence Index	- D/A -	
4		-		Hydrophytic Vegetation		
5				Dominance Test is		
0				Prevalence Index is		
7.				Morphological Ada	otations <sup>1</sup> (Provide su	pporting
8.					or on a separate sh	
Woody Vine Stratum (Plot size:)	10+	= Tota	l Cover	Problematic Hydrop	ohytic Vegetation <sup>1</sup> (E	Explain)
1				<sup>1</sup> Indicators of hydric soil be present, unless distu	and wetland hydrol rbed or problematic	ogy must
	0	= Tota	l Cover	Hydrophytic		
% Bare Ground in Herb Stratum $\frac{33}{}$ % Cover	of Biotic Cr		6	Vegetation	. V	
Remarks:				Present? Yes	s No	

Type: C-Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C-Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C-Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C-Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thistosc (A1)  Histosc (A2)  Histosc (A2)  Histosc (A2)  Stripped Matrix (S5)  Stripped Matrix (S5)  Loany Glayd Matrix (S5)  1 cm Muck (A9) (LRR C)  Depleted Matrix (F3)  1 cm Muck (A9) (LRR C)  Depleted Layers (A5) (LRR C)  Depleted Dark Surface (F1)  Thick Dark Surface (A12)  Depleted Dark Surface (F7)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Vernal Pools (F9)  Wetland Hydrology Indicators or Indicators of hydrophytic vegetation and wall and hydrology must be present, unless disturbed or problematic.  **Problematics**  **Problematics**  **Problematics**  **Indicators of hydrophytic vegetation and wall and hydrology must be present, unless disturbed or problematic.  **Problematics**  **Problematics**  **Problematics**  **Indicators of hydrophytic vegetation and wall and hydrology must be present, unless disturbed or problematic.  **Problematics**  **Problematics**  **Problematics**  **Problematics**  **Problematics**  **Problematics**  **Problematics**  **Problematics**  **Indicators of hydrophytic vegetation and wall and hydrology must be present, unless disturbed or problematic.  **Problematics**	Longitude   Long	Profile Desc	ription: (Describe (	o the dep	th needed to docu	ment me	moncator	AND STREET AND STREET	n ine ansenc	e of indicatore t
D-\\   D\   S   D\   S   2   G   D   D\   R   S   D   C   M   C   C   C   C   C   C   C   C	Description	Depth	Matrix						., (10.00.10	o or mondators.
Description	Description							_Loc <sup>2</sup>	Texture	Remarks
International Content   Inte		2-16	104RS/2	[00					day	
Dipport   Dipp	DPROLOGY   DP S   DD   Depletion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains.	16-18	104R5/2	90	104R718	10	C	M		promingut moffles
Digitary   Description   Des	Dipps: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.	18 -20	104 5/1	100			-			
Histosol (A1) Sandy Redox (S5)	Histosol (A1)								_clay_	gleyed watthx
Histosol (A1) Sandy Redox (S5)	Histosol (A1)	Turne Co-O								
Histic Epipedon (A2) Stripped Matrix (S6) 2 m Muck (A9) (LRR C) Black Histic (A3) 2 Loamy Mucky Minorat (F1) Reduced Vertic (F18) Pepleted Below Dark Surface (A11) Depleted Dark Surface (F6) Depleted Dark Surface (F19) Reduced Vertic (F18) Pepleted Dark Surface (F17) Percentil Vertic (F18) Percentil Vertic (F18) Percentil Vertic (F18) Percent (F18) Percentil Vertic (F18) Percent (F18) Percentil Vertic (F18) Percent (F18) Percentil Vertic (F18)	Histic Epipedon (A2) Siripped Matrix (S5) 2 m Muck (A9) (LRR C) Black Histic (A3) 2 Loamy Mucky Mineral (F1) Reduced Vertic (F18) Black Histic (A3) 4 Loamy Mucky Mineral (F1) Reduced Vertic (F18) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Reduced Vertic (F18) 1 cm Muck (A9) (LRR C) Depleted Matrix (F2) Redoced Vertic (F18) Depleted Below Dark Surface (A11) Depleted Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) Redox Depressions (F8) wetland hydrology must be prosent, unless disturbed or problematic.  Type: Depth (inches): Hydric Soil Present? Yes No  Depleted Dark Surface (A12) Secondary Indicators (2 or more required) Depth (inches): Surface (A12) Soil Crust (B12) Surface Water (A1) Surface (A12) Soil Crust (B12) Surface Water (A1) Surface Water (A1) Surface Water (A1) Surface Water (A2) Biolic Crust (B12) Surface Water (A3) Pydrogen Sulfide Odor (C1) Surface Water (A3) Aqualic Invertebrates (B13) Drift Deposits (B3) (Riverine) Sediment Deposits (B2) (Nonriverine) Hydrogen Sulfide Odor (C1) Drainge Patterns (B10) Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Drainge Patterns (B10) Dirft Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Sulface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Did Observations:  rface Water Present? Yes No Depth (inches): Literator Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Secribe Recorded Data (stream gauge, monitoring well, aertal photos, previous Inspections), if available:	vdric Soil Ir	ncentration, D=Deple	tion, RM=	Reduced Matrix, CS	S=Covered	or Coated	d Sand Gra		cation: PL=Pore Lining, M=Matrix.
Histic Epipedon (A2) Stripped Matrix (S6) 1 cm Muck (A9) (LRR C) 2 cm Muck (A10) (LRR B) 8 lack Histic (A3) 2 cm Muck (A10) (LRR B) 8 lack Histic (A3) 2 cm Muck (A10) (LRR B) 8 lack Histic (A3) 4 camy Mucky Mineral (F1) 8 reduced Vertic (F18) 8 reduced Vertic (F18) 8 reduced Vertic (F18) 9 reduced Vertic (F18) 8 reduced Vertic (F18) 9 reduced	Histic Epipedon (A2) Stripped Matrix (S6) 1 cm Muck (A9) (LRR C) 2 cm Muck (A70) (LRR B) Black Histic (A3) 2 cm Muck (A70) (LRR B) Black Histic (A3) 2 cm Muck (A70) (LRR B) 1 cm Muck (A70) (LRR B) 2			ne to an t			ed.)		Indicators	for Problematic Hydric Soils <sup>3</sup> :
Bilack Histic (A3)	Black Histic (A3)		•							
Hydrogen Sulfide (A4)  Stratified Layers (A5) (LRR C)  Depleted Matrix (F2)  1 cm Muck (A9) (LRR D)  Depleted Below Dark Surface (A11)  Depleted Dark Surface (F6)  Depleted Below Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Setricitive Layer (if present):  Type:  Depth (inches):  Perparative:  Depth (inches):  Surface Water (A1)  Surface Water (A1)  Surface Water (A1)  Surface (A3)  Sandy Mucky Mineral (S1)  Surface (A12)  Sandy Mucky Mineral (S1)  Surface (A12)  Surface (A12)  Surface (A12)  Surface Water (A1)  Surface Soil Cracks (B1) (Nonriverine)  Oxidized Rhizospheres along Living Roots (C3)  Dry-Season Water Table (C2)  Craylish Burrows (C8)  Surface Soil Cracks (B6)  Recent Iron Reduction in Tilled Soils (C6)  Surface Soil Cracks (B6)  Recent Iron Reduction in Tilled Soils (C6)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Surface Water Present?  Yes  No  Depth (inches):  Surf	Hydrogen Sulfide (A4)  Stratified Layers (A5) (LRR C)  Depleted Matrix (F2)  And Commy Gleyed Matrix (F2)  Depleted Below Dark Surface (A11)  Depleted Below Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sestrictive Layer (if present):  Type:  Depth (inches):  Depth (inches):  Depth (inches):  Depth (inches):  Sandy Mucky Mineral (S1)  Surface Water (A1)  Salt Crust (B11)  Water Marks (B1) (Riverine)  Salt Crust (B12)  Salt Crust (B12)  Sadiment Deposits (B3) (Riverine)  Water Marks (B1) (Nonriverine)  Dydrogen Sulfide Odor (C1)  Drift Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Surface Soil Cracks (B6)  Recent Iron Reduction in Titled Soils (C6)  Saturation Visible on Aerial Imagery (S7)  Water Stained Leaves (B9)  Other (Explain in Remarks)  And Water Marks (B1) (Riverine)  Drift Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Surface Soil Cracks (B6)  Recent Iron Reduction in Titled Soils (C6)  Saturation Visible on Aerial Imagery (S7)  Water-Stained Leaves (B9)  Other (Explain in Remarks)  Drift Deposits? Yes No Depth (inches):  Inturation Present? Yes No Depth (inches):  Surface Water Present? Yes No Depth (inches):  Surface Water Present? Yes No Depth (inches):  Statutation Present? Yes No Depth (inches):  Surface Water Present? Yes No D						/E4\			
Stratified Layers (A5) (LRR C)  Depleted Matrix (F3)  Depleted Balow Dark Surface (A11)  Depleted Dark Surface (F6)  Depleted Dark Surface (F7)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Strictive Layer (if present):  Type:  Depth (inches):  Biolic Crust (B12)  Sattration (A3)  Water Marks (B1) (Norriverine)  Saturation (Nai)  Water Marks (B2) (Nonriverine)  Depth (inches):  Saturation Visible on Aerial Imagery (C2)  Drift Deposits (B3) (Nonriverine)  Drift Deposits (B3) (No	Stratified Layers (A5) (LRR C)  Depleted Matrix (F3)  Coher (Explain in Remarks)  Depleted Below Dark Surface (A11)  Depleted Dark Surface (F8)  Depleted Dark Surface (F8)  Depleted Dark Surface (F8)  Depleted Dark Surface (F7)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Serioritive Layer (if present):  Type:  Depth (Inches):  Bear Indicators (minimum of one required; check all that apply)  Secondary Indicators (Minimum of one required; check all that apply)  Secondary Indicators (P7)  Saturation (A3)  Water Marks (B1) (Riverine)  Hydric Soil Present? Yes No  Drift Deposits (B2) (Nonriverine)  Drift Deposits (B2) (Nonriverine)  Drift Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Drift Depo									
1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) Wetland hydrology must be present wetland hydrology must be present unless disturbed or problematic.  Type: Depth (inches):  DROLOGY  Bitland Hydrology Indicators: Imary Indicators (minimum of one required: check all that apply) Surface Water (A1) Salt Crust (B12) Sediment Deposits (B2) (Riverine) Surface Water (A1) Sediment Deposits (B2) (Riverine) Surface Water (A3) Aquatic Invertebrates (B13) Drit Deposits (B3) (Riverine) Sediment Deposits (B3) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drit Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Recent fron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (B7) Water Stained Leaves (B8) Other (Explain in Remarks)  **Indicators of hydrophytic vegetation and wetland hydrology must be present.  ### Water Marks (B1) (Norriverine)  ### Bit office Turner Required  **Indicators of hydrophytic vegetation and wetland hydrology must be present.  ### Water Marks (B1) (Riverine)  ### Secondary Indicators (2 or more required)  ### Water Marks (B1) (Riverine)  ### Secondary Indicators (2 or more required)  ### Water Marks (B1) (Riverine)  ### Secondary Indicators (2 or more required)  ### Water Marks (B1) (Riverine)  ### Secondary Indicators (2 or more required)  ### Water Marks (B1) (Riverine)  ### Secondary Indicators (2 or more required)  ### Water Marks (B1) (Riverine)  ### Deposits (B2) (Riverine)  ### Deposits (B2) (Riverine)  ### Drit Deposits (B2) (Riverine)  ### Drit Deposits (B3) (Riverine)  ### Drit	1 cm Muck (A9) (LRR D)				Depleted Ma	atrix (F3)	(1.2)			
Depleted Below Dark Surface (A11)	Depleted Below Dark Surface (A11)	_ 1 cm Muc	k (A9) (LRR D)		Redox Dark	Surface (i	=6)		Other	(⊏xplain in Remarks)
Thick Dark Surface (A12) Redox Depressions (F8)	Thick Dark Surface (A12) Redox Depressions (F8)			A11)						
Sandy Gleyed Matrix (S4) unless disturbed or problematic.  Type:	Sandy Gleyed Matrix (S4) unless disturbed or problematic.  Type:								<sup>3</sup> Indicators	of hydronhytic vegetation and
Secondary Indicators (20 more required)  DROLOGY  International English (10 more)  Surface Water (A1)  Salt Crust (B11)  Surface Water (A2)  Surface Water (A3)  Salt Crust (B12)  Saturation (A3)  Aquatic Invertebrates (B13)  Water Marks (B1) (Riverine)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Saturation (A3)  Saturation (A3)  Water Marks (B2) (Nonriverine)  Drift Deposits (B2) (Nonriverine)  Oxidized Rhizospheres atong Living Roots (C3)  Drift Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Craylish Burrows (C8)  Surface Soil Cracks (B6)  Recent Iron Reduction in Tilled Soils (C6)  Inundation Visible on Aerial Imagery (B7)  Water Saturation (A3)  Presence of Reduced Iron (C4)  Surface Soil Cracks (B6)  Recent Iron Reduction in Tilled Soils (C6)  Surface Water Present?  Yes  No  Depth (inches):  Iter Table Present?  Yes  No  Depth (inches):  Wetland Hydrology Present? Yes  No  Surface Water Present?  Yes  No  Depth (inches):  Wetland Hydrology Present? Yes  No  Surface Water Present?  Yes  No  Depth (inches):  Versioned Available:	Interpretation (As)  Water Marks (B1) (Nonriverine)  Water Marks (B1) (Nonriverine)  Water Marks (B2) (Nonriverine)  Dedit (Ba) (Nonriverine)  Drift Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Surface Soil Cracks (B6)  Recent Iron Reduction in Titled Soils (C6)  Inundation Visible on Aerial Imagery (B7)  Water Present?  Wet Marks (B1) (Nonriverine)  Drift Deposits (B2) (Nonriverine)  Presence of Reduced Iron (C4)  Crayfish Burrows (C8)  Saturation (Visible on Aerial Imagery (B7)  Thin Muck Surface (C7)  Water-Stained Leaves (B9)  Other (Explain in Remarks)  Wetland Hydrology Present?  Yes No Depth (inches):  Wetland Hydrology Present?  Yes No Seminant Applicators (20 or more required.  No March Marks (B1) (Nonriverine)  No March Marks (B1) (Nonriverine)  Secondary Indicators (2 or more required.  No Mater Stained Leaves (3 (3) (Riverine)  Drift Deposits (B2) (Riverine)  D				Vernal Pools	(F9)			wetland i	hydrology must be present.
DROLOGY  International Presents (Present Presents Presents (Present Presents Presents (Presents Presents (Presents Presents Presents Presents (Presents Presents Presents (Presents Presents Presents Presents Presents Presents (Presents Presents Presents Presents Presents (Presents Presents Presents Presents (Presents Presents Presents Presents (Presents Presents Presents Presents Presents Presents (Presents Presents	DROLOGY  International Presents (Present Presents (Present) Presents (					~				
Depth (inches):	DROLOGY  Setland Hydrology Indicators: mary Indicators (minimum of one required; check all that apply) Surface Water (A1) Sulface Water (A1) Sulface Water (A2) Salt Crust (B11) Sediment Deposits (B2) (Riverine) Sediment Deposits (B2) Sediment Deposits (B2) Sediment Deposits (B2) (Nonriverine) Sediment Deposits (B3) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Sediment Deposits (B3) (Nonriverine) Sediment Deposits (B3) (Riverine) Sediment Deposits (B2) (Riverine) Sediment Deposits (B3) (Riverine) Sediment Deposits (B2) (Riverine) Sediment Deposits (B3) (River		ivei in biesenti:							· · · · · · · · · · · · · · · · · · ·
DROLOGY  etland Hydrology Indicators: mary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Sath Crust (B11)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2) (Riverine)  Sediment Deposits (B3) (Riverine)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B3) (Riverine)  Drift Deposits (B3) (Riverine)  Sediment Deposits (B3) (Riverine)  Drift Deposits (B3) (R	DROLOGY  etland Hydrology Indicators: mary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B2) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B2) (Nonriverine)  Drift Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Riverine)  Drift Deposits (B3)	_	. ( ( )							
DROLOGY  etland Hydrology Indicators: imary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Salt Crust (B12)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Hydrogen Sulfide Odor (C1)  Drift Deposits (B2) (Nonriverine)  Drift Deposits (B3)	DROLOGY  etland Hydrology Indicators: imary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Hydrogen Sulfide Odor (C1)  Drift Deposits (B2) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Drift Deposits (B2) (Nonriverine)	Туре:								
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Drift Deposits (B3) (Nonriverine) Drift Deposits (B3) (Nonriverine) Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drift Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drift Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drift Deposits (B2) (Riverine) Drift Deposits (B10) Dr	High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Water Marks (B1) (Riverine)  Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dra	Type: Depth (inch							Hydric Soil	Present? Yes No
Saturation (A3)	Saturation (A3)	Type: Depth (inchemarks:  DROLOG  etland Hydremary Indicate	es): Y ology Indicators: tors (minimum of one	required;					Secon	dary Indicators (2 or more reguired)
Water Marks (B1) (Nonriverine)	Water Marks (B1) (Nonriverine)	Type: Depth (inchemarks:  DROLOG etland Hydromary Indicate Surface W	ology Indicators: tors (minimum of one later (A1)	required;	Salt Crust (I	B11)			<u>Secon</u> W	dary Indicators (2 or more reguired) ater Marks (B1) (Riverine)
Sediment Deposits (B2) (Nonriverine)	Sediment Deposits (B2) (Nonriverine)	Type:	es):	required;	Salt Crust (I	B11) (B12)	(R12)		<u>Secon</u> W Se	dary Indicators (2 or more required) ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine)
Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Ind Observations:  rface Water Present?  Yes No Depth (inches):  turation Present?  Yes No Depth (inches):  cludes capillary fringe)  Surface Water Gracks (B3) (Nonriverine)  Yes No Depth (inches):  Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C1) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No Solutions (C2)  Wetland Hydrology Present? Yes No Solutions (C3)  Wetland Hydrology Present? Yes No Solutions (C4)  Wetland Hydrology Present? Yes No Solutions (C5)  Wetland Hydrology Present? Yes No Solutions (C5)  Wetland Hydrology Present? Yes No Solutions (C5)  No Solution Present? Yes No Solutions (C5)  Wetland Hydrology Present? Yes No Solutions (C5)  No Solution Present? Yes No Solutions (C5)  No Solution Present? Yes No Solutions (C5)  Wetland Hydrology Present? Yes No Solutions (C5)  No Solution Present? Yes No Solution Present? Yes No Solutions (C5)	Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Ind Observations:  rface Water Present?  Yes No Depth (inches):  turation Present?  Yes No Depth (inches):  turation Present?  Yes No Depth (inches):  Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No Soludes capillary fringe) Scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Type: Depth (inchemarks:  DROLOG Etland Hydromary Indicate Surface W High Wate Saturation	ology Indicators: tors (minimum of one fater (A1) or Table (A2) (A3)		Salt Crust (I Biotic Crust Aquatic Inve	B11) (B12) ertebrates			<u>Secon</u> W Se Dr	dary Indicators (2 or more required) ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine)
Recent Iron Reduction in Tilled Soils (C6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Other (Explain in Remarks)  Shallow Aquitard (D3) FAC-Neutral Test (D5)  Trace Water Present?  Yes No Depth (inches): Inundation Visible on Aerial Imagery (C1) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No Depth (inches): Inuration Present?  Yes No Depth (inches): Inuration Present?  Yes No Depth (inches): Inuration Present?  Yes No Depth (inches): Inuration Present?  Yes No Depth (inches): Inuration Present?  Yes No Pr	Recent Iron Reduction in Tilled Soils (C6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Other (Explain in Remarks)  Shallow Aquitard (D3) FAC-Neutral Test (D5)  Thin Muck Surface (C7) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Thin Muck Surface (C7) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Thin Muck Surface (C7) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Thin Muck Surface (C7) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Thin Muck Surface (C7) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Thin Muck Surface (C7) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Thin Muck Surface (C7) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Thin Muck Surface (C7) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Thin Muck Surface (C7) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Thin Muck Surface (C7) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Thin Muck Surface (C7) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Thin Muck Surface (C7) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Thin Muck Surface (C7) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Thin Muck Surface (C7) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Thin Muck Surface (C7) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Thin Muck Surface (C7) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Thin Muck Surface (C7) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Thin Muck Surface (C7) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Thin Muck Surface (C7) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Thin Muck Surface (C7) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Thin Muck Surface (C7) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Thin Muck Surface (C7) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Thin Muck Surface (C7) Shallow Aquitard (D3) FAC-Neutral Test (D5)	Depth (inchemarks:  DROLOGetland Hydromary Indicate West High Wate Saturation Water Mar	ology Indicators: tors (minimum of one rater (A1) rate (A2) (A3) rks (B1) (Nonriverine	)	Salt Crust (I Biotic Crust Aquatic Inve	B11) (B12) ertebrates sulfide Odd	or (C1)	ving Roots	<u>Secon</u> W Se Dr Dr	dary Indicators (2 or more required) ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Pattems (B10)
Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) Shallow Aquitard (D3) FAC-Neutral Test (D5) ster Table Present?	Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) Shallow Aquitard (D3) FAC-Neutral Test (D5)	Depth (inchemarks:  DROLOG  etland Hydremary Indicate Surface W High Wate Saturation Water Mar Sediment I Drift Depos	ology Indicators: tors (minimum of one fater (A1) or Table (A2) (A3) rks (B1) (Nonriverine Deposits (B2) (Nonriverine	) /erine)	Salt Crust (I Biotic Crust Aquatic Inve	B11) (B12) ertebrates sulfide Odo nizosphere	or (C1) es along Li	ving Roots	Secon	dary Indicators (2 or more required) (ater Marks (B1) (Riverine) (addiment Deposits (B2) (Riverine) (addiment Deposits (B3) (Riverine)
Water-Stained Leaves (B9)  Other (Explain in Remarks)  FAC-Neutral Test (D5)  FAC-Neutral Test (D5)  Trace Water Present?  Yes No Depth (inches):  turation Present?  Yes No Depth (inches):  Uturation Present?  Yes No Depth (inches):  Uturation Present?  Yes No Depth (inches):  Scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Water-Stained Leaves (B9)  Other (Explain in Remarks)  FAC-Neutral Test (D5)  FAC-Neutral Test (D5)  Trace Water Present?  Yes No Depth (inches):  turation Present?  Yes No Depth (inches):  Uturation Present?  Yes No Depth (inches):  Scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Depth (inchemarks:  DROLOG  Patland Hydromary Indicate Surface W High Wate Saturation Water Mar Sediment I Drift Depose Surface So	ology Indicators: tors (minimum of one fater (A1) or Table (A2) (A3) rks (B1) (Nonriverine Deposits (B2) (Nonriverine sits (B3) (Nonriverine	) verine) e)	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh	B11) (B12) ertebrates sulfide Odo nizosphere f Reduced	or (C1) es along Li Iron (C4)		Secon  W Se Di C(C3) C(C3)	dary Indicators (2 or more required) (ater Marks (B1) (Riverine) (addiment Deposits (B2) (Riverine) (addiment Deposits (B3) (Riverine) (addiment Deposits (B
rface Water Present? Yes No Depth (inches):	rface Water Present? Yes No Depth (inches):	Depth (inchemarks:  DROLOG  Petland Hydromary Indicate Surface W High Water Mare Sediment I Drift Depose Surface So Inundation	ology Indicators: tors (minimum of one fater (A1) or Table (A2) (A3) rks (B1) (Nonriverine Deposits (B2) (Nonriverine oil Cracks (B6) Visible on Aerial Ima	) verine) e)	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron	B11) (B12) ertebrates sulfide Odo nizosphere f Reduced Reduction	or (C1) es along Li Iron (C4) n in Tilled (		Secon  W Se Dr Dr Cr Se	dary Indicators (2 or more required) ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C8)
turation Present? Yes No Depth (inches):	turation Present? Yes No Depth (inches):	Depth (inchemarks:  DROLOG  Petland Hydromary Indicate Surface W High Water Saturation Water Mar Sediment I Drift Depose Surface So Inundation Water-Stai	ology Indicators: tors (minimum of one fater (A1) or Table (A2) (A3) cks (B1) (Nonriverine Deposits (B2) (Nonriverine Dil Cracks (B6) Visible on Aerial Imalined Leaves (B9)	) verine) e)	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S	B11) (B12) ertebrates culfide Odd nizosphere f Reduced Reduction Surface (C	or (C1) es along Lir Iron (C4) n in Tilled ( 7)		Secon  W Se Di Di CO CO Si	dary Indicators (2 or more required) fater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C8) nallow Aquitard (D3)
turation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	turation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Depth (inchemarks:  DROLOG etland Hydremary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Surface So Inundation Water-Stai	ology Indicators: tors (minimum of one fater (A1) or Table (A2) (A3) rks (B1) (Nonriverine Deposits (B2) (Nonriverine oil Cracks (B6) I Visible on Aerial Imalined Leaves (B9) tions:	) verine) ⊋) gery (B7)	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S	B11) (B12) ertebrates culfide Odd nizosphere f Reduced Reduction Surface (C	or (C1) es along Lir Iron (C4) n in Tilled ( 7)		Secon  W Se Di Di CO CO Si	dary Indicators (2 or more required) fater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C8) nallow Aquitard (D3)
cludes capillary fringe) scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	cludes capillary fringe)  scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Depth (inchemarks:  DROLOG  Prolog  Pr	ology Indicators: tors (minimum of one fater (A1) or Table (A2) (A3) olds (B1) (Nonriverine Deposits (B2) (Nonriverine oil Cracks (B6) Visible on Aerial Ima ined Leaves (B9) tions: Present? Yes	) verine) ≱) gery (B7)	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rt Presence of Recent Iron Thin Muck S Other (Expl	B11) (B12) ertebrates sulfide Odo nizosphere f Reduced Reduction Surface (C ain in Rem	or (C1) es along Li lron (C4) n in Tilled (7) narks)	Soils (C6)	Secon  W Se Di Di CO CO Si	dary Indicators (2 or more required) fater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C8) nallow Aquitard (D3)
		Type:	ology Indicators: tors (minimum of one fater (A1) or Table (A2) (A3) red (A	) verine) ) gery (B7) No	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expla	B11) (B12) ertebrates sulfide Odd nizosphere f Reduced Reduction Surface (C ain in Rem nes):	or (C1) es along Li Iron (C4) n in Tilled 9 7) narks)	Soils (C6)	Secon  W Se Di Di Ci S (C3) Di S (FA	dary Indicators (2 or more required) dater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C8 nallow Aquitard (D3) AC-Neutral Test (D5)
marks:		Depth (inchemarks:  DROLOG  etland Hydra  mary Indicat  Surface W  High Wate  Saturation  Water Mar  Sediment I  Drift Depos  Surface So  Inundation  Water-Staileld Observa  rface Water  ater Table Produces capille	ology Indicators: tors (minimum of one fater (A1) or Table (A2) (A3) rks (B1) (Nonriverine Deposits (B2) (Nonriverine oil Cracks (B6) Visible on Aerial Ima ined Leaves (B9) tions: Present? Yes resent? Yes ary fringe)	) verine) e) gery (B7) No No	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Explant) Depth (inch	B11) (B12) ertebrates sulfide Odo nizosphere f Reduced Reduction Surface (C ain in Rem nes):	or (C1) as along Li Iron (C4) a in Tilled (7) arks)	Soils (C6)	Secon   W   Se   Se   Se   Se   Se   Se   Se	dary Indicators (2 or more required) dater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C8 nallow Aquitard (D3) AC-Neutral Test (D5)
THAT INC.		Depth (inchemarks:  DROLOG etland Hydro imary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Surface Sc Inundation Water-Stai eld Observa arface Water atter Table Protuction Presicues capill escribe Reconservation	ology Indicators: tors (minimum of one fater (A1) or Table (A2) (A3) rks (B1) (Nonriverine Deposits (B2) (Nonriverine oil Cracks (B6) Visible on Aerial Ima ined Leaves (B9) tions: Present? Yes resent? Yes ary fringe)	) verine) e) gery (B7) No No	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Explant) Depth (inch	B11) (B12) ertebrates sulfide Odo nizosphere f Reduced Reduction Surface (C ain in Rem nes):	or (C1) as along Li Iron (C4) a in Tilled (7) arks)	Soils (C6)	Secon   W   Se   Se   Se   Se   Se   Se   Se	dary Indicators (2 or more required) dater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C8 nallow Aquitard (D3) AC-Neutral Test (D5)
		Depth (inch marks: DROLOG Petland Hydromary Indicat Surface W High Water Mar Sediment I Drift Deposed Surface So Inundation Water-Staileld Observater Table Proturation Presidudes capilles	ology Indicators: tors (minimum of one fater (A1) or Table (A2) (A3) rks (B1) (Nonriverine Deposits (B2) (Nonriverine oil Cracks (B6) Visible on Aerial Ima ined Leaves (B9) tions: Present? Yes resent? Yes ary fringe)	) verine) e) gery (B7) No No	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Explant) Depth (inch	B11) (B12) ertebrates sulfide Odo nizosphere f Reduced Reduction Surface (C ain in Rem nes):	or (C1) as along Li Iron (C4) a in Tilled (7) arks)	Soils (C6)	Secon   W   Se   Se   Se   Se   Se   Se   Se	dary Indicators (2 or more required) dater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C8 nallow Aquitard (D3) AC-Neutral Test (D5)

