JURISDICTIONAL WETLAND DELINEATION REPORT
FOR WESTERN SALT POND 20
IMPERIAL BEACH, CALIFORNIA

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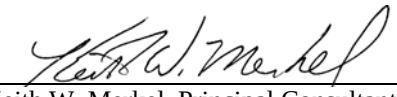

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JURISDICTIONAL WETLAND DELINEATION
FOR POND 20
IMPERIAL BEACH, CALIFORNIA

Merkel & Associates, Inc.
August 2008

EXECUTIVE SUMMARY

Merkel & Associates, Inc. has completed a jurisdictional determination and wetland delineation of San Diego Unified Port District (Port) owned properties at the south end of San Diego Bay. The site lies south of the Otay River channel, north of Palm Avenue, east of 13th Street, and west of Saturn Boulevard in Imperial Beach (Figure ES-1). The delineation site is dominated by the southern end of a former brine concentration pond, Pond 20, of the Western Salt South Bay Saltworks. In addition to remnant features of Pond 20, the study area also includes tidal and non-tidal drainage features along Nestor Creek to the east and an unnamed ditch to the Otay River to the west of Pond 20. The site is wholly with the Coastal Zone.

Western Salt Company and its predecessors formerly utilized the area for commercial salt harvesting dating back to the 1800's. Over the past century, various internal berms have been constructed, repaired, and removed by operational changes and flooding. These changes have resulted in changing topographic conditions that make a continued discussion of distinct pond cells worthwhile in the context of jurisdiction under federal and state wetland regulatory programs. The Pond 20 site is defined by internal dikes that include three smaller pond cells (herein termed Ponds 20A, 20B, and 20C). Areas involved in the present delineation are portions of Pond 20A and 20B.

The western portion of Pond 20A may have historically supported middle to high salt marsh habitat in the 1800s, prior to its conversion near the turn of the last century for salt production. Historic aerial photographs of the area in the 1940s show some vestigial salt marsh south of Pond 20A immediately

Figure ES-1. Study Area Locator Map

south of Palm Avenue in areas that have since been filled. The eastern portion of Pond 20A, immediately north of an off-site mobile home park, includes an area that retains long-ago isolated braided stream patterns associated with the historic mouth of Nestor Creek. These are not considered jurisdictional due to the historic diversion of Nestor Creek to the north and the lack of any recent evidence of ponding in these elevated locations. Pond 20A was last regularly used as an evaporator pond in the 1940s with a failed subsequent effort in the 1960s to reintegrate the pond into the evaporator process of the salt works.