Project/Site: Newport Banning Rar	nch (Newport JC	)15)	City/County: Newpor	rt Beach/Orange	Sampling Date:	7/1/0/09
Applicant/Owner: Newport	BanningR	anch		State: CA	Sampling Point:	39
Investigator(s): Gary Medeiros, Alli				ange: N/A - "Santiago D		
Landform (hillslope, terrace, etc.):						
Subregion (LRR): C		Lat: 3	3.63498	_ Long: -117.9563	Slope (	10)
Soil Map Unit Name: Had Fla	13			NWI classifica	_	101005
Are climatic / hydrologic conditions on		this time of ve				
Are Vegetation, Soil, o				"Normal Circumstances" p		Na
Are Vegetation, Soil, o				eeded, explain any answer		
SUMMARY OF FINDINGS - A			,	• •	,	ros oto
	15 P				important reata	1105, 010.
Hydrophytic Vegetation Present? Hydric Soil Present?	Yes	No <u> </u>	Is the Sampled	d Area	_	
Wetland Hydrology Present?		No	within a Wetla	nd? Yes	No <u> </u>	
Remarks:	169	110				
VEGETATION – Use scientific	c names of pl	ants.				
Trans Otractions (District		Absolute		Dominance Test works	heet:	
Tree Stratum (Plot size:			Species? Status	Number of Dominant Sp		
1				That Are OBL, FACW, or	rFAC:	(A)
3.				Total Number of Domina		
4				Species Across All Strata	a:	(B)
Sapling/Shrub Stratum (Plot size:	)	0	= Total Cover	Percent of Dominant Spe That Are OBL, FACW, or		(A/B)
1				Prevalence Index work	sheet:	
2				Total % Cover of:	Multiply by:	
3				OBL species	x 1 =	
4				FACW species	x 2 =	
5		— <del></del>		I .	x 3 =	l l
Herb Stratum (Plot size:	١		= Total Cover	FACU species		
1. Salicornia virginica	/	40	4 OBL	UPL species		
2. Batis maritima		5	h OBL	Column Totals:	(A)	(B)
3.				Prevalence Index	= B/A =	
4				Hydrophytic Vegetation	ı Indicators:	
5				Dominance Test is >		
6				Prevalence Index is		
78				Morphological Adapt data in Remarks	tations¹ (Provide supp or on a separate shee	oorting et)
		45	= Total Cover	Problematic Hydroph	າytic Vegetation¹ (Exp	olain)
Woody Vine Stratum (Plot size:1				<sup>1</sup> Indicators of hydric soil a be present, unless distur	and wetland hydrolog	y must
2.		W.				
% Bare Ground in Herb Stratum	55 % Co	ver of Biotic Cr	= Total Cover	Hydrophytic Vegetation Present? Yes	<u> </u>	
Remarks:						-
					¥	

	cription: (Describe	to the depth				or confirn	n the absence	of indicators.)	
Depth (inches)	<u>Matrix</u> Color (moist)		Red Color (moist)	ox Feature	S Type <sup>1</sup>	Loc²	T	_	
0-18	2.5Y 5/4						Texture		Remarks
•							Sand	-	
18-20	10y 4/1	100				<del> </del>	sand	_gleyed	matrix
<sup>1</sup> Type: C=Co	oncentration, D=Deple	etion, RM=Re	educed Matrix, C	 S=Covered	or Coated	Sand Gr	ains. <sup>2</sup> Loca	ation: PL=Pore	Lining, M=Matrix.
	ndicators: (Applica	ble to all LR	Rs, unless othe	rwise note	ed.)				Hydric Soils <sup>3</sup> :
Histosol			Sandy Red				1 cm M	uck (A9) ( <b>LRR (</b>	<b>;</b> )
	ipedon (A2)		Stripped M					uck (A10) ( <b>LRR</b>	B)
Black His	stic (A3) n Sulfide (A4)		Loamy Mud					d Vertic (F18)	
	Layers (A5) ( <b>LRR C</b> )	١	Loamy Gle		(F2)			ent Material (Ti	
	ck (A9) (LRR D)	)	Depleted M Redox Darl		E6)		Other (E	Explain in Rema	rks)
	Below Dark Surface	(A11)	Depleted D						
	rk Surface (A12)	()	Redox Dep				<sup>3</sup> Indicators o	f hydrophytic ve	gatation and
Sandy M	ucky Mineral (S1)		Vernal Poo		-/			ydrology must b	
	leyed Matrix (S4)			, ,				turbed or proble	•
Restrictive L	ayer (if present):							•	
Type:			_						
Depth (inc	hes):		<b></b>				Hydric Soil P	resent? Yes	No X
Remarks:							I		
IYDROLOG									
	rology Indicators:								
	ators (minimum of one	e required; cl					Second	ary Indicators (2	or more required)
	Vater (A1)		X Salt Crust	(B11)			Wa	ter Marks (B1) (	Riverine)
	er Table (A2)		Biotic Crus	t (B12)					(B2) (Riverine)
Saturation			Aquatic In	ertebrates/	(B13)			t Deposits (B3)	
	ırks (B1) (Nonriverin		Hydrogen		` '		Dra	inage Patterns	
	Deposits (B2) (Nonr		Oxidized F			ving Roots	s (C3) Dry	-Season Water	Table (C2)
	osits (B3) (Nonriverin	ne)	Presence		, ,			yfish Burrows (	C8)
•	Soil Cracks (B6)		Recent Iro			Soils (C6)	Sat	uration Visible o	on Aerial Imagery (C9
	n Visible on Aerial Im	agery (B7)	Thin Muck					allow Aquitard ([	
	ained Leaves (B9)		Other (Exp	lain in Ren	narks)			C-Neutral Test (	D5)
Field Observ			./ -						
Surface Wate		S No ]		:hes):		- i			
Water Table F		S No	. (	:hes):		- 1			
Saturation Pre includes capi		No _	P Depth (inc	ches):		Wetla	nd Hydrology	Present? Yes	× No
	orded Data (stream g	auge, monito	oring well aerial r	hotos pre	vious inens	ections) if	available:		700
rescuine Medi	(=1,00,11,9		gon, acriai j	o.os, pre	vious ilispe	-cuons), II	avaliable;		
Jeschbe Red									
Remarks:									

Project/Site: Newport Banning Ranch (Newport J015)	City/County:	r: Newport Beach/Orange Sampling Date:	6109
Applicant/Owner: Newport Barning Kane		State: <u>CA</u> Sampling Point: 46	
•		wnship, Range: N/A - "Santiago De Santa Ana" land gran	
Landform (hillslope, terrace, etc.):	l ocal relief	(concave convex none).	
Subregion (LRR): C	Lat: 33.63450	OS Long: 117.950254 Datum NA	7 6 2
Soil Map Unit Name: tidal flats		NWI classification: PUBHx	003
Are climatic / hydrologic conditions on the site typical for this t	imo of voor? V	NVVI classification:	
Are Vegetation, Soil, or Hydrology sig			
		Are "Normal Circumstances" present? Yes No	
Are Vegetation, Soil, or Hydrology nat		(If needed, explain any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map sl	nowing sampling	g point locations, transects, important features	, etc.
Hydrophytic Vegetation Present? Yes No			
Hydric Soil Present? Yes No	X Is the	e Sampled Area	
Wetland Hydrology Present? Yes No	within	in a Wetland? Yes No _X	
Remarks:			
VEGETATION – Use scientific names of plants			
	bsolute Dominant	Indicator   Dominance Test worksheet:	
	6 Cover Species?		
1		That Are OBL, FACW, or FAC: (	(A)
2		Total Number of Demisers	` '
3			(B)
4	D = Total Cov	Percent of Dominant Species	`
Sapling/Shrub Stratum (Plot size:)	= Total Cov	rer That Are OBL, FACW, or FAC:	(A/B)
1		Prevalence Index worksheet:	
2			
3		OBL species x 1 =	
4			İ
5		FAC species x 3 =	
Herb Stratum (Plot size:	= Total Cove	er FACU species x 4 =	
1. Salicornia Virginica	40 Y	UPL species x 5 =	İ
2. Batis mantina	5 n	Column Totals: (A)	(B)
3.		Prevalence Index = B/A =	
4			
5		Dominance Test is >50%	
6		Prevalence Index is ≤3.0 <sup>1</sup>	
7		Morphological Adaptations <sup>1</sup> (Provide supportin	ıg
8		data in Remarks or on a separate sheet)	
Woody Vino Stratum (Plot size)	= Total Cove	er Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	'
Woody Vine Stratum (Plot size:) 1		1 Indicators of budging a ill and until and budging	,
2		Indicators of hydric soil and wetland hydrology mu be present, unless disturbed or problematic.	iSt
	0 = Total Cove	er Hydrophytic	
% Bare Ground in Herb Stratum 55 % Cover of		Vegetation	
Remarks:	Biotic Crust	Present? Yes No No	
Nonans.			

C	63	Ħ	£	
0	تليا	E	Ĕ	

Profile Des	cription: (Describe	to the dep	oth needed to docu	ment the i	ndicator	or confir	m the absenc	e of indicators.)	
Depth	Matrix			x Features					
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Re	marks
0-6	104R5/2			-			clay		
6-8	104R 5/2	70	10 YR 718	_30_		M	clan	broning	nottles
							7		
				-					
<del></del>				-					
***									
***************************************		-		-					
1							·····		
Type: C=C	oncentration, D=Dep	letion, RM=	Reduced Matrix, CS	S=Covered	or Coated	d Sand G		cation: PL=Pore Li	ning, M=Matrix.
	Indicators: (Applic	able to all			d.)		Indicators	s for Problematic H	lydric Soils³:
Histosol			Sandy Red	. ,				Muck (A9) (LRR C)	
	pipedon (A2)		Stripped Ma					Muck (A10) ( <b>LRR B</b>	)
	istic (A3)		Loamy Muc					ced Vertic (F18)	
	en Sulfide (A4)	*1	Loamy Gley		F2)			Parent Material (TF2	,
	d Layers (A5) ( <b>LRR (</b> uck (A9) ( <b>LRR D</b> )	•)	Depleted M Redox Dark	, ,	:e)		Other	(Explain in Remark	s)
	d Below Dark Surfac	e (A11)	Redox Dark	,	,				
	ark Surface (A12)	- (/ \	Redox Depi		. ,		3Indicata	of hydrophytic vega	otation and
	lucky Mineral (S1)		Vernal Pool		5)			hydrology must be	
	Gleyed Matrix (S4)			- ()				disturbed or problem	· A
Restrictive I	Layer (if present):						4.1.000	notaribod or problem	auo.
Type:	hard soil								
Depth (inc	ches):						Hydric Soil	Present? Yes	No X
Remarks:	•						Tiyano con		NO /-
IYDROLO	GY								
	drology Indicators:								
_	cators (minimum of o	ne required	: check all that apply	۸					
	Water (A1)	ie required	. ^					ndary Indicators (2 o	
	ter Table (A2)		Salt Crust					Vater Marks (B1) (R	
Saturatio			Biotic Crus Aquatic Inv		(040)			Sediment Deposits (I	
	arks (B1) ( <b>Nonriveri</b>	no)						Prift Deposits (B3) (F	
	nt Deposits (B2) (Nor	,	Hydrogen		. ,			rainage Patterns (B	,
	osits (B3) (Nonriver	,	Oxidized R					ry-Season Water Ta	, ,
	Soil Cracks (B6)	me)	Presence o		, ,			crayfish Burrows (C8	,
1	on Visible on Aerial Ir	magany (D7	Recent Iron			Soils (Co			Aerial Imagery (C9)
	tained Leaves (B9)	nagery (b?						hallow Aquitard (D3	,
Field Observ			Other (Exp	alli III Kem	агкѕ)	<del></del>	<u>&gt;</u> 22 F	AC-Neutral Test (D	o)
Surface Wate		es N	lo \$ D4- 0	ر د ما					
				hes):					
Water Table I		es N		hes):					**
Saturation Pr (includes cap		n se	lo Depth (inc	hes):		Wetla	and Hydrolog	y Present? Yes _	<u> </u>
	corded Data (stream	gauge, moi	nitoring well, aerial n	hotos, nrev	ious insp	ections)	if available.		
	•	_	5 · · · · · · · · · · ·	, p.o.		-5.10110),	n available.		
							The second secon		
Remarks:									
Remarks:									
Remarks:									
Remarks:									
Remarks:									

THE THE THE POIL DOINING HONDOLL	015)	City/County: Newp	ort Beach/Orange Sampling Date: 7/22/
Applicant/Owner: Newfoot Banning W	ranch		State: CA Sampling Point: 4-1
Investigator(s): Gary Medeiros, Allison Rudalevige	2	Section, Township, I	Range: N/A - "Santiago De Santa Ana" land grant
Landform (hillslope, terrace, etc.):		Local rollof (company)	
Subregion (LRR): C	Lat: 3:	3.634 27534	e, convex, none): Slope (%): Long: <u>-1/7, 951(9965</u> Datum: <u>NAD</u>
Soil Map Unit Name:YWEYWASh			NWI classification: E 2 EMP <sub>X</sub>
Are climatic / hydrologic conditions on the site typical fo	r this time of ver		(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology			
Are Vegetation, Soil, or Hydrology			e "Normal Circumstances" present? Yes✓_ No
		V	needed, explain any answers in Remarks.)  locations, transects, important features, et
Hydrophytic Vegetation Present? Yes X			mportant reatures, et
Hydric Soil Present? Yes X	No	Is the Sample	
Wetland Hydrology Present? Yes X	No	within a Wetla	and? Yes No
Remarks:			
EGETATION – Use scientific names of pi			#
Lociation – use scientific names of pi		Dominant Indicator	# #
Tree Stratum (Plot size:)	% Cover	Species? Status	Dominance Test worksheet:
l			Number of Dominant Species That Are OBL, FACW, or FAC:(A)
)			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:
			Total % Cover of: Multiply by:
			OBL species x 1 =
5,			FACW species x 2 =
		Total Cover	FACU species x 3 = FACU species x 4 =
Herb Stratum (Plot size:)	_		UPL species x 5 =
. Salicornia Virginica	25	Y OBL	Column Totals: (A) (B)
Frankenia Saling Egrandifor Batis maritima	19 5 85	n FACH	•
2001		Y OBL	Prevalence Index = B/A =
			Hydrophytic Vegetation Indicators:  Dominance Test is >50%
			Prevalence Index is ≤3.0¹
			Morphological Adaptations <sup>1</sup> (Provide supporting
			data in Remarks or on a separate sheet)
		Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Noody Vine Stratum (Plot size:)			
			<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	=	Total Cover	Hydrophytic
% Bare Ground in Herb Stratum % Co	ver of Biotic Cru	st D	Vegetation Present? Yes No

Depth		to the de	oth needed to docu			or confi	m the absence of	indicators.)	
(inches)	<u>Matrix</u> Color (moist)	%	Redo	x Feature		. 3	_		
0-15	104R3/4	95	5 YR3/4		Type <sup>1</sup>	Loc <sup>2</sup>	1 ,	Remarks	
			<u>U1N3/4</u>	5		<u>M</u>	Sandy clay	Prominent	mottle
ype: C=Co ydric Soil II _ Histosol	ndicators: (Application	letion, RM= able to all	Reduced Matrix, CS LRRs, unless other	wise note	or Coated	l Sand G	Indicators for I	n: PL=Pore Lining, M Problematic Hydric	l=Matrix. Soils³:
_ Histic Ep	ipedon (A2)		Stripped Mat					(A9) (LRR C)	
_ Black His			Loamy Muck		(F1)		Z cm Muck	(A10) (LRR B)	
	Sulfide (A4)		Loamy Gleye		(F2)			: Material (TF2)	
	Layers (A5) ( <b>LRR C</b> ck (A9) ( <b>LRR D</b> )	5)	Depleted Ma	trix (F3)			Other (Expl	ain in Remarks)	
	Below Dark Surface	(A11)	Redox Dark : Depleted Dar						A
	k Surface (A12)	, (, (, )	Redox Depre	k Suriace essions /F	e (►/) :R/		31		*
_ Sandy Mi	ucky Mineral (S1)		Vernal Pools		u)		Indicators of hy	drophytic vegetation plogy must be presen	and
	eyed Matrix (S4)			` ,				лоду must be presen ped or problematic.	t,
	ayer (if present):							oca or problematic.	
Туре:									
	nes):						Hydric Soil Pres	ent? Yes X	No
Depth (inchemarks:  DROLOG	iY rology Indicators:	e required:	check all that anniv)						
Depth (inchemarks:  DROLOG  etland Hydrimary Indica	iY rology Indicators: tors (minimum of on	e required;	check all that apply)	111)			Secondary	Indicators (2 or more	reguired)
Depth (inchemarks:  DROLOG  etland Hydrimary Indica	iY rology Indicators: tors (minimum of on	e required;	Salt Crust (E				Secondary Water I	Indicators (2 or more Marks (B1) (Riverine	reguired)
Depth (inchemarks:  DROLOG  etland Hydrimary Indica  Surface W  High Wate	ology Indicators: tors (minimum of on /ater (A1) er Table (A2)		Salt Crust (E Biotic Crust	(B12)	(B13)		Secondary Water I Sedime	Indicators (2 or more Marks (B1) (Riverine ent Deposits (B2) (Riv	required) ) verine)
Depth (inchemarks:  DROLOG  etland Hydr  imary Indica  Surface W  High Water  Saturation  Water Ma	iY rology Indicators: tors (minimum of on /ater (A1) er Table (A2) (A3) rks (B1) (Nonriverir	ne)	Salt Crust (E Biotic Crust Aquatic Inve Hydrogen Si	(B12) rtebrates ulfide Odd	or (C1)		Secondary  Water I Sedime Drift De	Indicators (2 or more Marks (B1) (Riverine ent Deposits (B2) (Riverine	required) ) verine)
Depth (inchemarks:  DROLOG  etland Hydreimary Indica  Surface W High Wate Saturation Water Mar Sediment	iY rology Indicators: tors (minimum of on /ater (A1) er Table (A2) (A3) rks (B1) (Nonriverir Deposits (B2) (Non	ne) riverine)	Salt Crust (E Biotic Crust Aquatic Inve Hydrogen St Oxidized Rh	(B12) rtebrates ulfide Odd izosphere	or (C1) es along Liv	ving Root	Secondary Water I Sedime Drift De	Indicators (2 or more Marks (B1) (Riverine ent Deposits (B2) (Riverine eposits (B3) (Riverine ge Patterns (B10)	reguired) ) verine) e)
Depth (inchemarks:  DROLOG  etland Hydrimary Indica  Surface W High Wate Saturation Water Mar Sediment Drift Depo	ology Indicators: tors (minimum of on /ater (A1) er Table (A2) (A3) rks (B1) (Nonriverir Deposits (B2) (Nonriveris	ne) riverine)	Salt Crust (E Biotic Crust Aquatic Inve Hydrogen Si Oxidized Rh Presence of	(B12) rtebrates ulfide Odd izosphere Reduced	or (C1) es along Liv Iron (C4)		Secondary Water I Sedime Drift De Drainag ts (C3) Dry-Se	Indicators (2 or more Marks (B1) (Riverine ent Deposits (B2) (Riverine	reguired) ) verine) e)
Depth (inchemarks:  DROLOG  etland Hydro imary Indica Surface W High Water Saturation Water Mar Sediment Drift Depo	ology Indicators: tors (minimum of on /ater (A1) er Table (A2) (A3) rks (B1) (Nonriverir Deposits (B2) (Nonriveris sits (B3) (Nonriveris	ne) riverine) ne)	Salt Crust (E Biotic Crust Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron	(B12) rtebrates ulfide Odd izosphere Reduced Reductio	or (C1) es along Liv Iron (C4) n in Tilled S		Secondary Water I Sedime Drift De Drainag ts (C3) Dry-Se Crayfis	Indicators (2 or more Marks (B1) (Riverine ent Deposits (B2) (Riverine eposits (B3) (Riverine ge Patterns (B10) ason Water Table (C:	reguired) ) verine) e)
DROLOG etland Hydr imary Indica Surface W High Water Mat Sediment Drift Depo Surface S Inundatior	tors (minimum of on tater (A1) Table (A2) (A3) rks (B1) (Nonriverir Deposits (B2) (Noniverir Sits (B3) (Nonriverir Oil Cracks (B6)	ne) riverine) ne)	Salt Crust (E Biotic Crust Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Thin Muck S	(B12) rtebrates ulfide Odd izosphere Reduced Reduction urface (C	or (C1) es along Liv I Iron (C4) n in Tilled ( 57)		Secondary Water I Sedime Drift De Drainag ts (C3) Dry-Se Crayfis Saturat	Indicators (2 or more Marks (B1) (Riverine ent Deposits (B2) (Riverine ge Patterns (B10) ason Water Table (Canonic Canonic Can	reguired) ) verine) e)
Depth (inchemarks:  DROLOG  etland Hydre imary Indica Surface Water Ma Sediment Drift Depo Surface S Inundatior Water-Sta	rology Indicators: tors (minimum of on /ater (A1) er Table (A2) (A3) rks (B1) (Nonriverir Deposits (B2) (Nonriveris sits (B3) (Nonriveris oil Cracks (B6) n Visible on Aerial Im ined Leaves (B9)	ne) riverine) ne)	Salt Crust (E Biotic Crust Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron	(B12) rtebrates ulfide Odd izosphere Reduced Reduction urface (C	or (C1) es along Liv I Iron (C4) n in Tilled ( 57)		Secondary Water I Sedime Drift De Drainag ts (C3) Dry-Se Crayfis Saturat	Indicators (2 or more Marks (B1) (Riverine ent Deposits (B2) (Riverine ge Patterns (B10) ason Water Table (Ca th Burrows (C8) tion Visible on Aerial I	reguired) ) verine) e)
Depth (inchemarks:  DROLOG  Tetland Hydromary Indication Surface Water Mar Sediment Drift Depo Surface S Inundation Water-Sta	torology Indicators: tors (minimum of on /ater (A1) or Table (A2) or (A3) rks (B1) (Nonriverir Deposits (B2) (Nonriverir oil Cracks (B6) or Visible on Aerial In ined Leaves (B9)	ne) riverine) ne) nagery (B7)	Salt Crust (E Biotic Crust Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expla	(B12) rtebrates ulfide Odd izosphere Reduced Reduction urface (C in in Rem	or (C1) es along Liv I Iron (C4) n in Tilled ( 57)		Secondary Water I Sedime Drift De Drainag ts (C3) Dry-Se Crayfis Saturat	Indicators (2 or more Marks (B1) (Riverine ent Deposits (B2) (Riverine ge Patterns (B10) ason Water Table (Canonic Canonic Can	reguired) ) verine) e)
Depth (inchemarks:  DROLOG  Tetland Hydromary Indicates  Surface Water Mater Mater Sediment Drift Depo Surface S Inundation Water-Sta	tology Indicators: tors (minimum of on /ater (A1) er Table (A2) (A3) rks (B1) (Nonriverir Deposits (B2) (Nonriverir oil Cracks (B6) visible on Aerial Im ined Leaves (B9) ations: Present? Ye	ne) riverine) ne) nagery (B7)	Salt Crust (E Biotic Crust Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expla	(B12) rtebrates ulfide Odd izosphere Reduced Reduction urface (C in in Rem	or (C1) es along Liv I Iron (C4) n in Tilled ( 57)		Secondary Water I Sedime Drift De Drainag ts (C3) Dry-Se Crayfis Saturat	Indicators (2 or more Marks (B1) (Riverine ent Deposits (B2) (Riverine ge Patterns (B10) ason Water Table (Canonic Canonic Can	reguired) ) verine) e)
Depth (inchemarks:  DROLOG  etland Hydre imary Indica Surface Water Mar Sediment Drift Depo Surface S Inundatior Water-Sta eld Observation Precludes capil	rology Indicators: tors (minimum of on /ater (A1) er Table (A2) (A3) rks (B1) (Nonriverir Deposits (B2) (Nonriverir oil Cracks (B6) n Visible on Aerial Im ined Leaves (B9) ations: Present? Ye resent? Ye sent? Ye	ne) riverine) ne) nagery (B7) s N s N	Salt Crust (E Biotic Crust Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expla	(B12) rtebrates ulfide Odd izosphere Reduced Reduction urface (C in in Rem es):es):es):	or (C1) es along Liv I Iron (C4) n in Tilled \$ 67) narks)	Soils (C6	Secondary  Water I  Sedime Drift De Drainag ts (C3) Dry-Se Crayfis Saturat Shallov FAC-N	Indicators (2 or more Marks (B1) (Riverine ent Deposits (B2) (Riverine ge Patterns (B10) ason Water Table (Canonic Canonic Can	reguired) ) verine) e) 2) Imagery (C
Depth (inchemarks:  DROLOG  etland Hydre imary Indica Surface Water Mar Sediment Drift Depo Surface S Inundation Water-Sta eld Observation Presidudes capil	rology Indicators: tors (minimum of on /ater (A1) er Table (A2) (A3) rks (B1) (Nonriverir Deposits (B2) (Nonriverir oil Cracks (B6) n Visible on Aerial Im ined Leaves (B9) ations: Present? Ye resent? Ye sent? Ye	ne) riverine) ne) nagery (B7) s N s N	Salt Crust (E Biotic Crust Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expla	(B12) rtebrates ulfide Odd izosphere Reduced Reduction urface (C in in Rem es):es):es):	or (C1) es along Liv I Iron (C4) n in Tilled \$ 67) narks)	Soils (C6	Secondary  Water I  Sedime Drift De Drainag ts (C3) Dry-Se Crayfis Saturat Shallov FAC-N	Indicators (2 or more Marks (B1) (Riverine ent Deposits (B2) (Riverine ge Patterns (B10) eason Water Table (C. h Burrows (C8) tion Visible on Aerial I w Aquitard (D3) eutral Test (D5)	reguired) ) /erine) a) 2) imagery (C

Project/Site: Newport Banning Ranch (Newport JO	015) City/County: Newpo	rt Beach/Orange Sampling Date: 7/22/0
Applicant/Owner: Newport Banning		State: <u>CA</u> Sampling Point: <u>42</u>
Investigator(s): Gary Medeiros, Allison Rudalevige	Section, Township, R	ange: N/A - "Santiago De Santa Ana" land grant
Landform (hillslope, terrace, etc.): & Som	Local relief (concave	convex none): Concolle Slone (9(): A
Subregion (LRR): C	Lat: 33,63438858	Long: -117.95097333 Datum: NADS
Soil Map Unit Name:		NWI classification: PUBH x
Are climatic / hydrologic conditions on the site typical for	,	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	-	"Normal Circumstances" present? Yes ✓ No
Are Vegetation, Soil, or Hydrology		eeded, explain any answers in Remarks.)
·		locations, transects, important features, etc.
· ·		iocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	No Is the Sample	d Area
Hydric Soil Present?  Wetland Hydrology Present?  Yes  Yes	NO within a Wetla	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Remarks:	No	
VEGETATION – Use scientific names of pl		
VEGETATION – use scientific frames of pr		4.
Tree Stratum (Plot size:)	Absolute Dominant Indicator <u>% Cover Species? Status</u>	Dominance Test worksheet:
1		Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3.		Total Number of Dominant Species Across All Strata: (B)
4		Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)	= Total Cover	That Are OBL, FACW, or FAC: (A/B)
1		Prevalence Index worksheet:
2		Total % Cover of: Multiply by:
3		OBL species x 1 =
5		FACW species x 2 =
	= Total Cover	FAC species x 3 = FACU species x 4 =
Herb Stratum (Plot size:)		UPL species x 5 =
1. Salicornia Viginica	70 Y OBL	Column Totals: (A) (B)
2. Batis mounting		,
3. Frankenia Salina Sgrandifolia J	_ 5 n FACW	Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:  Dominance Test is >50%
€		Prevalence Index is ≤3.0¹
7.		Morphological Adaptations <sup>1</sup> (Provide supporting
8		data in Remarks or on a separate sheet)
Woody Vine Stratum (Plot size:)	= Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2		
% Bare Ground in Herb Stratum % Co	= Total Cover	Hydrophytic Vegetation Present?  Yes No
Remarks:		

Profile Description: (Describe to the depth need		confirm the absen	ice of indicators.)
Depth <u>Matrix</u> Sinches) Color (moist) % Color	Redox Features or (moist) % Type <sup>1</sup>	- 2	
		Loc <sup>2</sup> Texture	Remarks
	R314 1 C	M clay	prominent mottles
17-26 N 2.51- 100			
Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR C) 1 cm Muck (A9) (LRR D) Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	ed Matrix, CS=Covered or Coated Sunless otherwise noted.) Sandy Redox (S5) Stripped Matrix (S6) Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8)	Indicato 1 cm 2 cm Redu Red Othe	.ocation: PL=Pore Lining, M=Matrix. rs for Problematic Hydric Soils³: n Muck (A9) (LRR C) n Muck (A10) (LRR B) uced Vertic (F18) Parent Material (TF2) er (Explain in Remarks)
_ Sandy Mucky Mineral (S1)	Vernal Pools (F9)		d hydrology must be present,
_ Sandy Gleyed Matrix (S4)	(, 0)		disturbed or problematic.
estrictive Layer (if present):		unicss	disturbed of problematic.
Туре:			
Double (in al).			
Depth (inches):emarks:		Hydric So	il Present? Yes No No
		Hydric So	il Present? Yes No No
emarks:  DROLOGY  etland Hydrology Indicators:		Hydric So	il Present? Yes No No
emarks:  DROLOGY  etland Hydrology Indicators:  mary Indicators (minimum of one required; check a	all that apply)		
DROLOGY etland Hydrology Indicators: mary Indicators (minimum of one required; check a		Seco	ondary Indicators (2 or more required)
DROLOGY etland Hydrology Indicators: mary Indicators (minimum of one required; check a	all that apply) Salt Crust (B11) Biotic Crust (B12)	Seco	ondary Indicators (2 or more required) Water Marks (B1) ( <b>Riverine</b> )
DROLOGY  etland Hydrology Indicators:  mary Indicators (minimum of one required; check a  Surface Water (A1)  High Water Table (A2)  Saturation (A3)	Salt Crust (B11) Biotic Crust (B12)	Seco	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
DROLOGY  etland Hydrology Indicators: mary Indicators (minimum of one required; check a Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine)	Salt Crust (B11)	Seco	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine)
DROLOGY  etland Hydrology Indicators:  mary Indicators (minimum of one required; check a  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13)	Seco	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)
DROLOGY  etland Hydrology Indicators:  mary Indicators (minimum of one required; check at a surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4)	Seco	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2)
DROLOGY  etland Hydrology Indicators:  mary Indicators (minimum of one required; check as a surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
DROLOGY  etland Hydrology Indicators:  mary Indicators (minimum of one required; check a surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4)	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
DROLOGY  etland Hydrology Indicators: mary Indicators (minimum of one required; check as Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
DROLOGY  etland Hydrology Indicators: mary Indicators (minimum of one required; check at a Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks)	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3)
DROLOGY  etland Hydrology Indicators:  mary Indicators (minimum of one required; check at a surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  eld Observations:  rface Water Present?  Yes No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches):	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3)
DROLOGY  etland Hydrology Indicators:  mary Indicators (minimum of one required; check at a surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  eld Observations:  rface Water Present?  Yes No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches):	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3)
DROLOGY  etland Hydrology Indicators: mary Indicators (minimum of one required; check at Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)  eld Observations: rface Water Present? Ater Table Present? Ves No turation Present? Ves No turation Present? Ves No turation Present? Ves No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches):  Depth (inches):	Second Se	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3)
DROLOGY  etland Hydrology Indicators:  mary Indicators (minimum of one required; check at surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  eld Observations:  rface Water Present?  Yes X No  turation Present? Yes X No  turation Present? Yes X	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches):  Depth (inches):	Second Se	Ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3) FAC-Neutral Test (D5)
DROLOGY  etland Hydrology Indicators: mary Indicators (minimum of one required; check at Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)  eld Observations: rface Water Present? Ater Table Present? Yes X No Ater Table Present? Yes X No Loudes capillary fringe) scribe Recorded Data (stream gauge, monitoring vertical present)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches): Depth (inches):	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3) FAC-Neutral Test (D5)
DROLOGY  etland Hydrology Indicators: mary Indicators (minimum of one required; check at Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)  eld Observations: rface Water Present? Ater Table Present? Yes X No Ater Table Present? Yes X No Loudes capillary fringe) scribe Recorded Data (stream gauge, monitoring vertical present)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches): Depth (inches):	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3) FAC-Neutral Test (D5)
DROLOGY  etland Hydrology Indicators: mary Indicators (minimum of one required; check at Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)  eld Observations: rface Water Present? Yes No ster Table Present? Yes No turation Present? Yes No cludes capillary fringe) scribe Recorded Data (stream gauge, monitoring v	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches): Depth (inches):	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3) FAC-Neutral Test (D5)

Project/Site: Newport Banning Ranch (New)	port J015) City	County: Newport F	Reach/Orange	Sampling Date:	7/22/1
Applicant/Owner: Newport Barniv	a Ranch	<u> </u>	State: CA	Sampling Point:	43
Investigator(s): Gary Medeiros, Allison Ruda	) levige Sec	tion Township Ranc	re: N/A - "Santiago De	Santa Ana" land	rant
Landform (hillslope, terrace, etc.): domese	im loo	al relief (concave, co	nvex none): CMCC	711-P Slane	9/ \.
Subregion (LRR): C	Lat. 33.6	3386235	long:=117.950k	Slope (	%): WAD & >
Soil Map Unit Name: tidal flats			NWI classifica		
Are climatic / hydrologic conditions on the site type					× ×
Are Vegetation, Soil, or Hydrolog					
Are Vegetation, Soil, or Hydrology			ormal Circumstances" pr ded, explain any answers		No
SUMMARY OF FINDINGS – Attach si		,		,	res. etc.
	CNo				
Hydric Soil Present? Yes "Yes"	No	Is the Sampled A			
Wetland Hydrology Present? Yes _	9 No	within a Wetland?	? Yes <u>V</u>	No	
Remarks:		<u></u>			
VEGETATION – Use scientific names	of plants	170		#	
		minant Indicator   E	Dominance Test works		
Tree Stratum (Plot size:) 1	<u>% Cover Spe</u>	ecies? Status	Jominance Test works Number of Dominant Spe That Are OBL, FACW, or	ecies 🥎	(A)
2					_ (''
3			Total Number of Domina Species Across All Strata		(B)
4	/>	<sub>=</sub>	Percent of Dominant Spe	ories land	_
Sapling/Shrub Stratum (Plot size:	= To		hat Are OBL, FACW, or		_ (A/B)
1		P	Prevalence Index works	sheet:	
2			Total % Cover of:	Multiply by:	
3			DBL species	x 1 =	
4			ACW species		
5	67		AC species		
Herb Stratum (Plot size:)	= To	ş ş	ACU species		
1 habis maritima			JPL species		
2. Salicornia Virginica	45 1	1 OBL	Column Totals:	(A)	— <sup>(B)</sup>
3		) -	Prevalence Index =	= B/A =	
4			lydrophytic Vegetation		
5			∑ Dominance Test is >	50%	
6			_ Prevalence Index is:		
7			Morphological Adapt	ations <sup>1</sup> (Provide supp or on a separate shee	
8	85 = To	1.1.0	Problematic Hydroph		' 1
Woody Vine Stratum (Plot size:	_ <u></u>	ital Cover		,	
1		1 <sub>1</sub> b	Indicators of hydric soil a be present, unless disturt	and wetland hydrolog oed or problematic.	y must
	Ø = To	otal Cover I-	łydrophytic		
% Bare Ground in Herb Stratum	% Cover of Biotic Crust	\ \	lonotation	<u>                                      </u>	
Remarks:	Joyol or blond ordat	F	resent: Yes	· NO	-
					1

US Army Corps of Engineers

Arid Wood Varaina 2.0

112

inches) Color (moist) %	Color (moist) % Type <sup>1</sup> L	<u>oc² Texture Remarks</u>
aric Soil indicators: (Applicable to a Histosol (A1)	Sandy Redox (S5)	and Grains.   2Location: PL=Pore Lining, M=Matrix.  Indicators for Problematic Hydric Soils <sup>3</sup> :  1 cm Muck (A9) (LRR C)
Histic Epipedon (A2)	Stripped Matrix (S6)	2 cm Muck (A10) (LRR B)
_ Black Histic (A3) _ Hydrogen Sulfide (A4)	<ul><li>Loamy Mucky Mineral (F1)</li><li>Loamy Gleyed Matrix (F2)</li></ul>	Reduced Vertic (F18)
Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)	Red Parent Material (TF2)
1 cm Muck (A9) (LRR D) Depleted Below Dark Surface (A11)	Redox Dark Surface (F6) Depleted Dark Surface (F7)	Other (Explain in Remarks)
_ Thick Dark Surface (A12) _ Sandy Mucky Mineral (S1) _ Sandy Gleyed Matrix (S4)	<pre> Redox Depressions (F8) Vernal Pools (F9)</pre>	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present,
strictive Layer (if present):		unless disturbed or problematic.
Type:		
Depth (inches):		Hydric Soil Present? Yes No
DROLOGY	- To presence of water	filling the dopression. assumed in dry season (fidal influence)
tland Hydrology Indicators:		
mary Indicators (minimum of one require	ed; check all that apply)	Secondary Indicators (2 or more required)
	Salt Crust (B11)	Water Marks (B1) (Riverine)
Surface Water (A1)	Biotic Crust (B12)	Sediment Deposits (B2) (Riverine)
High Water Table (A2)		Drift Deposits (B3) (Riverine)
High Water Table (A2) Saturation (A3)	🔀 Aquatic Invertebrates (B13)	
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine)	<ul><li>Aquatic Invertebrates (B13)</li><li>Hydrogen Sulfide Odor (C1)</li></ul>	Drainage Patterns (B10)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine)	<ul> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living</li> </ul>	Roots (C3) Dry-Season Water Table (C2)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine)	Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)	Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6)	Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils	Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) s (C6) Saturation Visible on Aerial Imagery (C9)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine)	Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils  Thin Muck Surface (C7)	Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) s (C6) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (E	Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils	Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) s (C6) Saturation Visible on Aerial Imagery (C9)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (E Water-Stained Leaves (B9)	Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils  Thin Muck Surface (C7)  Other (Explain in Remarks)	Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) s (C6) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (E Water-Stained Leaves (B9)	Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils  Thin Muck Surface (C7)  Other (Explain in Remarks)	Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) s (C6) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (E Water-Stained Leaves (B9) Id Observations: face Water Present?  Yes  Table Present?  Yes  Uration Present?  Yes  Uration Present?  Yes  Uration Present?	Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Other (Explain in Remarks)  No Depth (inches): No Depth (inches):	Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) s (C6) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3) FAC-Neutral Test (D5)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (E Water-Stained Leaves (B9) Id Observations: face Water Present?  Yes  Table Present?  Yes  Uration Present?  Yes  Uration Present?  Yes  Uration Present?	Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils  Thin Muck Surface (C7)  Other (Explain in Remarks)  No  Depth (inches):  No  Depth (inches):	Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) s (C6) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3) FAC-Neutral Test (D5)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (E Water-Stained Leaves (B9) Id Observations: face Water Present?  Yes  Table Present?  Yes  Uration Present?  Yes  Uration Present?  Yes  Uration Present?	Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Other (Explain in Remarks)  No Depth (inches): No Depth (inches):	Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) s (C6) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3) FAC-Neutral Test (D5)

Project/Site: Newport Banning Ranch (Newport J015)	City/County: Newpo	ort Beach/Orange Sampling Date:	122/09
Applicant/Owner: Newport Banning Ranc	h	State: CA Sampling Point:	
Investigator(s): Gary Medeiros, Allison Rudalevige	Section, Township, R	Range: N/A - "Santiago De Santa Ana" land gra	ni
Landform (hillslope, terrace, etc.):	Local relief (concave	3. CONVEX none). Slope (%).	
Subregion (LRR): C	33.63879628	Long: -117.94804 788 Datum: NA	1083
Soil Map Unit Name: Bolsa Silt loam		NWI classification: PSSC	<u>,-0</u>
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 significa		e "Normal Circumstances" present? Yes✓ No	_
Are Vegetation, Soil, or Hydrology naturall		needed, explain any answers in Remarks.)	J
SUMMARY OF FINDINGS – Attach site map show	,		s. etc.
Hydrophytic Vegetation Present? Yes Yes No			
Hydric Soil Present? Yes No	Is the Sample		
Wetland Hydrology Present? Yes No	within a Wetla	and? Yes No	
Remarks:			
VEGETATION – Use scientific names of plants.		ыß	
Absol	ute Dominant Indicator	Dominance Test worksheet:	
	ver Species? Status	Number of Dominant Species	
1. South gooddingii ico	y OBL	7 11 00 00 000	(A)
3		Total Number of Dominant	
4		Species Across All Strata:	(B)
60	= Total Cover	Percent of Dominant Species	
Sapling/Shrub Stratum (Plot size: )		That Are OBL, FACW, or FAC:	(A/B)
1. Baceharis Salicifolia 50 2 Cortaboria Selloana 50		Prevalence Index worksheet:	
2. Cornadina salloang 50 350	y upe	Total % Cover of: Multiply by:	- i
4		OBL species x 1 =	
5.		FAC species x 2 =	
lc	= Total Cover	FAC species x 3 = FACU species x 4 =	
Herb Stratum (Plot size:)	rotal cover	UPL species x 5 =	
1		Column Totals: (A)	
2			
3		Prevalence Index = B/A =	_
4		Hydrophytic Vegetation Indicators:	
5		☐ Dominance Test is >50% ☐ Prevalence Index is ≤3.0¹	
7		Morphological Adaptations <sup>1</sup> (Provide supporting the supporti	
8		data in Remarks or on a separate sheet)	ng
ľ	= Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain	)
Woody Vine Stratum (Plot size:)			
1		<sup>1</sup> Indicators of hydric soil and wetland hydrology m	ust
2	)	be present, unless disturbed or problematic.	
1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	= Total Cover	Hydrophytic Vegetation	
% Bare Ground in Herb Stratum 100 % Cover of Bioti	ic Crust	Present? Yes No	
Remarks:			

5	01	F
800	W-9 0	E

OIL	<u>, ,, ,,</u>			Sampling Point:
ronie Description: (Descrit Depth Matrix		needed to document the indicat	or or confirm the	absence of indicators.)
(inches) Color (moist)		Redox Features Color (moist) % Type	$\frac{1}{1 \cdot 1 \cdot 00^2}$ T	exture Remarks
0-4 loy83/2	les?	1 1 1 1 1 1		exture Remarks
				ay
		-:		
ype: C=Concentration, D=De	epletion, RM=Red	luced Matrix, CS=Covered or Coass, unless otherwise noted.)		<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
_ Histosol (A1)		•	ln:	dicators for Problematic Hydric Soils <sup>3</sup> :
_ Histic Epipedon (A2)		Sandy Redox (S5) Stripped Matrix (S6)		_ 1 cm Muck (A9) (LRR C)
_ Black Histic (A3)	-	Supped Matrix (56) Loamy Mucky Mineral (F1)	·····	_ 2 cm Muck (A10) (LRR B)
_ Hydrogen Sulfide (A4)	•	Loamy Gleyed Matrix (F2)		Reduced Vertic (F18)
Stratified Layers (A5) (LRR	(C)	Depleted Matrix (F3)		_ Red Parent Material (TF2) _ Other (Explain in Remarks)
_ 1 cm Muck (A9) (LRR D)		Redox Dark Surface (F6)	<del>4</del>	_ Other (Explain in Nemarks)
_ Depleted Below Dark Surfa	ce (A11)	Depleted Dark Surface (F7)		
_ Thick Dark Surface (A12)	-	Redox Depressions (F8)	³In	rdicators of hydrophytic vegetation anปี
_ Sandy Mucky Mineral (S1)	-	Vernal Pools (F9)	,	wetland hydrology must be present,
_ Sandy Gleyed Matrix (S4) estrictive Layer (if present):				unless disturbed or problematic.
Type: Marked Sal				
Type: <u>hand Sal</u>				
Type: Nava Sol Depth (inches): 4			Нус	dric Soil Present? Yes No
Depth (inches): 4			Нус	dric Soil Present? Yes No _ <del></del>
Depth (inches): 4 emarks:  DROLOGY	:		Нус	dric Soil Present? Yes No
Depth (inches): 4 emarks:  DROLOGY etland Hydrology Indicators		eck all that apply)	Нус	
Depth (inches): emarks:  DROLOGY etland Hydrology Indicators imary Indicators (minimum of			Нус	Secondary Indicators (2 or more required)
Depth (inches): emarks:  DROLOGY etland Hydrology Indicators imary Indicators (minimum of a		Salt Crust (B11)	Нус	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)
DROLOGY etland Hydrology Indicators imary Indicators (minimum of Surface Water (A1) High Water Table (A2)		Salt Crust (B11) Biotic Crust (B12)	Нус	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
DROLOGY etland Hydrology Indicators imary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3)	one required; che	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13)	Нус	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)
Depth (inches): emarks:  DROLOGY  etland Hydrology Indicators imary Indicators (minimum of a company Indicators)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonrive	one required; che	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)		Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)
Depth (inches): emarks:  DROLOGY  etland Hydrology Indicators imary Indicators (minimum of a graph of	one required; che rine) onriverine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along	g Living Roots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)
Depth (inches): emarks:  DROLOGY  etland Hydrology Indicators imary Indicators (minimum of a company Indicators)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonrive	one required; che rine) onriverine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C	3 Living Roots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Depth (inches): emarks:  DROLOGY  etland Hydrology Indicators imary Indicators (minimum of a Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriver Sediment Deposits (B2) (Nonriver Drift Deposits (B3) (Nonriver)	one required; che rine) onriverine) erine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C	3 Living Roots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Depth (inches): emarks:  DROLOGY  etland Hydrology Indicators imary Indicators (minimum of a grade Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriveration (Nonriveration (B2))  Sediment Deposits (B2) (Nonriveration (B3))  Drift Deposits (B3) (Nonriveration (B3))  Surface Soil Cracks (B6)	one required; che rine) onriverine) erine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C Recent Iron Reduction in Till Thin Muck Surface (C7)	3 Living Roots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)  Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Depth (inches):	one required; che rine) onriverine) erine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C	3 Living Roots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Depth (inches):	one required; che rine) onriverine) erine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C Recent Iron Reduction in Till Thin Muck Surface (C7)	g Living Roots (C3 34) ed Soils (C6)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)  Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Depth (inches):	one required; che rine) prriverine) erine) Imagery (B7)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C Recent Iron Reduction in Till Thin Muck Surface (C7) Other (Explain in Remarks)	g Living Roots (C3 24) ed Soils (C6)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)  Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Depth (inches):	one required; che rine) erine) Imagery (B7)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C Recent Iron Reduction in Till Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches):  Depth (inches):	g Living Roots (C3) (24) ed Soils (C6)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
DROLOGY etland Hydrology Indicators imary Indicators (minimum of a surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverse (B2) (Nonriverse (B3) (	one required; che rine) priverine) Imagery (B7)  /es No /es No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C Recent Iron Reduction in Till Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	g Living Roots (C3) 24) ed Soils (C6)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
DROLOGY etland Hydrology Indicators imary Indicators (minimum of a surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverse (B2) (Nonriverse (B3) (	one required; che rine) priverine) Imagery (B7)  /es No /es No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C Recent Iron Reduction in Till Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches):  Depth (inches):	g Living Roots (C3) 24) ed Soils (C6)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
DROLOGY etland Hydrology Indicators imary Indicators (minimum of a surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverse (B2) (Nonriverse (B3) (	one required; che rine) priverine) Imagery (B7)  /es No /es No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C Recent Iron Reduction in Till Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	g Living Roots (C3) 24) ed Soils (C6)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (inches):	one required; che rine) priverine) Imagery (B7)  /es No /es No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C Recent Iron Reduction in Till Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	g Living Roots (C3) 24) ed Soils (C6)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (inches):	one required; che rine) priverine) Imagery (B7)  /es No /es No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C Recent Iron Reduction in Till Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	g Living Roots (C3) 24) ed Soils (C6)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)

Project/Site: Newport Banning Ranch (Newport J015)	_ City/County: Newpo	ort Beach/Orange	Sampling Date: `H 22109
Applicant/Owner: Newport Banning Ranch		State: CA	Sampling Point: 45
Investigator(s): Gary Medeiros, Allison Rudalevige	_ Section, Township, R	lange: N/A - "Santiago I	De Santa Ana" land grant
Landform (hillslope, terrace, etc.): depression	_ Local relief (concave	, convex, none): Con	<i>∽ u•</i> Slone (%):
Subregion (LRR): C	33.63753933	Long: -117.9516	1648 Datum NAD83
		NWI classifi	
Are climatic / hydrologic conditions on the site typical for this time of	,	(If no, explain in F	•
Are Vegetation, Soil, or Hydrology significant			present? Yes No
Are Vegetation, Soil, or Hydrology naturally p		needed, explain any answe	
SUMMARY OF FINDINGS – Attach site map showin	•		'
Hydrophytic Vegetation Present? Yes No			
Hydric Soil Present?  Wetland Hydrology Present?  Yes No	Is the Sample		🗸
	within a Wetla	ind? Yes	No <u>X</u>
Remarks:			
VEGETATION – Use scientific names of plants.		A PARTY OF THE PAR	. A.
Absolute   Tree Stratum (Plot size:)		Dominance Test work	
1	Species? Status	Number of Dominant S That Are OBL, FACW,	
3		Total Number of Domir Species Across All Stra	
4			
Sapling/Shrub Stratum (Plot size:)	_ = Total Cover	Percent of Dominant Sport That Are OBL, FACW,	pecies or FAC: 100% (A/B)
1		Prevalence Index wor	ksheet:
2		3	Multiply by:
3		1	x 1 =
4.     5.			x 2 =
		li .	x 3 =
Herb Stratum (Plot size:)	_ = Total Cover		x 4 =
1. Salicornia Virginica 60	4 CBL	Column Totals:	χ 5 =(Δ), (P)
2. Frankenia Salina Egrandifdia 3 40	Y FACEN	Column rotals.	(A) (B)
3. Conium maculatum 5	- " EXCW	Prevalence Index	= B/A =
4		Hydrophytic Vegetation	I
5		Dominance Test is	<b>1</b>
6		Prevalence Index i	•
7.       8.		data in Remarks	ptations <sup>1</sup> (Provide supporting s or on a separate sheet)
Woody Vine Stratum (Plot size:)	= Total Cover	Problematic Hydro	phytic Vegetation <sup>1</sup> (Explain)
1			and wetland hydrology must
2		be present, unless distu	urbed or problematic.
% Bare Ground in Herb Stratum % Cover of Biotic	_ = Total Cover	Hydrophytic Vegetation Present? Ye	s
Remarks:		. reserit: 10	3

6.5	63	R	6
-00	11 B	11	ĸ

Depth Matrix		led to docum Redox	Features					•	
(inches) Color (moist)		or (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarl	ks
0-20 <u>104R412</u>	98 2.5	YR 418	2	NOT	M	clay	pron	ninent	
rpe: C=Concentration, D=Depletic dric Soil Indicators: (Applicable Histosol (A1) Histic Epipedon (A2) Black Histic (A3)	e to all LRRs, u 	d Matrix, CS= nless otherw Sandy Redox Stripped Matri Loamy Mucky	r <b>ise note</b> d (S5) ix (S6)	1.)		Indicators f 1 cm Mi 2 cm Mi	or Proble	(LRR B)	, M=Matrix. ic Soils³:
Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR C)	$\overline{\mathbf{X}}$	Loamy Gleyed Depleted Matr	d Matrix (F fix (F3)	F2)	- -	Red Par	ent Materi Explain in F	ial (TF2)	
_ 1 cm Muck (A9) (LRR D) _ Depleted Below Dark Surface (A _ Thick Dark Surface (A12) _ Sandy Mucky Mineral (S1) _ Sandy Gleyed Matrix (S4)	11) [ F	Redox Dark S Depleted Dark Redox Depres Vernal Pools (	Surface (	(F7)	3	wetland hy	/drology m	tic vegetationust be presproblematic.	ent,
anticipation I man will man a ment									
Type:									
estrictive Layer (if present):  Type:  Depth (inches): emarks:					Н	ydric Soil P	resent?	Yes <u>V</u>	No
Type: Depth (inches): emarks:  DROLOGY					Н	ydric Soil P	resent?	Yes <u>X</u>	No
Type: Depth (inches): emarks:  DROLOGY etland Hydrology Indicators:					Н	ydric Soil P	resent?	Yes <u>X</u>	No
Type: Depth (inches): emarks:	equired; check a erine)	Il that apply) Salt Crust (B1 Biotic Crust (I Aquatic Invert Hydrogen Sul Oxidized Rhiz Presence of F Recent Iron R Thin Muck Su	B12) tebrates (I fide Odor cospheres Reduced II Reduction urface (C7	(C1) along Livron (C4) in Tilled S	ving Roots (C	Seconda  War Seconda Drif Drif Dra Sato Sato	ary Indicat ter Marks ( liment Dep t Deposits inage Patt -Season V yfish Burro	tors (2 or mo (B1) (Riveri posits (B2) (I (B3) (River terns (B10) Vater Table ows (C8) sible on Aeriard (D3)	ore required) ne) Riverine) ine)
Type:	equired; check a	Salt Crust (Ba Biotic Crust (Ba Aquatic Invert Hydrogen Sul Oxidized Rhiz Presence of F Recent Iron R Thin Muck Su Other (Explain Depth (inche	B12) tebrates (I fide Odor cospheres Reduced II Reduction urface (C7 n in Rema	(C1) s along Liveron (C4) in Tilled Selection ) arks)	ving Roots (C	Seconda  War Seconda Drif Drif Dra Sato Sato	ary Indicat ter Marks ( liment Dep t Deposits inage Patt -Season V yfish Burro uration Vis	tors (2 or mo (B1) (Riveri posits (B2) (I (B3) (River terns (B10) Vater Table ows (C8) sible on Aeriard (D3)	ore required) ne) Riverine) ine)
Type:	equired; check a	Salt Crust (Ba Biotic Crust (I Aquatic Invert Hydrogen Sul Oxidized Rhiz Presence of F Recent Iron R Thin Muck Su Other (Explain Depth (inche Depth (inche	atebrates (I lfide Odor cospheres Reduced II Reduction Irface (C7 In in Rema	(C1) salong Liv ron (C4) in Tilled 5 ) trks)	ving Roots (C Soils (C6)	Seconda Wa Seconda Drif Dra Ora Sata Sha FAC	ary Indicat ter Marks ( liment Dep t Deposits inage Patt -Season W yfish Burro uration Vis uration Vis ullow Aquit	tors (2 or mo (B1) (Riveri posits (B2) (I (B3) (River terns (B10) Vater Table ows (C8) sible on Aeriard (D3)	ore required) ne) Riverine) ine) (C2) al Imagery (C9

Project/Site: Newport Banning Ranch (Newport JO	L5)	City/County: Newpo	ort Beach/Orange Sampling Date: 6(25)	109
Applicant/Owner: Newport Barring 1	Ranch		State: Sampling Point: 46	
Investigator(s): Gary Medeiros, Allison Rudalevige				
Landform (hillslope, terrace, etc.): Shallow degre	SSYON	Local relief (concave	convex none): Concerte Slope (%):	
Subregion (LRR): C	Lat:	33.6247137	7 Long: -117. 94220318 Datum: NAD	83
Soil Map Unit Name: Beaches				<u> </u>
Are climatic / hydrologic conditions on the site typical for	this time of ve	er? Voc V No	NWI classification:	
Are Vegetation, Soil, or Hydrology			•	
Are Vegetation, Soil, or Hydrology			"Normal Circumstances" present? Yes No	
SUMMARY OF FINDINGS – Attach site ma		•	needed, explain any answers in Remarks.)  locations, transects, important features, e	etc
	No			
Hydric Soil Present? Yes X	No	is the Sample		
,	No	within a Wetla	nd? Yes X No	
Remarks: Area is a depressional land		feature		
VEGETATION – Use scientific names of pla	nts.		Ar A	
Tree Stratum (Plot size:	Absolute	Dominant Indicator Species? Status	Dominance Test worksheet:	
1			Number of Dominant Species That Are OBL, FACW, or FAC: (A)	
2				
3			Total Number of Dominant Species Across All Strata:  2 (B)	
4			(-/	
Sapling/Shrub Stratum (Plot size: 20 ×2c		= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/E	В)
	5	y LEPL	Prevalence Index worksheet:	
2.			Total % Cover of: Multiply by:	
3			OBL species x 1 =	
4			FACW species x 2 =	
5		T. 1.1.0	FAC species 15 x 3 = 45	
Herb Stratum (Plot size: 20×26		= Total Cover	FACU species x 4 =	
1. Distichlis spicata	10	Y FACIO	UPL species $25 \times 5 = 175$ Column Totals: $10$ (A) $310$ (B	,
2. Carpobratus Edulis	20	- UPL	•	')
3. Fromus madrifensis ssp. ruber		N N/*	Prevalence Index = B/A = 282	
4. Melilotus Sp. **	15	n FAC	Hydrophytic Vegetation Indicators:	
5			Dominance Test is >50%	
6			Y Prevalence Index is ≤3.0¹	
7			Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)	
8	106	= Total Cover	Problematic Hydrophytic Vegetation¹ (Explain)	
Woody Vine Stratum (Plot size:)			1	
1			<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Ζ,				_
		= Total Cover	Hydrophytic Vegetation	
% Bare Ground in Herb Stratum % Cov			Present? Yes NoNo	
Remarks: Ficient information avail	lable t	o determine	indicator status in this region	n.
Nationary, tentarious	to ido	atify to see	cies. However Melilotus indico	۱ ۱
Nationally, rentatively assigned and day; unable had previously been observed	ed in t	he area.		

UIL				_				Sampling Point: 46
Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the	indicator	or confir	n the absence of i	ndicators.)
Depth (inches)	Matrix Color (moist)	%	Redo	ox Feature				
(IIICIICS)			Color (moist)	%	_Type <sup>1</sup>	_Loc <sup>2</sup>	<u>Texture</u>	Remarks
2 11 -	2.545/4	100			-		sand	
2-16	2.57414	79	54RS/6		C	M	sandy clas	í
				-	-			
					-			
					-			
ype: C=Coi	ncentration, D=Depl	etion, RM=	Reduced Matrix, CS	S=Covere	d or Coate	d Sand Gr	roino <sup>2</sup> l acetica	. DI -D
ydric Soil Ir	idicators: (Applica	ble to all I	RRs, unless other	wise not	ed.)	u Janu Gi		: PL=Pore Lining, M=Matrix. Problematic Hydric Soils <sup>3</sup> :
_ Histosol (			Sandy Redo		,			
_ Histic Epi	pedon (A2)		Stripped Ma	` ,			1 cm Muck	(A10) (LRR B)
_ Black Hist	tic (A3)		Loamy Muc		I (F1)		Reduced Ve	
_ Hydrogen	Sulfide (A4)		Loamy Gley	ed Matrix	(F2)			Material (TF2)
	Layers (A5) (LRR C	)	Depleted Ma		(· –/		Other (Expla	
	k (A9) ( <b>LRR D</b> )		Redox Dark		(F6)		- Carol (Explo	an an romana)
_ Depleted	Below Dark Surface	(A11)	Depleted Da					
	k Surface (A12)		Redox Depr	essions (f	=8)		3Indicators of hyd	drophytic vegetation anซึ
	cky Mineral (S1)		Vernal Pools	s (F9)	,			logy must be present,
	eyed Matrix (S4)							ed or problematic.
	yer (if present):						T	
Type:								
Depth (inch	es): <u>  \@</u>	nal la	- undscape f	Recetar	c tho	ct is	Hydric Soil Preso	
Depth (inchemarks:  rea is  proble eason.	es): 16 a dopression matic hydri	nal la	andscape for condition	Ration Dona	c tho	it is		y ponded. This is during the neet
Depth (inchemarks:  PEC IS  PROVIDE  PROLOG	es): 16 a depression matic hydri	nal la	endscape for condition	Readour J. Pone	c the	ct is was		
Depth (inchemarks: PEC IS PROVOE PROLOG etland Hydro	es): 16 a depression matic hydri Y ology Indicators:				t the	ct is		
Depth (inchemarks: PEC IS PROVOE PROLOG etland Hydro	es): 16 a depression matic hydri				c tho	ct is was	seasonall observed	y ponded. This is during the next
Depth (inchemarks:  PEC IS  PROLOG  Patland Hydromary Indicat  Surface W	es): 16  a dopression  matic hydro  y  plogy Indicators:  cors (minimum of one ater (A1)			)	c tho	it is	seasonall observed	y ponded. This is during the net
Depth (inchemarks:  PEC IS  PROLOG  Patland Hydromary Indicat  Surface W	es): 16  a dopression matic hydri  Y  plogy Indicators: cors (minimum of one		check all that apply	) B11)	c tho	ut is	Seasonall Observed Secondary I	ponded. This is during the net net net net net net net net net ne
Depth (inch marks: PEC IS PROLOG etland Hydromary Indicat Surface W High Wate Saturation	es): 16  a depression  Y  ology Indicators:  ors (minimum of one ater (A1)  r Table (A2) (A3)	e required;	check all that apply Salt Crust ( Biotic Crust	) B11) : (B12)		ct is	Seasonallo Observed Secondary I Water N Sedime	ponded. This is during the net net net net net net net net net ne
Depth (inchemarks:  PEC IS  PECSON.  DROLOG  etland Hydremary Indicat  Surface W  High Wate  Saturation	es): 16  a depression  y  ology Indicators:  cors (minimum of one ater (A1)  r Table (A2)	e required;	check all that apply Salt Crust ( Biotic Crust Aquatic Inve	) B11) : (B12) ertebrates	s (B13)	ct is was	Seasonallo Secondary I — Water M — Sedime — Drift De	ponded. This is during the net and and and and and and and and and and
Depth (inchemarks:  PEC IS  PROLOG  Etland Hydra  Mary Indicate  Surface W  High Wate  Saturation  Water Mar	es): 16  a depression  Y  ology Indicators:  ors (minimum of one ater (A1)  r Table (A2) (A3)	e required;	check all that apply Salt Crust ( Biotic Crust Aquatic Invo	) B11) : (B12) ertebrates Sulfide Od	s (B13) or (C1)		Seasonallo Secondary I  Secondary I  Sedime Drift De Drainag	ponded. This is during the net and and and and and and and and and and
Depth (inchemarks:  PEC IS  PROLOG  Etland Hydrimary Indicat  Surface W  High Wate  Saturation  Water Mar  Sediment I  Drift Depos	es): 16  a depression hydro  y  cology Indicators: cors (minimum of one ater (A1)  r Table (A2) (A3)  ks (B1) (Nonrivering Deposits (B2) (Nonrivering its (B3) (Nonrivering its	e required; e) iverine)	check all that apply Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized Ri	) B11) : (B12) ertebrates Sulfide Od	s (B13) or (C1) es along L	iving Root	Seasonallo Secondary I  Secondary I  Sedime Drift De Drainag s (C3) Dry-Sea	ponded. This is during the net andicators (2 or more required)  Marks (B1) (Riverine) Int Deposits (B2) (Riverine) Int Deposits (B3) (Riverine) Int Deposits (B4) (Riverine)
Depth (inchemarks:  PEC IS  PE	es): 16  a depression  y  cology Indicators:  cors (minimum of one ater (A1)  r Table (A2)  (A3)  ks (B1) (Nonrivering  Deposits (B2) (Nonrivering	e required; e) iverine)	check all that apply Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized RI	) B11) (B12) ertebrates Sulfide Od hizospher f Reduced	s (B13) or (C1) es along L d Iron (C4)	iving Root	Seasonall  Secondary I  Water N  Sedime  Drift De  Drainag  s (C3)  Crayfish	ponded. This is during the net andicators (2 or more required)  Marks (B1) (Riverine) Int Deposits (B2) (Riverine) Int Deposits (B3) (Riverine) Int Deposits (B4)
Depth (inchemarks:  PEC SON:  DROLOG  etland Hydrimary Indicat  Surface W  High Wate  Saturation  Water Mar  Sediment I  Drift Depos  Surface So	es): 16  a dopression  y  cology Indicators: cors (minimum of one ater (A1)  r Table (A2)  (A3)  ks (B1) (Nonrivering opensits (B2) (Nonrivering oil Cracks (B6)	e required; e) iverine) ie)	check all that apply  Salt Crust ( Biotic Crust Aquatic Inv Hydrogen S Oxidized Ri Presence o	) B11) (B12) ertebrates Sulfide Od nizospher f Reduced Reductio	s (B13) or (C1) es along L d Iron (C4) on in Tilled	iving Root	Seasonallo Secondary I  Secondary I  Sedime Drift De Drainag s (C3) Dry-Sea Crayfish Saturati	ndicators (2 or more required) Marks (B1) (Riverine) Int Deposits (B2) (Riverine) posits (B3) (Riverine) e Patterns (B10) ason Water Table (C2) in Burrows (C8) on Visible on Aerial Imagery (C9)
Depth (inchemarks:  PROLOG  Patland Hydremary Indicat  Surface W  High Water Mar  Sediment I  Drift Depose  Surface So  Inundation	es): 16  a depression hydro  y  cology Indicators: cors (minimum of one ater (A1)  r Table (A2) (A3)  ks (B1) (Nonrivering Deposits (B2) (Nonrivering its (B3) (Nonrivering its	e required; e) iverine) ie)	check all that apply  Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized Ri Presence o Recent Iron	) B11) (B12) ertebrates Sulfide Od hizospher f Reduced Reductio Surface (C	s (B13) or (C1) es along L d Iron (C4) on in Tilled	iving Root	Seasonallo Secondary I  Secondary I  Water N  Sedime Drift De Drainag s (C3) Dry-Sea Crayfish Saturati Shallow	ndicators (2 or more required) Marks (B1) (Riverine) Int Deposits (B2) (Riverine) posits (B3) (Riverine) e Patterns (B10) ason Water Table (C2) a Burrows (C8) on Visible on Aerial Imagery (C9) Aquitard (D3)
Depth (inchemarks:  PROLOG  PROLOG  Partial Hydromary Indicate  Surface W  High Wate  Saturation  Water Mar  Sediment I  Drift Depose  Surface So  Inundation  Water-Stai	es): 16  c. dopression  c. dopression  c. dopression  c. dopression  c. dopression  c. dopression  place hydra  constitution  co	e required; e) iverine) ie)	check all that apply  Salt Crust ( Biotic Crust Aquatic Inv Hydrogen S Oxidized Ri Presence o	) B11) (B12) ertebrates Sulfide Od hizospher f Reduced Reductio Surface (C	s (B13) or (C1) es along L d Iron (C4) on in Tilled	iving Root	Seasonallo Secondary I  Secondary I  Water N  Sedime Drift De Drainag s (C3) Dry-Sea Crayfish Saturati Shallow	ndicators (2 or more required) Marks (B1) (Riverine) Int Deposits (B2) (Riverine) posits (B3) (Riverine) e Patterns (B10) ason Water Table (C2) in Burrows (C8) on Visible on Aerial Imagery (C9)
Depth (inchemarks:  PEC IS  PE	es): Nonrivering Cracks (B6) Visible on Aerial Immed Leaves (B9) tions:	e required; e) iverine) ae)	check all that apply  Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized RI Presence o Recent Iron Thin Muck S	) B11) (B12) ertebrates Sulfide Od hizospher f Reductio Reductio Surface (C ain in Rer	s (B13) or (C1) es along L d Iron (C4) on in Tilled C7) marks)	iving Root	Seasonallo Secondary I  Secondary I  Water N  Sedime Drift De Drainag s (C3) Dry-Sea Crayfish Saturati Shallow	ndicators (2 or more required) Marks (B1) (Riverine) Int Deposits (B2) (Riverine) posits (B3) (Riverine) e Patterns (B10) ason Water Table (C2) a Burrows (C8) on Visible on Aerial Imagery (C9) Aquitard (D3)
Depth (inchemarks:  PEC S  PROLOG  PROLOG  Petland Hydra  Imary Indicat  Surface W  High Water  Saturation  Water Mar  Sediment I  Drift Depose  Surface Sc  Inundation  Water-Stai  Pid Observar  Fface Water	es): Nonrivering Cracks (B6) Visible on Aerial Impact (B9) tions:  Present? Yes	e required; e) iverine) agery (B7)	check all that apply Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized RI Presence o Recent Iron Thin Muck S Other (Expl	B11) ertebrates Sulfide Od hizospher f Reduced Reductio Surface (Cain in Rer	s (B13) or (C1) es along L d Iron (C4) on in Tilled C7) marks)	iving Root Soils (C6)	Seasonallo Secondary I  Secondary I  Water N  Sedime Drift De Drainag s (C3) Dry-Sea Crayfish Saturati Shallow	ndicators (2 or more required) Marks (B1) (Riverine) Int Deposits (B2) (Riverine) posits (B3) (Riverine) e Patterns (B10) ason Water Table (C2) a Burrows (C8) on Visible on Aerial Imagery (C9) Aquitard (D3)
Depth (inchemarks:  DROLOG  etland Hydro  imary Indicat  Surface W  High Wate  Saturation  Water Mar  Sediment if  Drift Depose  Surface So  Inundation  Water-Stain  eld Observa  arface Water  ater Table Pr	es): Nonrivering of Cacks (B6) Visible on Aerial Immed Leaves (B9) tions:  Present? Yes and Cacks (B6) Vesent?	e required; e) iverine) agery (B7)	check all that apply Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized RI Presence o Recent Iron Thin Muck S Other (Expl	B11) (B12) ertebrates Sulfide Od nizospher f Reduced Reductio Surface (Cain in Rer	s (B13) or (C1) es along L d Iron (C4) on in Tilled C7) marks)	iving Root Soils (C6)	Seasonallo Secondary I  Secondary I  Water M  Sedime  Drift De  Drainag s (C3)  Crayfish  Saturati  Shallow  FAC-Ne	ndicators (2 or more required) Marks (B1) (Riverine) Int Deposits (B2) (Riverine) posits (B3) (Riverine) e Patterns (B10) ason Water Table (C2) In Burrows (C8) on Visible on Aerial Imagery (C9) Aquitard (D3) eutral Test (D5)
Depth (inchemarks:  DROLOG  etland Hydrimary Indicat  Surface W High Wate Saturation Water Mar Sediment I Drift Depos Surface Sc Inundation Water-Stai eld Observar face Water ater Table Pr turation Prescuedes capilla	es): Nonrivering Cracks (B6) Visible on Aerial Imned Leaves (B9) tions: Present? Yes early fringe)	e required; e) iverine) agery (B7)	check all that apply Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized RI Presence o Recent Iron Thin Muck S Other (Expl	B11) ertebrates Sulfide Od hizospher f Reducto Reducto Surface (Cain in Rer hes):	s (B13) or (C1) es along L d Iron (C4) on in Tilled C7) marks)	iving Root Soils (C6)	Seasonallo Secondary I  Secondary I  Water N  Sedime  Drift De  Drainag s (C3) Dry-Sea  Crayfish  Saturati  Shallow  FAC-Ne	ndicators (2 or more required) Marks (B1) (Riverine) Int Deposits (B2) (Riverine) posits (B3) (Riverine) e Patterns (B10) ason Water Table (C2) a Burrows (C8) on Visible on Aerial Imagery (C9) Aquitard (D3)
Depth (inchemarks:  DROLOG  etland Hydrimary Indicate  Surface W High Water Saturation Water Mar Sediment I Drift Depose Surface Scenarios Inundation Water-Stain Eld Observator Arface Water Staturation Prescuedes capilla	y  ology Indicators: ors (minimum of one ater (A1) r Table (A2) (A3) ks (B1) (Nonrivering old Cracks (B6) Visible on Aerial Imped Leaves (B9) tions: Present? Yes esent? Yes	e required; e) iverine) agery (B7)	check all that apply Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized RI Presence o Recent Iron Thin Muck S Other (Expl	B11) ertebrates Sulfide Od hizospher f Reducto Reducto Surface (Cain in Rer hes):	s (B13) or (C1) es along L d Iron (C4) on in Tilled C7) marks)	iving Root Soils (C6)	Seasonallo Secondary I  Secondary I  Water N  Sedime  Drift De  Drainag s (C3) Dry-Sea  Crayfish  Saturati  Shallow  FAC-Ne	ndicators (2 or more required) Marks (B1) (Riverine) Int Deposits (B2) (Riverine) posits (B3) (Riverine) e Patterns (B10) ason Water Table (C2) In Burrows (C8) on Visible on Aerial Imagery (C9) Aquitard (D3) eutral Test (D5)
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Depth (inch emarks:  Depth (inch emarks:  Depth (inch emarks:  Depth (inch emarks:  Depth (inch emarks:  Depth (inch emarks:  Depth (inch emarks:  Depth (inch emarks:  Securation Water Mar Sediment if Drift Depos Surface So Inundation Water-Stai eld Observa urface Water ater Table Pr emarks:  Drift Depos Surface So Inundation Water-Stai eld Observa	es): Nonrivering Cracks (B6) (Nonrivering): Cracks (B6) (Nonrivering): Cracks (B6) (Nonrivering): Cracks (B6) (Nonrivering): Cracks (B6) (Nonrivering): Cracks (B6) (Nonrivering): Cracks (B6) (Nonrivering): Cracks (B6) (Nonrivering): Cracks (B6) (Nonrivering): Cracks (B6) (Nonrivering): Cracks (B6) (Nonrivering): Cracks (B6) (Nonrivering): Cracks (B6) (Nonrivering): Cracks (B6) (Nonrivering): Cracks (B9) (Nonrivering): Crac	e) iverine) agery (B7)	check all that apply  Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized RI Presence o Recent Iron Thin Muck S Other (Expl	B11) c (B12) ertebrates Sulfide Od nizospher f Reductio Surface (C ain in Rer hes): hes):	s (B13) or (C1) es along L d Iron (C4) on in Tilled C7) marks)	iving Root Soils (C6) 	Secondary I  Secondary I  Water N  Sedime  Drift De  Drainag s (C3) Dry-Sea  Crayfish  Saturati  Shallow  FAC-Ne	ndicators (2 or more required) Marks (B1) (Riverine) Int Deposits (B2) (Riverine) Int Deposits (B3) (Riverine) Int Deposits (B10) Int Deposits (B10) Int Deposits (B2) (Riverine) Int Deposits (B3) (Riverine) Int Deposits (B2) (Riverine) Int Deposits (B3) (Riverine) Int Deposits (B3) (Riverine) Int Deposits (B2) (Riverine) Int Deposits (B3) (Riverine) Int Deposits
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Depth (inchemarks:  Department is a considered with the considered	es): Nonrivering Cracks (B6) (Nonrivering): Cracks (B6) (Nonrivering): Cracks (B6) (Nonrivering): Cracks (B6) (Nonrivering): Cracks (B6) (Nonrivering): Cracks (B6) (Nonrivering): Cracks (B6) (Nonrivering): Cracks (B6) (Nonrivering): Cracks (B6) (Nonrivering): Cracks (B6) (Nonrivering): Cracks (B6) (Nonrivering): Cracks (B6) (Nonrivering): Cracks (B6) (Nonrivering): Cracks (B6) (Nonrivering): Cracks (B9) (Nonrivering): Crac	e) iverine) agery (B7)	check all that apply  Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized RI Presence o Recent Iron Thin Muck S Other (Expl	B11) c (B12) ertebrates Sulfide Od nizospher f Reduceto Reductio Surface (Cain in Rer hes): hes):	s (B13) or (C1) es along L d Iron (C4) on in Tilled C7) marks)	iving Root Soils (C6) 	Seasonallo Secondary I  Secondary I  Water N  Sedime  Drift De  Drainag s (C3) Dry-Sea  Crayfish  Saturati  Shallow  FAC-Ne	ndicators (2 or more required) Marks (B1) (Riverine) Int Deposits (B2) (Riverine) Posits (B3) (Riverine) Posits (B10) Posi

Project/Site: <u>Newport Banning Ranch (Newport JC</u>	(15) City/Cour	nty: Newpor	t Beach/Orange Sampling Date: 6/25/0
Applicant/Owner: Wewfort Banning R	anch		State: CA Sampling Point: 47
Investigator(s): Gary Medeiros, Allison Rudalevige	Section, 7	Гownship, Ra	ange: N/A - "Santiago De Santa Ana" land grant
Landform (hillslope, terrace, etc.):	Local reli	ef (concave,	convex, none): Slope (%):
Subregion (LRR): C	Lat. 23.625	56260	1000 -117,9114/0071 01 1008
Soil Map Unit Name: Myford Sandy loarn	(9-30% slopes	erodod	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			"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology			eeded, explain any answers in Remarks.)
•		,	ocations, transects, important features, etc.
	No	he Sampled	Area
Wetland Hydrology Present? Yes X		hin a Wetlar	nd? YesNo X
Remarks:			
VEGETATION – Use scientific names of pla	ants.		#
70V20	Absolute Dominan	t Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 20×30)  1. Salix lasialeris	% Cover Species?	Status FACW	Number of Dominant Species
2		17/00	That Are OBL, FACW, or FAC: (A)
3.			Total Number of Dominant Species Across All Strata: 2 (B)
4			(b)
Sapling/Shrub Stratum (Plot size:)	<u>qo</u> = Total Co		Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)
1			Prevalence Index worksheet:
3			Total % Cover of: Multiply by:
4			OBL species x 1 = FACW species 20 x 2 = 180
5			FAC species x 3 =
Horb Strotum (Blot size: 70V20	= Total Co	over	FACU species x 4 =
Herb Stratum (Plot size: 20x30 )  1. Carpobrotus edulis	26 V	1121-	UPL species 20 x 5 = 100
2		VIII	Column Totals: 1(5 (A) 280 (B)
3.		-	Prevalence Index = B/A = 2.55
4			Hydrophytic Vegetation Indicators:
5			Dominance Test is >50%
6			✓ Prevalence Index is ≤3.0¹  1.7  1.7  1.7  1.7  1.7  1.7  1.7  1.
7 8			Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
	= Total Co		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:)			
1 2			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	= Total Co	over	Hydrophytic
% Bare Ground in Herb Stratum 80 % Co	ver of Biotic Crust		Vegetation
Remarks:			Present?

SO		L
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Depth Matrix Inches) Color (moist) %	Redox Features Color (moist) % Type <sup>1</sup> Loc	Tromarko	
3-20 loyr 5/3 100	)	Sand	
			-
ype: C=Concentration, D=Depletion, RN	M=Reduced Matrix, CS=Covered or Coated Sand	Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix	х.
dric Soil Indicators: (Applicable to a	•	Indicators for Problematic Hydric Soils <sup>3</sup> :	
Histosof (A1)	Sandy Redox (S5)	1 cm Muck (A9) ( <b>LRR C</b> )	
_ Histic Epipedon (A2) _ Black Histic (A3)	Stripped Matrix (S6)	2 cm Muck (A10) (LRR B)	
_ Black Flistic (A3) _ Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1)	Reduced Vertic (F18)	
Stratified Layers (A5) (LRR C)	Loamy Gleyed Matrix (F2) Depleted Matrix (F3)	Red Parent Material (TF2)	
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6)	Other (Explain in Remarks)	
Depleted Below Dark Surface (A11)	Depleted Dark Surface (F7)		
Thick Dark Surface (A12)	Redox Depressions (F8)	<sup>3</sup> Indicators of hydrophytic vegetation anนี้	
Sandy Mucky Mineral (S1)	Vernal Pools (F9)	wetland hydrology must be present,	
Sandy Gleyed Matrix (S4)		unless disturbed or problematic.	
strictive Layer (if present):			
		1	
Depth (inches):		Hydric Soil Present? Yes No _	×
Type: Depth (inches): marks:		Hydric Soil Present? Yes No _	<u>*</u>
Depth (inches):		Hydric Soil Present? Yes No _	×
Depth (inches):marks:		Hydric Soil Present? Yes No _	×
Depth (inches): marks: DROLOGY tland Hydrology Indicators:		Hydric Soil Present? Yes No _	×
Depth (inches): marks: DROLOGY tland Hydrology Indicators: nary Indicators (minimum of one require	ed; check all that apply)		
Depth (inches): marks:  DROLOGY tland Hydrology Indicators: nary Indicators (minimum of one require Surface Water (A1)	ed; check all that apply) Salt Crust (B11)	Secondary Indicators (2 or more require	
Depth (inches): marks:  DROLOGY  tland Hydrology Indicators: nary Indicators (minimum of one require Surface Water (A1) High Water Table (A2)		Secondary Indicators (2 or more require Water Marks (B1) (Riverine)	ed)
Depth (inches): marks:  DROLOGY  fland Hydrology Indicators: mary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3)	Salt Crust (B11)	Secondary Indicators (2 or more require  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)	ed)
Depth (inches):	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Secondary Indicators (2 or more require  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)	ed)
Depth (inches):	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Secondary Indicators (2 or more require  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)	ed)
Depth (inches):	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Secondary Indicators (2 or more require  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) oots (C3) Dry-Season Water Table (C2)	ed)
Depth (inches):	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (	Secondary Indicators (2 or more require  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) oots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8)	ed)
Depth (inches):	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (67) Thin Muck Surface (C7)	Secondary Indicators (2 or more require  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  oots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)	ed)
DROLOGY  Itland Hydrology Indicators: mary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B Water-Stained Leaves (B9)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (	Secondary Indicators (2 or more require  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  oots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery	ed)
Depth (inches):	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C7) Thin Muck Surface (C7) Other (Explain in Remarks)	Secondary Indicators (2 or more require  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  oots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery  Shallow Aquitard (D3)	ed)
Depth (inches):	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C7) Thin Muck Surface (C7) Other (Explain in Remarks)  No X Depth (inches):	Secondary Indicators (2 or more require  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  oots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery  Shallow Aquitard (D3)	ed)
Depth (inches):	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C7) Other (Explain in Remarks)  No Depth (inches): No Y Depth (inches): No Y Depth (inches): No Y	Secondary Indicators (2 or more require  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  oots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery  Shallow Aquitard (D3)	ed)
Depth (inches):	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C7) Thin Muck Surface (C7) Other (Explain in Remarks)  No X Depth (inches): No Y Depth (inches):	Secondary Indicators (2 or more require  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  oots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery  Shallow Aquitard (D3)  FAC-Neutral Test (D5)	ed) ) yy (Cs
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Depth (inches):	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C7) Thin Muck Surface (C7) Other (Explain in Remarks)  No X Depth (inches): No X Depth (inches):	Secondary Indicators (2 or more require  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  oots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery  Shallow Aquitard (D3)  FAC-Neutral Test (D5)	ed) ) yy (Cs
DROLOGY  Itland Hydrology Indicators: mary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B Water-Stained Leaves (B9) Id Observations: face Water Present? Yes ter Table Present? Yes uration Present? Yes surdes capillary fringe) Scribe Recorded Data (stream gauge, mo	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C7) Thin Muck Surface (C7) Other (Explain in Remarks)  No X Depth (inches): No X Depth (inches):	Secondary Indicators (2 or more require  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  oots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery  Shallow Aquitard (D3)  FAC-Neutral Test (D5)	ed) ) yy (Cs
DROLOGY  Itland Hydrology Indicators: mary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B Water-Stained Leaves (B9) Id Observations: face Water Present? Yes ter Table Present? Yes uration Present? Yes surdes capillary fringe) Scribe Recorded Data (stream gauge, mo	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C7) Thin Muck Surface (C7) Other (Explain in Remarks)  No X Depth (inches): No X Depth (inches):	Secondary Indicators (2 or more require  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  oots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery  Shallow Aquitard (D3)  FAC-Neutral Test (D5)	ed) ) yy (Cs

Project/Site: Newport Banning F	Kanch (Newport J	015) City/	/County: <u>Newpo</u>	rt Beach/Orange	Sampling Date: 9/30/0
Applicant/Owner: Newpord	Banning K	anch		State: <u>CA</u>	Sampling Point: 48
Investigator(s): Gary Medeiros, A	Illison Rudalevige	Sec	tion, Township, R	ange: <u>N/A - "Santiago D</u>	e Santa Ana" land grant
Landform (hillslope, terrace, etc.): _	'	Loc	al relief (concave	, convex, none): <u>Conca</u>	<u>೫೬</u> Slope (%):
Subregion (LRR): C		Lat: <u>33, (</u>	4192	_ Long: 117,948	72 Datum: NAD 83
Soil Map Unit Name: Bolsa	Silt loan			NWI classifica	ation: PEMCx
Are climatic / hydrologic conditions	on the site typical fo	r this time of year?	Yes No _	(If no, explain in Re	emarks.)
Are Vegetation, Soil					resent? Yes ✓ No
Are Vegetation, Soil	, or Hydrology	naturally problem		eeded, explain any answer	
SUMMARY OF FINDINGS -	Attach site ma	ap showing sar			
Hydrophytic Vegetation Present?	Yes 🔭				
Hydric Soil Present?	Yes	No X	Is the Sample		V
Wetland Hydrology Present?	Yes	No X	within a Wetla	nd? Yes	No <u>X</u>
VEGETATION – Use scienti			minant Indicator	Dominance Test works	# As As As As As As As As As As As As As
Tree Stratum (Plot size:		% Cover Spe	ecies? Status	Number of Dominant Sport That Are OBL, FACW, or	ecies 1
3				Total Number of Domina Species Across All Strata	
4. Sapling/Shrub Stratum (Plot size:	)	= To		Percent of Dominant Spe That Are OBL, FACW, or	
1.				Prevalence Index works	
2				Total % Cover of:	
3 4				OBL species	
5.				FACW species	
		= To	tal Cover	FACU species	
Herb Stratum (Plot size:  1. Frankenia Salina Ig	),, ,, ¬			1	x 5 =
2. Salicornia virginica	randitolia 1	- 40 Y	<u>FACIO</u>	Column Totals:	
		<u> </u>	1 OBL	Dravalanas Inday	- D/A
3 4				Hydrophytic Vegetation	= B/A =
5				Dominance Test is >	
6				Prevalence Index is:	
7 8				Morphological Adapt	ations <sup>1</sup> (Provide supporting or on a separate sheet)
Woody Vine Stratum (Plot size:			tal Cover	Problematic Hydroph	nytic Vegetation <sup>1</sup> (Explain)
1 2				<sup>1</sup> Indicators of hydric soil a be present, unless disturb	and wetland hydrology must bed or problematic.
% Bare Ground in Herb Stratum				Hydrophytic Vegetation Present? Yes	У No
Remarks:	*			165	

50	0	Ē

Indicates   Color (moist)	Depth	Matrix		Redox Features	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coaled Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coaled Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coaled Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coaled Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coaled Sand Grains.  To Coal Coal Coal Coal Coal Coal Coal Coa		Color (moist)	%	Color (moist) % Type <sup>1</sup>	Loc <sup>2</sup> Texture Remarks
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix (PS)  Histic Epipedon (A2)  Stripped Matrix (SS)  Depletion (A2)  Stripped Matrix (SS)  D=Depletion (A2)  Stripped Matrix (FS)  Stripp					organic
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix (PS)  Histic Epipedon (A2)  Stripped Matrix (SS)  Depletion (A2)  Stripped Matrix (SS)  D=Depletion (A2)  Stripped Matrix (FS)  Stripp			100		silty loam
"Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. *Location: PL=Pore Lining, M=Matrix. Ptydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histocost (A1) Sandy Redox (S5)	6-14	2.5 Y2/2	100		
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histos (A1)					Sittle touting
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histos (A1)					
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosoil (A1) Sandy Redox (S5) 1 to miduck (A9) (LRR C)  Histos Epipedon (A2) Stripped Matrix (S6) 2 to more required (A10) (LRR B)  Black Histo (A3) Loamy Mucky Mineral (F1) Redox Person Muck (A9) (LRR C)  Stratified Layers (A5) (LRR C) Depleted Matrix (F2) Red Perent Material (TF2)  Stratified Layers (A5) (LRR D) Redox Dark Surface (F6)  Depleted Bolow Dark Surface (A11) Depleted Dark Surface (F7)  Thick Dark Surface (A12) Redox Depressions (F8)  Sandy Mucky Mineral (S1) Person (S1) Vernal Pools (F9) Welland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if present):  Type:  Deplt (inches):  Deplt (inches):  Popth (inches):  Semarks:  Somuc occassional Yedox Concentrations were present, within the properties of the problematic (B2) (Riverine)  Surface Water (A1) Salt Crust (B12) Sectional Proposits (B2) (Riverine)  Surface Water Table (A2) Biotic Crust (B12) Setting Poposits (B3) (Riverine)  Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C11) Drainage Patterns (B10)  Sediment Deposits (B2) (Nonriverine) Present for Nonriverine) Present for Reduced Iron (C4) Crayfish Burrows (C3) Dry-Season Water Table (C2) Crayfish Burrows (C3) Shallow Aquitard (D3) Sediment Deposits (B3) (Nonriverine) Present for Reduced Iron (C4) Crayfish Burrows (C3) Shallow Aquitard (D3) Present? Yes No Y Depth (Inches): Water Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No Y Depth (Inches): Water Babel Carbana (Page) Present? Yes No Y Depth (Inches): Water Babel Carbana (Page) Present? Yes No Y Depth (Inches): Water Table Present? Yes No Y Depth (Inches): Water Stained Data (stream gauge, monitoring well, serial photos, previous inspections), if available:					
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosoil (A1) Sandy Redox (S5) 1 to miduck (A9) (LRR C)  Histos Epipedon (A2) Stripped Matrix (S6) 2 to more required (A10) (LRR B)  Black Histo (A3) Loamy Mucky Mineral (F1) Redox Person Muck (A9) (LRR C)  Stratified Layers (A5) (LRR C) Depleted Matrix (F2) Red Perent Material (TF2)  Stratified Layers (A5) (LRR D) Redox Dark Surface (F6)  Depleted Bolow Dark Surface (A11) Depleted Dark Surface (F7)  Thick Dark Surface (A12) Redox Depressions (F8)  Sandy Mucky Mineral (S1) Person (S1) Vernal Pools (F9) Welland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if present):  Type:  Deplt (inches):  Deplt (inches):  Popth (inches):  Semarks:  Somuc occassional Yedox Concentrations were present, within the properties of the problematic (B2) (Riverine)  Surface Water (A1) Salt Crust (B12) Sectional Proposits (B2) (Riverine)  Surface Water Table (A2) Biotic Crust (B12) Setting Poposits (B3) (Riverine)  Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C11) Drainage Patterns (B10)  Sediment Deposits (B2) (Nonriverine) Present for Nonriverine) Present for Reduced Iron (C4) Crayfish Burrows (C3) Dry-Season Water Table (C2) Crayfish Burrows (C3) Shallow Aquitard (D3) Sediment Deposits (B3) (Nonriverine) Present for Reduced Iron (C4) Crayfish Burrows (C3) Shallow Aquitard (D3) Present? Yes No Y Depth (Inches): Water Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No Y Depth (Inches): Water Babel Carbana (Page) Present? Yes No Y Depth (Inches): Water Babel Carbana (Page) Present? Yes No Y Depth (Inches): Water Table Present? Yes No Y Depth (Inches): Water Stained Data (stream gauge, monitoring well, serial photos, previous inspections), if available:		1			
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosoil (A1) Sandy Redox (S5) 1 to miduck (A9) (LRR C)  Histos Epipedon (A2) Stripped Matrix (S6) 2 to more required (A10) (LRR B)  Black Histo (A3) Loamy Mucky Mineral (F1) Redox Person Muck (A9) (LRR C)  Stratified Layers (A5) (LRR C) Depleted Matrix (F2) Red Perent Material (TF2)  Stratified Layers (A5) (LRR D) Redox Dark Surface (F6)  Depleted Bolow Dark Surface (A11) Depleted Dark Surface (F7)  Thick Dark Surface (A12) Redox Depressions (F8)  Sandy Mucky Mineral (S1) Person (S1) Vernal Pools (F9) Welland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if present):  Type:  Deplt (inches):  Deplt (inches):  Popth (inches):  Semarks:  Somuc occassional Yedox Concentrations were present, within the properties of the problematic (B2) (Riverine)  Surface Water (A1) Salt Crust (B12) Sectional Proposits (B2) (Riverine)  Surface Water Table (A2) Biotic Crust (B12) Setting Poposits (B3) (Riverine)  Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C11) Drainage Patterns (B10)  Sediment Deposits (B2) (Nonriverine) Present for Nonriverine) Present for Reduced Iron (C4) Crayfish Burrows (C3) Dry-Season Water Table (C2) Crayfish Burrows (C3) Shallow Aquitard (D3) Sediment Deposits (B3) (Nonriverine) Present for Reduced Iron (C4) Crayfish Burrows (C3) Shallow Aquitard (D3) Present? Yes No Y Depth (Inches): Water Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No Y Depth (Inches): Water Babel Carbana (Page) Present? Yes No Y Depth (Inches): Water Babel Carbana (Page) Present? Yes No Y Depth (Inches): Water Table Present? Yes No Y Depth (Inches): Water Stained Data (stream gauge, monitoring well, serial photos, previous inspections), if available:					
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histos (A1)					
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosoil (A1) Sandy Redox (S5) 1 to miduck (A9) (LRR C)  Histos Epipedon (A2) Stripped Matrix (S6) 2 to more required (A10) (LRR B)  Black Histo (A3) Loamy Mucky Mineral (F1) Redox Person Muck (A9) (LRR C)  Stratified Layers (A5) (LRR C) Depleted Matrix (F2) Red Perent Material (TF2)  Stratified Layers (A5) (LRR D) Redox Dark Surface (F6)  Depleted Bolow Dark Surface (A11) Depleted Dark Surface (F7)  Thick Dark Surface (A12) Redox Depressions (F8)  Sandy Mucky Mineral (S1) Person (S1) Vernal Pools (F9) Welland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if present):  Type:  Deplt (inches):  Deplt (inches):  Popth (inches):  Semarks:  Somuc occassional Yedox Concentrations were present, within the properties of the problematic (B2) (Riverine)  Surface Water (A1) Salt Crust (B12) Sectional Proposits (B2) (Riverine)  Surface Water Table (A2) Biotic Crust (B12) Setting Poposits (B3) (Riverine)  Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C11) Drainage Patterns (B10)  Sediment Deposits (B2) (Nonriverine) Present for Nonriverine) Present for Reduced Iron (C4) Crayfish Burrows (C3) Dry-Season Water Table (C2) Crayfish Burrows (C3) Shallow Aquitard (D3) Sediment Deposits (B3) (Nonriverine) Present for Reduced Iron (C4) Crayfish Burrows (C3) Shallow Aquitard (D3) Present? Yes No Y Depth (Inches): Water Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No Y Depth (Inches): Water Babel Carbana (Page) Present? Yes No Y Depth (Inches): Water Babel Carbana (Page) Present? Yes No Y Depth (Inches): Water Table Present? Yes No Y Depth (Inches): Water Stained Data (stream gauge, monitoring well, serial photos, previous inspections), if available:	<sup>1</sup> Type: C=Co	oncentration, D=Depl	etion, RM=Red	uced Matrix, CS=Covered or Coated	Sand Grains 2 ocation: PL=Pore Lining M=Metrix
Histosol (A1) Histosol (A2) Black Histosol (A2) Black Histosol (A4) Loamy Mucky Mineral (F1) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Hydrogen Sulfide (A4) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F2) Straffided Layers (A5) (LRR C) Depleted Matrix (F2) 1 cm Muck (A9) (LRR D) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Wetland hydrology must be present, unless disturbed or problematic.  Wetland hydrology must be present, unless disturbed or problematic.  Water factors of hydrophylic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Water Marks (B1) (Riverine)  Water Marks (B1) (Riverine)  Water Marks (B1) (Ronriverine)  Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No Depth (Inches): Mater Table Present? Yes No Depth (Inches): Mater Table Present? Yes No Depth (Inches): Mater Table Present? Yes No Depth (Inches): Mater Table Present? Yes No Depth (Inches): Mater Table Present? Yes No Depth (Inches): Mater Table Present? Yes No Depth (Inches): Mater Table Recorded Data	Hydric Soil I	Indicators: (Applica	able to all LRR	s, unless otherwise noted.)	
Histic Epped on (A2)	Histosol	(A1)	_	Sandy Redox (S5)	
Loarny Mucky Mineral (F1)			_	Stripped Matrix (S6)	
Hydrogen Sulfide (A4)  Loarny Gleyed Matrix (F2)  1 cm Muck (A9) (LRR C)  Depleted Matrix (F3)  Depleted Below Dark Surface (A11)  Depleted Below Dark Surface (A11)  Depleted Below Dark Surface (A12)  Redox Dark Surface (F6)  Depleted Below Dark Surface (A11)  Depleted Dark Surface (F8)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Gleyed Matrix (S4)  Sandy Gleyed Matrix (S4)  Sandy Gleyed Matrix (S4)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if present):  Type:  Depth (inches):  Hydric Soil Present? Yes No Yes No Yes Observed in Harappy  Secondary Indicators (2 or more required water (A12)  Secondary Indicators (2 or more required water (A12)  Secondary Indicators (2 or more required water (A12)  Surface Water (A1)  High Water Table (A2)  Biotic Crust (B12)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Hydrogen Sulfide Odor (C1)  Drift Deposits (B2) (Riverine)  Drift Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Drift Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Drift Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Saturation Visible on Aerial Imagery (B7)  Thin Muck Surface (C7)  Shallow Aquitard (D3)  Water Stained Leaves (B8)  Other (Explain in Remarks)  FAC-Neutral Test (D5)  FAC-Neutral Test (D5)  Prescribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		• •	-	Loamy Mucky Mineral (F1)	
Strate Layers (AS) (LIRR C) Depleted Matrix (F3) Other (Explain in Remarks)  1 cm Muck (A9) (LRR D) Redox Dark Surface (F5) Depleted Bolow Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) Wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if present): Type: Depth (inches):			-	Loamy Gleyed Matrix (F2)	
Depleted Below Dark Surface (A11)			_	• •	
Thick Dark Surface (A12)			-	` ,	
Sandy Mucky Mineral (S1)			(A11) _		
Sandy Gleyed Matrix (S4)  Restrictive Layer (if present):  Type: Depth (inches): Hydric Soil Present? Yes No Y  PROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) High Water Table (A2) Salt Crust (B11) Saturation (A3) Aquatic Invertebrates (B13) Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Sediment Deposits (B3) (Riverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Surface Water Present? Water Table Present? Yes No Depth (inches): Surface Water Present? Water Table Present? Yes No Depth (inches): Surface Water Present? Yes No Depth (inches): Surface Water Present? Yes No Depth (inches): Surface Water Present? Yes No Depth (inches): Surface Water Present? Yes No Depth (inches): Surface Water Present? Yes No Depth (inches): Surface Water Present? Yes No Depth (inches): Surface Water Present? Yes No Depth (inches): Surface Water Present? Yes No Y Depth (inches): Surface Water Present? Yes No Y Depth (inches): Surface Water Present? Yes No Y Depth (inches): Surface Water Present? Yes No Y Depth (inches): Surface Water Present? Yes No Y Depth (inches): Surface Water Present? Yes No Y Depth (inches): Surface Water Present? Yes No Y Depth (inches): Surface Water Present? Yes No Y Depth (inches): Surface Water Present? Yes No Y Depth (inches): Surface Water Present? Yes No Y Depth (inches): Surface Water Present? Yes No Y Depth (inches): Surface Water Present? Yes No Y Depth (inches): Surface Water Present? Yes No Y Depth (inches): Surface Water Present? Yes No Y Depth (inches):			-		<sup>3</sup> Indicators of hydrophytic vegetation and
Restrictive Layer (if present):  Type:  Depth (inches):  Remarks:  Stand occassional redox concentrations were existented in thin laminations, less than a minimum of one required; check all that apply)  Secondary Indicators (pninimum of one required; check all that apply)  Surface Water (A1)  Surface Water (A1)  Sati Crust (B11)  High Water Table (A2)  Saturation (A3)  Aquatic Invertebrates (B13)  Water Marks (B1) (Nonriverine)  Hydrogen Sulfide Odor (C1)  Drainage Patterns (B10)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drift Deposits (B3) (Riverine)  Sediment Deposits (B3) (Inverine)  Drift Deposits (B3) (Riverine)  Drift Deposits (B3) (Inverine)  Sediment Deposits (B3) (Inverine)  Drift Deposits (B3) (Inverine)  Drift Deposits (B3) (Inverine)  Sediment Deposits (B3) (Inverine)  Drift Deposi			_	vernai Pools (F9)	
Type:					unless disturbed or problematic.
Depth (inches):		,			
Primary Indicators (minimum of one required; check all that apply)  Secondary Indicators (2 or more required) Surface Water (A1) Salt Crust (B11) Water Marks (B1) (Riverine) High Water Table (A2) Solitic Crust (B12) Sediment Deposits (B2) (Riverine) Sediment Deposits (B2) (Riverine) Sediment Deposits (B2) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Sediment Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Thin Muck Surface (C7) Shallow Aquitard (D3) Water Table Present? Yes No Depth (inches): Surface Water Present? Yes No Depth (inches): Sediment Deposits (B3) (Nonriverine) Sediment Deposits (B3) (Nonriverine) Sediment Deposits (B3) (Nonriverine) Sediment Deposits (B3) (Riverine) Sediment Deposits (B3) (					V
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Riverine)  Sediment Deposits (B3) (Riverine)  Mater Marks (B1) (Riverine)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B3) (Riverine)  Drift Deposits (B3) (Riverine)  Sediment Deposits (B3) (Riverine)  Mater Marks (B1) (Nonriverine)  Sediment Deposits (B3) (Riverine)  Drift Deposits (B3) (Riverine)  Sediment Deposits (B3) (Riverine)  Drift Deposits (B3) (Nonriverine)  Sediment Deposits (B3) (Riverine)  Drift Deposits (B3) (Riverine)  Sediment Deposits (B3) (Riverine)  Drift Deposits (B3) (Riverine)  Drift Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Other (Explain in Remarks)  Thin Muck Surface (C7)  Water-Stained Leaves (B9)  Other (Explain in Remarks)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No Depth (inches):  Wetland Hydrology Present? Yes No Depth (inches):  Includes capillary fringe)  Describe Recorded Data (stream gauge, moniloring well, aerial photos, previous inspections), if available:	(				
Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B2) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water Stained Leaves (B9)  Other (Explain in Remarks)  Sediment Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Saturation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Other (Explain in Remarks)  Sediment Deposits (B3) (Riverine)  Drift Deposits (B3) (Riverine)  Drift Deposits (B3) (Nonriverine)  Saturation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Other (Explain in Remarks)  Sediment Deposits (B3) (Riverine)  Sediment Deposits (B3) (Riverine)  Drift Deposits (B3) (Rive	Remarks: Some o	ccassional re	edox conce	ntrations were observe	
Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B2) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water Stained Leaves (B9)  Other (Explain in Remarks)  Sediment Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Saturation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Other (Explain in Remarks)  Sediment Deposits (B3) (Riverine)  Drift Deposits (B3) (Riverine)  Drift Deposits (B3) (Nonriverine)  Saturation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Other (Explain in Remarks)  Sediment Deposits (B3) (Riverine)  Sediment Deposits (B3) (Riverine)  Drift Deposits (B3) (Rive	Some o		edox conce	ntrations were observe	
Surface Water (A1)	Some o	ЭҮ	dox conce	ntrations were observe	
High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B2) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Depth (inches):  Water Table Present?  Water Table Present?  Yes  No  Depth (inches):  Depth (inches):  Depth (inches):  Depth (inches):  Wetland Hydrology Present?  Yes  No  Wetland Hydrology Present?  Yes  No  Depth (inches):  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Some 6 YDROLOG	GY rology Indicators:			ed in thin laminations. Less than
Saturation (A3)	YDROLOG Wetland Hyd	GY Irology Indicators: ators (minimum of on		ck all that apply)	d in thin laminations. Less than
Water Marks (B1) (Nonriverine)	YDROLOG Wetland Hyd Primary Indica Surface V	GY Irology Indicators: ators (minimum of one Water (A1)		ck all that apply) Salt Crust (B11)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)
Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Surface Water Present?  Water Table Present?  Yes  No  Depth (inches):  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	YDROLOG Wetland Hyd Primary Indica Surface V High Wat	GY irology Indicators: ators (minimum of one Water (A1) er Table (A2)		ck all that apply) Salt Crust (B11) Biotic Crust (B12)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)
Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)  Gurface Water Present?  Water Table Present?  Ves No Depth (inches):  Saturation Present?  Ves No Depth (inches):  Saturation Present?  Yes No Depth (inches):  Saturation Present?  Yes No Depth (inches):  Social Cracks (B6)  Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (D3) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No No Depth (inches):  Wetland Hydrology Present? Yes No No Depth (inches):  Social Cracks (B6) Saturation Visible on Aerial Imagery (D3) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No No No Depth (inches):  Wetland Hydrology Present? Yes No No Depth (inches):  Social Cracks (B6) Saturation Visible on Aerial Imagery (D3) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No No Mo No Metland Hydrology Present? Yes No Mo Metland Hydrology Present? Yes No Mo Metland Hydrology Present? Yes No Mo Metland Hydrology Present? Yes No Metland Hydrology Present?	YDROLOG Wetland Hyd Primary Indica Surface V High Wat Saturation	GY Irology Indicators: ators (minimum of one Water (A1) er Table (A2) n (A3)	e required; che	ck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)
Surface Soil Cracks (B6)	YDROLOG Wetland Hyd Primary Indica Surface V High Wat Saturation Water Ma	GY Irology Indicators: ators (minimum of one Nater (A1) er Table (A2) n (A3) arks (B1) (Nonriverin	e required; che	ck all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)
Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (D3)  Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5)  Field Observations:  Surface Water Present? Yes No Depth (inches):  Vater Table Present? Yes No Depth (inches):  Saturation Present? Yes No Depth (inches):  Saturation Present? Yes No Depth (inches):  Seturation Present? Yes No Depth (inches):  Seturation Present? Yes No Depth (inches):  Seturation Present? Yes No Present? Yes No No No No No No No No No No No No No	YDROLOC Wetland Hyd Primary Indica Surface V High Wat Saturation Water Ma	GY  Irology Indicators: ators (minimum of one Water (A1) ter Table (A2) in (A3) arks (B1) (Nonriverin t Deposits (B2) (Nonr	e required; che	ck all that apply)  Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Livi	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3) Dry-Season Water Table (C2)
Water-Stained Leaves (B9)  Other (Explain in Remarks)  FAC-Neutral Test (D5)  FAC-Neutral Test (D5)  Surface Water Present?  Yes No Depth (inches):  Saturation Present?  Yes No Depth (inches):  Saturation Present?  Yes No Depth (inches):  Security fringe  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	YDROLOG  Wetland Hyd  Primary Indica  Surface V  High Wat  Saturation  Water Mat  Sediment  Drift Depo	rology Indicators: ators (minimum of one Nater (A1) ter Table (A2) n (A3) arks (B1) (Nonriverin t Deposits (B2) (Nonriverin osits (B3) (Nonriverin	e required; che	ck all that apply)  Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Livi  Presence of Reduced Iron (C4)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)
FAC-Neutral Test (D5)  Sourface 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):  Sourface Water Present? Yes No Wetland Hydrology Present? Yes No No No No No No No No No No No No No	YDROLOG  Wetland Hyde  Primary Indica  Surface V  High Water Mater	rology Indicators: ators (minimum of one Nater (A1) ter Table (A2) n (A3) arks (B1) (Nonriverin t Deposits (B2) (Nonriverin soits (B3) (Nonriverin Soil Cracks (B6)	e required; che	ck all that apply)  Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Livi  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Se	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C8)
Vater Table Present? Yes NoX Depth (inches):  Saturation Present? Yes NoX Depth (inches): Wetland Hydrology Present? Yes NoX No NoX NoX NoX NoX NoX NoX NoX NoX NoX No NoX NoX NoX NoX NoX NoX NoX	YDROLOG  Wetland Hyde  Frimary Indication  Surface V  High Water Mater M	GY  Irology Indicators: ators (minimum of one Water (A1) ter Table (A2) to (A3) arks (B1) (Nonriverin to Deposits (B2) (Nonriverin Soil Cracks (B6) to Visible on Aerial Im	e required; che	ck all that apply)  Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Livi  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled So	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Dills (C6) Saturation Visible on Aerial Imagery (C6)  Shallow Aquitard (D3)
Vater Table Present? Yes NoX Depth (inches):  Saturation Present? Yes NoX Depth (inches): Wetland Hydrology Present? Yes NoX No NoX NoX NoX NoX NoX NoX NoX NoX NoX No NoX NoX NoX NoX NoX NoX NoX	YDROLOC Wetland Hyde Primary Indicator Surface V High Wate Saturation Water Ma Sediment Drift Depo Surface S Inundation Water-Sta	GY  Irology Indicators: ators (minimum of one Vater (A1) er Table (A2) n (A3) arks (B1) (Nonriverin t Deposits (B2) (Nonriverin soil Cracks (B6) n Visible on Aerial Im ained Leaves (B9)	e required; che	ck all that apply)  Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Livi  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled So	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Dills (C6) Saturation Visible on Aerial Imagery (C6)  Shallow Aquitard (D3)
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No No Sescribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	YDROLOG Wetland Hyd Primary Indica Surface V High Wat Saturation Water Ma Sediment Drift Depo Surface S Inundatio Water-Sta	frology Indicators: ators (minimum of one Nater (A1) ter Table (A2) in (A3) arks (B1) (Nonriverin t Deposits (B2) (Nonriverin soils (B3) (Nonriverin Soil Cracks (B6) in Visible on Aerial Im ained Leaves (B9) ations:	e required; che	ck all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livi Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Dills (C6) Saturation Visible on Aerial Imagery (C6)  Shallow Aquitard (D3)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	YDROLOC Wetland Hyd Primary Indica Surface W High Wat Saturation Water Ma Sediment Drift Depo Surface S Inundatio Water-Sta	r Present?	e required; che	ck all that apply)  Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Livi  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled So  Thin Muck Surface (C7)  Other (Explain in Remarks)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Dills (C6) Saturation Visible on Aerial Imagery (C6)  Shallow Aquitard (D3)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	YDROLOG  Wetland Hyde  Primary Indication  Surface V High Water Mater Mater Sediment  Drift Depote Surface Sediment  Water-State State State Sediment  Water-State State State State Sediment  Water-State Water Water Table F	rology Indicators: ators (minimum of one Water (A1) er Table (A2) n (A3) arks (B1) (Nonriverin t Deposits (B2) (Nonriverin coils (B3) (Nonriverin coil Cracks (B6) n Visible on Aerial Im ained Leaves (B9) ations: r Present? Yes	e required; che	ck all that apply)  Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Livi  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled So  Thin Muck Surface (C7)  Other (Explain in Remarks)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C8)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
	YDROLOG  Wetland Hyd  Primary Indica Surface V High Water Saturation Water Ma Sediment Drift Depo Surface S Inundatio Water-Sta  Field Observ  Surface Water  Water Table F  Saturation Pre	Irology Indicators: ators (minimum of one Water (A1) ter Table (A2) In (A3) arks (B1) (Nonriverin It Deposits (B2) (Nonriverin Soil Cracks (B6) In Visible on Aerial Im ained Leaves (B9) ations: Ir Present? Ir P	e required; che	ck all that apply)  Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Livi  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled So  Thin Muck Surface (C7)  Other (Explain in Remarks)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C8)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Remarks:	YDROLOG Wetland Hyd Primary Indica Surface V High Wat Saturation Water Ma Sediment Drift Depo Surface S Inundatio Water-Sta Field Observ Surface Wate Water Table F Saturation Pre includes capi	Irology Indicators: ators (minimum of one Water (A1) ter Table (A2) in (A3) arks (B1) (Nonriverin t Deposits (B2) (Nonriverin osits (B3) (Nonriverin osits (B3) (Nonriverin osits (B6) in Visible on Aerial Im ained Leaves (B9) ations: r Present? Present? Yes esent? Yes elsent? Yes elsent?	e required; che	ck all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livi Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C8)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
	Wetland Hyde Primary Indicated Saturation Water May Sediment Drift Deporation Water-State State Water Table Formulation Procession Recommendation of the Procession of the Pro	Irology Indicators: ators (minimum of one Water (A1) ter Table (A2) in (A3) arks (B1) (Nonriverin t Deposits (B2) (Nonriverin osits (B3) (Nonriverin osits (B3) (Nonriverin osits (B6) in Visible on Aerial Im ained Leaves (B9) ations: r Present? Present? Yes esent? Yes elsent? Yes elsent?	e required; che	ck all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livi Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C8)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
	Wetland Hyde Primary Indicated Surface Valuration Water May Sediment Drift Deporation Water-State Water Table Formulation Programment Field Observ Surface Water Table Formulation Programment Program	Irology Indicators: ators (minimum of one Water (A1) ter Table (A2) in (A3) arks (B1) (Nonriverin t Deposits (B2) (Nonriverin osits (B3) (Nonriverin osits (B3) (Nonriverin osits (B6) in Visible on Aerial Im ained Leaves (B9) ations: r Present? Present? Yes esent? Yes elsent? Yes elsent?	e required; che	ck all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livi Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C8)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
	Wetland Hyde Primary Indicated Saturation Water May Sediment Drift Deporation Water-State State Water Table Formulation Procession Recommendation of the Procession of the Pro	Irology Indicators: ators (minimum of one Water (A1) ter Table (A2) in (A3) arks (B1) (Nonriverin t Deposits (B2) (Nonriverin osits (B3) (Nonriverin osits (B3) (Nonriverin osits (B6) in Visible on Aerial Im ained Leaves (B9) ations: r Present? Present? Yes esent? Yes elsent? Yes elsent?	e required; che	ck all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livi Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C8)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)

Project/Site: Newport Banning Ranch (Newport J015)	City/Count	y: Newport I	Beach/Orange	Sampling Date:	9130109
Applicant/Owner: Wew port Barning Ro	anch.		State: CA	Sampling Point:	49
Investigator(s): Gary Medeiros, Allison Rudalevige	Section, To	ownship, Rang	ge: N/A - "Santiago	De Santa Ana" lanc	grant
Landform (hillslope, terrace, etc.): <u>closed de pross</u>	Sicon Local relie	ef (concave, co	onvex, none): Cm	Cave Slope	(%):
Subregion (LRR): C	Lat: 33.642	23	Long: -117.94	956 Datum	CADS
				ification: PEMCx	
Are climatic / hydrologic conditions on the site typical for this					
Are Vegetation, Soil, or Hydrologys				" present? Yes✓	No
Are Vegetation, Soil, or Hydrologyn			ded, explain any ansv		110
SUMMARY OF FINDINGS – Attach site map	showing samplin				ures. etc.
Hydrophytic Vegetation Present? Yes No					, , , , , , , , ,
	13 "	ne Sampled A nin a Wetland		No	
	D	mi a vvetianu	r res <u>r</u>	NO	
Remarks:					
VEOLTATION III III III III					
VEGETATION – Use scientific names of plant	ts.			enth-	
Tree Stratum (Plot size:)	Absolute Dominant		Dominance Test wo	rksheet:	
1	% Cover Species?		Number of Dominant That Are OBL, FACW		(A)
2					(^)
3			Total Number of Dom Species Across All St		(B)
4			Percent of Dominant S	Species Int	. ,
Sapling/Shrub Stratum (Plot size:)	= Total Co		That Are OBL, FACW		(A/B)
1			Prevalence Index wo	orksheet:	
2			Total % Cover of:	Multiply b	y:
3			OBL species	x 1 =	
4		F	FACW species	x 2 =	
5		<b>I</b>		x 3 =	
Herb Stratum (Plot size:)	= Total Co			x 4 =	
1. Salicornia Virginica	95 u	795L2 h		x 5 =	
2	7	0.00	Column Totals:	(A)	(B)
3.			Prevalence Inde	x = B/A =	
4			ydrophytic Vegetat		
5			🞾 Dominance Test i	is >50%	
6			Prevalence Index	is ≤3.0 <sup>1</sup>	
7				aptations <sup>1</sup> (Provide sup ks or on a separate sh	
8	95 = Total Co			ophytic Vegetation <sup>1</sup> (E	•
Woody Vine Stratum (Plot size:)	= 10tal Co	ver		3 (	. ,
1				oil and wetland hydrolo	gy must
2		k	pe present, unless dis	turbed or problematic.	
	= Total Co	1	lydrophytic		
% Bare Ground in Herb Stratum % Cover	of Biotic Crust	\   F	/egetation Present? Y	es <u>X</u> No	
Remarks: Pare ground includes dead ve	geration.				
<b>.</b>					

	needed to document	me maicator	or commit	the absence of h	idicators.)	
Depth Matrix	Redox Fea			_		
(inches) Color (moist) %		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	66 8.
1-12 2.542/2 95-98	104R46 2	<u>-5 _ C _</u>	_M_	silty loam	prominent	mothes
		1				
				•		
		,	_			
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Re	educed Matrix CS=Cov	ered or Coate	d Sand Grai	no <sup>2</sup> l continu	v. Di =Dono Livin - M-	N A = 4 -4 -
Hydric Soil Indicators: (Applicable to all LR	Rs, unless otherwise	noted.)	J Sanu Grai		n: PL=Pore Lining, M= Problematic Hydric S	
Histosol (A1)	Sandy Redox (S5	•			-	ons .
Histic Epipedon (A2)	Stripped Matrix (S	•			(A9) (LRR C) (A10) (LRR B)	
Black Histic (A3)	Loamy Mucky Mir	•		Reduced V		
Hydrogen Sulfide (A4)	Loamy Gleyed Ma	, ,			Material (TF2)	
Stratified Layers (A5) (LRR C)	Depleted Matrix (				ain in Remarks)	
1 cm Muck (A9) (LRR D)	Redox Dark Surfa				,	
Depleted Below Dark Surface (A11)	Depleted Dark Su					
Thick Dark Surface (A12)	Y Redox Depression				drophytic vegetation a	nd
Sandy Mucky Mineral (S1)	Vernal Pools (F9)				logy must be present,	-\$A
Sandy Gleyed Matrix (S4) Restrictive Layer (if present):				unless disturb	ed or problematic.	
,						
Type:					١/	
Depth (inches):Remarks:				Hydric Soil Pres	ent? Yes <u>X</u>	No
Wetland Hydrology Indicators:	heck all that anniv)			Cocondon	Indicator (O	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; c					Indicators (2 or more )	required)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; c  Surface Water (A1)	Salt Crust (B11)	<b>1</b>		Water	Marks (B1) ( <b>Riverine</b> )	
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; c Surface Water (A1) High Water Table (A2)	Salt Crust (B11) Biotic Crust (B12			Water Sedime	Marks (B1) ( <b>Riverine</b> ) ent Deposits (B2) ( <b>Riv</b>	erine)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; cl Surface Water (A1) High Water Table (A2) Saturation (A3)	Salt Crust (B11) Biotic Crust (B12 Aquatic Inverteb	ates (B13)		Water Sedime Drift De	Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine)	erine)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; compared of the surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)	Salt Crust (B11) Biotic Crust (B12 Aquatic Inverteb Hydrogen Sulfide	rates (B13) Odor (C1)	iving Posts	Water Sedime Drift De Draina	Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10)	erine)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; ci Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine)	Salt Crust (B11) Biotic Crust (B12 Aquatic Invertebi Hydrogen Sulfide Oxidized Rhizos	rates (B13) Odor (C1) Oheres along L		Water Sedime Drift De Draina (C3) Dry-Se	Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2	erine)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; compared in the surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)	Salt Crust (B11) Biotic Crust (B12 Aquatic Invertebi Hydrogen Sulfide Oxidized Rhizosi Presence of Red	rates (B13) c Odor (C1) oheres along L uced Iron (C4)		Water Sedimo Drift Do Draina (C3) Dry-Se Crayfis	Marks (B1) (Riverine) ent Deposits (B2) (Riverine eposits (B3) (Riverine ge Patterns (B10) ason Water Table (C2 h Burrows (C8)	erine) )
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; compared in the surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)	Salt Crust (B11) Biotic Crust (B12) Aquatic Inverteb Hydrogen Sulfide Oxidized Rhizos Presence of Red Recent Iron Red	ates (B13) Codor (C1) Cheres along L Code Iron (C4) Cotion in Tilled		Water Sedime Drift De Draina (C3) Dry-Se Crayfis Satura	Marks (B1) (Riverine) ent Deposits (B2) (Riverine eposits (B3) (Riverine ge Patterns (B10) ason Water Table (C2 h Burrows (C8) cion Visible on Aerial Ir	erine) )
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; c  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)	Salt Crust (B11) Biotic Crust (B12) Aquatic Inverteb Hydrogen Sulfide Oxidized Rhizos Presence of Red Recent Iron Red Thin Muck Surfa	ates (B13) c Odor (C1) cheres along L uced Iron (C4) uction in Tilled ce (C7)		Water Sedime Drift De Draina (C3) Dry-Se Crayfis Satura Shallov	Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) h Burrows (C8) cion Visible on Aerial Invaluation	erine) )
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; c  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)	Salt Crust (B11) Biotic Crust (B12) Aquatic Inverteb Hydrogen Sulfide Oxidized Rhizos Presence of Red Recent Iron Red	ates (B13) c Odor (C1) cheres along L uced Iron (C4) uction in Tilled ce (C7)		Water Sedime Drift De Draina (C3) Dry-Se Crayfis Satura Shallov	Marks (B1) (Riverine) ent Deposits (B2) (Riverine eposits (B3) (Riverine ge Patterns (B10) ason Water Table (C2 h Burrows (C8) cion Visible on Aerial Ir	erine) )
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; ci  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:	Salt Crust (B11) Biotic Crust (B12 Aquatic Inverteble Hydrogen Sulfide Oxidized Rhizos Presence of Red Recent Iron Red Thin Muck Surfar Other (Explain in	ates (B13) c Odor (C1) cheres along L cuced Iron (C4) cuction in Tilled ce (C7) Remarks)	Soils (C6)	Water Sedime Drift De Draina (C3) Dry-Se Crayfis Satura Shallov	Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) h Burrows (C8) cion Visible on Aerial Invaluation	erine) )
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; complete	Salt Crust (B11) Biotic Crust (B12 Aquatic Invertebre Hydrogen Sulfide Oxidized Rhizose Presence of Red Recent Iron Red Thin Muck Surfactor Other (Explain in	ates (B13) c Odor (C1) cheres along L uced Iron (C4) uction in Tilled ce (C7) Remarks)	Soils (C6)	Water Sedime Drift De Draina (C3) Dry-Se Crayfis Satura Shallov	Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) h Burrows (C8) cion Visible on Aerial Invaluation	erine) )
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; compared in the surface water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes No No No No No No No No No No No No No No No No No	Salt Crust (B11) Biotic Crust (B12 Aquatic Invertebret Hydrogen Sulfide Oxidized Rhizos Presence of Red Recent Iron Red Thin Muck Surfar Other (Explain in	ates (B13) c Odor (C1) cheres along L uced Iron (C4) uction in Tilled ce (C7) Remarks)	Soils (C6)	Water Sedime Drift De Draina (C3) Dry-Se Crayfis Satura Shallov	Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) h Burrows (C8) cion Visible on Aerial In v Aquitard (D3) eutral Test (D5)	erine) ) ) magery (C9)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; compared in the surface water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes No  Water Table Present? Yes No  Saturation Present? Yes No  (includes capillary fringe)	Salt Crust (B11) Biotic Crust (B12 Aquatic Invertebre Hydrogen Sulfide Oxidized Rhizose Presence of Red Recent Iron Red Thin Muck Surfact Other (Explain in Depth (inches): Depth (inches):	ates (B13) c Odor (C1) cheres along L uced Iron (C4) uction in Tilled ce (C7) Remarks)	Soils (C6)	Water Sedime Drift De Drainae (C3) Dry-Se Crayfis Saturae Shalloe FAC-N	Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) h Burrows (C8) cion Visible on Aerial Invaluation	erine) )
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; c  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes No Saturation Present? Yes No	Salt Crust (B11) Biotic Crust (B12 Aquatic Invertebre Hydrogen Sulfide Oxidized Rhizose Presence of Red Recent Iron Red Thin Muck Surfact Other (Explain in Depth (inches): Depth (inches):	ates (B13) c Odor (C1) cheres along L uced Iron (C4) uction in Tilled ce (C7) Remarks)	Soils (C6)	Water Sedime Drift De Drainae (C3) Dry-Se Crayfis Saturae Shalloe FAC-N	Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) h Burrows (C8) cion Visible on Aerial In v Aquitard (D3) eutral Test (D5)	erine) ) ) magery (C9)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; compared in the surface water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes No  Water Table Present? Yes No  Saturation Present? Yes No  (includes capillary fringe)	Salt Crust (B11) Biotic Crust (B12 Aquatic Invertebre Hydrogen Sulfide Oxidized Rhizose Presence of Red Recent Iron Red Thin Muck Surfact Other (Explain in Depth (inches): Depth (inches):	ates (B13) c Odor (C1) cheres along L uced Iron (C4) uction in Tilled ce (C7) Remarks)	Soils (C6)	Water Sedime Drift De Drainae (C3) Dry-Se Crayfis Saturae Shalloe FAC-N	Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) h Burrows (C8) cion Visible on Aerial In v Aquitard (D3) eutral Test (D5)	erine) ) ) magery (C9)
Primary Indicators (minimum of one required; c  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)  Field Observations: Surface Water Present? Yes No Saturation Present? Yes No (includes capillary fringe) Describe Recorded Data (stream gauge, monitor)  Remarks:	Salt Crust (B11) Biotic Crust (B12 Aquatic Invertebret Hydrogen Sulfide Oxidized Rhizos Presence of Red Recent Iron Red Thin Muck Surfar Other (Explain in Depth (inches): Depth (inches): Depth (inches):	ates (B13) c Odor (C1) cheres along L uced Iron (C4) uction in Tilled ce (C7) Remarks)	Soils (C6)	Water Sedime Drift De Drainae (C3) Dry-Se Crayfis Saturae Shalloe FAC-N	Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) h Burrows (C8) cion Visible on Aerial In v Aquitard (D3) eutral Test (D5)	erine) ) ) magery (C9)
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ATTACHMENT D
SOIL SURVEY

The soil classifications identified below was obtained from the U.S. Department of Agriculture, Natural Resources Conservation Service. The Official Soil Series Descriptions were obtained from the Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture.

#### **Beaches**

Beaches consist of sandy, gravelly, or cobbly coastal shores that are washed and rewashed by tidal and wave action. These areas may be partly covered with water during high tides or stormy periods. They support little or no vegetation and have no agricultural value. Some are excellent recreational areas. Runoff is very slow and the erosion hazard is high.

#### **Bolsa Series**

The Bolsa series is a fine-silty, mixed, superactive, calcareous, thermic Aquic Xerofluvent. It consists of deep, somewhat poorly drained soils formed in mixed alluvium. These soils are in flood plains and basins. The mean annual precipitation is about 13 inches and the mean annual temperature is about 62 degrees F (°F). The typical pedon is Bolsa silt loam, drained, fallow. (Colors are for dry soil unless otherwise noted.)

#### Range in Characteristics:

The soil between depths of 4 and 12 inches usually is moist in some part from sometime in November until sometime in May and is dry all the rest of the year if not irrigated. The mean annual soil temperature at depth of 20 inches is about 62 °F. The soil is saturated within 40 to 60 inches of the surface from about February to May unless drained. The soil is calcareous to a depth of 40 inches or more and is mildly or moderately alkaline. The 10- to 40-inch section averages 18 to 30 percent clay and less than 15 percent fine sand or coarser particles. Organic matter decreases irregularly as depth increases.

The A horizon is light brownish gray and pale brown in 10YR hue. It ranges from sandy loam to silty clay loam.

The C horizon is light gray, light brownish gray or pale brown in 10YR or 2.5Y hue. It has distinct or prominent mottles below a depth of about 30 inches. This horizon is mainly silt loam and silty clay loam but has thin strata of sandier material in some pedons. It has buried A horizons in many pedons.

### Drainage and Permeability:

These soils are somewhat poorly drained; have slow runoff; and have moderately slow permeability. Many areas have been drained by the lowering ground water levels and by pumping or by flood control channels.

#### **Capistrano Series**

The Capistrano series is a coarse-loamy, mixed, superactive, thermic Entic Haploxeroll. It consists of very deep, well drained soils that formed in alluvium from sedimentary or granitic sources. Capistrano soils are on alluvial fans and flood plains in small valleys. The mean annual precipitation is about 19 inches and the mean annual air temperature is about 62 degrees Fahrenheit (°F).

#### Range in Characteristics:

The mean annual soil temperature is 60 degrees to 65°F at depth of 20 inches and the soil temperature is usually not below 47°F at any time. The soil between depths of 8 and 25 inches is continuously dry in all parts from late April or May until late October and is usually moist in some part all the rest of the year. The 10- to 40-inch control section and usually all parts of the profile are sandy loam, coarse sandy loam or fine sandy loam and have less than 18 percent clay. The average combined silt, very fine sand and clay is assumed to be less than 50 percent. No distinct stratification is present. Rock fragments in the control section range from 0 to 3 percent, by volume, and are usually less than 3 inches in diameter.

The A horizon is dark brown, brown, grayish brown, or dark grayish brown in 10YR hue. It is assumed to have 1.5 to 3 percent organic matter in the upper 10 inches and organic matter decreases gradually to less than 1 percent at a depth of 20 inches. This horizon has weak granular or weak subangular blocky structure or is massive. It is neutral to medium acid.

The C horizon is brown, light yellowish brown, brownish yellow, or grayish brown. It is moderately acid to slightly alkaline and is non-calcareous.

### Drainage and Permeability:

Capistrano soils are well drained, have slow to medium runoff, and have moderately rapid permeability.

#### **Marina Series**

The Marina series is a mixed, thermic Lamellic Xeropsamment. It has a grayish brown and brown, slightly and moderately acidic, loamy sand A horizon; a light brown, moderately and strongly acidic, loamy sand B2 horizon with lamellae; and a light brown and pink, moderately acidic, sand C horizon.

#### Range in Characteristics:

The mean annual soil temperature is about 59 to 62 degrees Fahrenheit (°F) and the soil temperature usually is not below 47°F at any time. The mean summer soil temperature is about 65 to 70°F and the mean winter soil temperature is about 55 to 60°F. The soil between depths of about 12 and 35 inches is usually dry all of the time from late April or May until November and is moist in some or all parts the rest of the year. Rock fragments are lacking and textures throughout the profile are sand to loamy fine sand. Many pedons are about pH 5.7 to 6.3 and tend to be less acidic in the uppermost and lower most horizons. The full range of reaction is neutral to strongly acid.

The A horizon is pale brown to dark yellowish brown (10YR 6/2, 6/3, 5/2, 5/3, 5/4, 4/3, 4/4). It has less than 1 percent organic matter in all parts or less than 1 percent below a depth of 5 inches. This horizon is massive or single grained or has granular or crumb structure.

The B2 horizon is light brown to strong brown (7.5YR 6/4, 5/4, 4/4, 5/6). It is massive and slightly hard or hard and slightly brittle. This horizon has brown or reddish brown lamellae  $^{1}/_{4}$  to  $^{3}/_{4}$  inch thick. The lamellae are thinner and more distinct from the matrix in the upper part of the horizon and become generally thicker and less distinct with depth. Clay bridges in the lamellae are moderately thick to thick and the lamellae are hard or very hard when dry and sticky when

wet. The aggregate thickness of the lamellae is about 2 to 5 inches and the lamellae are about 2 to 6 inches apart. The matrix has some thin clay bridges.

The C horizon is very pale brown to light brown (10YR 7/3, 7/4, 6/3, 6/4; 7.5YR 7/2, 7/4, 6/4). It is sand or coarse sand and is soft when dry. Lamellae in this horizon become increasingly indistinct and more discontinuous with increasing depth.

Drainage and Permeability:

Marina soils are somewhat excessively drained; have slow to rapid runoff; and have moderate permeability. The soil above the B2 horizon is wet for several days to a week or more after periods of unusually heavy precipitation.

#### Myford Series

The Myford series is a fine-loamy, mixed, superactive, thermic Typic Palexeralf. It consists of deep, moderately well drained soils formed on terraces. The mean annual precipitation is about 16 inches and the mean annual air temperature is about 62°F.

Range in Characteristics:

The solum ranges from 45 to 75 inches thick. Mean annual soil temperature at a depth of 20 inches is 60 to 63°F. The soil between depths of about 5 and 15 inches is usually moist in some part from about November 15 until late May, and is continuously dry the rest of the year.

The A horizon is pinkish gray or light brown, light brownish gray, pale brown, grayish brown or brown in 7.5YR or 10YR hue. It is sandy loam, or fine sandy loam. This horizon has weak structure or is massive and ranges from strongly acid to slightly acid. The A3 horizon is one unit higher in value than the A1 horizon.

The Bt horizon is brown, dark brown, or yellowish brown in 7.5YR or 10YR hue. It is sandy clay or heavy clay loam in the upper part and sandy clay loam or clay loam in the lower part and averages 28 to 30 percent clay in the entire horizon. The upper boundary of the Bt horizon is abrupt and the clay increase from the A horizon to the Bt horizon is 18 to 28 percent. This horizon has prismatic or angular blocky structure. It ranges from medium acidic to moderately alkaline in the upper part and is moderately alkaline in the lower part. Exchangeable sodium is 15 to 35 percent below depth of one meter.

Drainage and Permeability:

Myford soils are moderately well drained; have medium to rapid runoff; and have very slow permeability.

#### Pits

Pits are open excavations from which soil and underlying material, mostly sand and gravel, have been removed for construction. Present land use is construction material, idle land, or ground water recharge if these areas are in a streambed.

#### Riverwash

Riverwash consists of areas of unconsolidated alluvium, generally stratified and varying widely in texture, recently deposited by intermittent streams, and subject to frequent changes through stream overflow. These are sandy, gravelly, cobbly, and bouldery deposits that support little or no vegetation. Runoff is generally rapid, and the erosion hazard is high. Deposition and removal of fresh alluvium are common. Riverwash has little or no agricultural value. Present use is watercourses, ground water recharge, sand and gravel pits, and wildlife habitat.

### **Tidal Flats**

Tidal flats are nearly level areas adjacent to bays and lagoons along the coast. Periodically, they are covered by tidal overflow. Some of the higher areas are covered only during very high tides. Tidal flats are stratified clayey to sandy deposits. They are poorly drained and are high in salts. The vegetation varies from none in the low areas to sparse, salt-tolerant plants in the higher areas. Runoff generally ponds and deposition from surrounding areas is a hazard.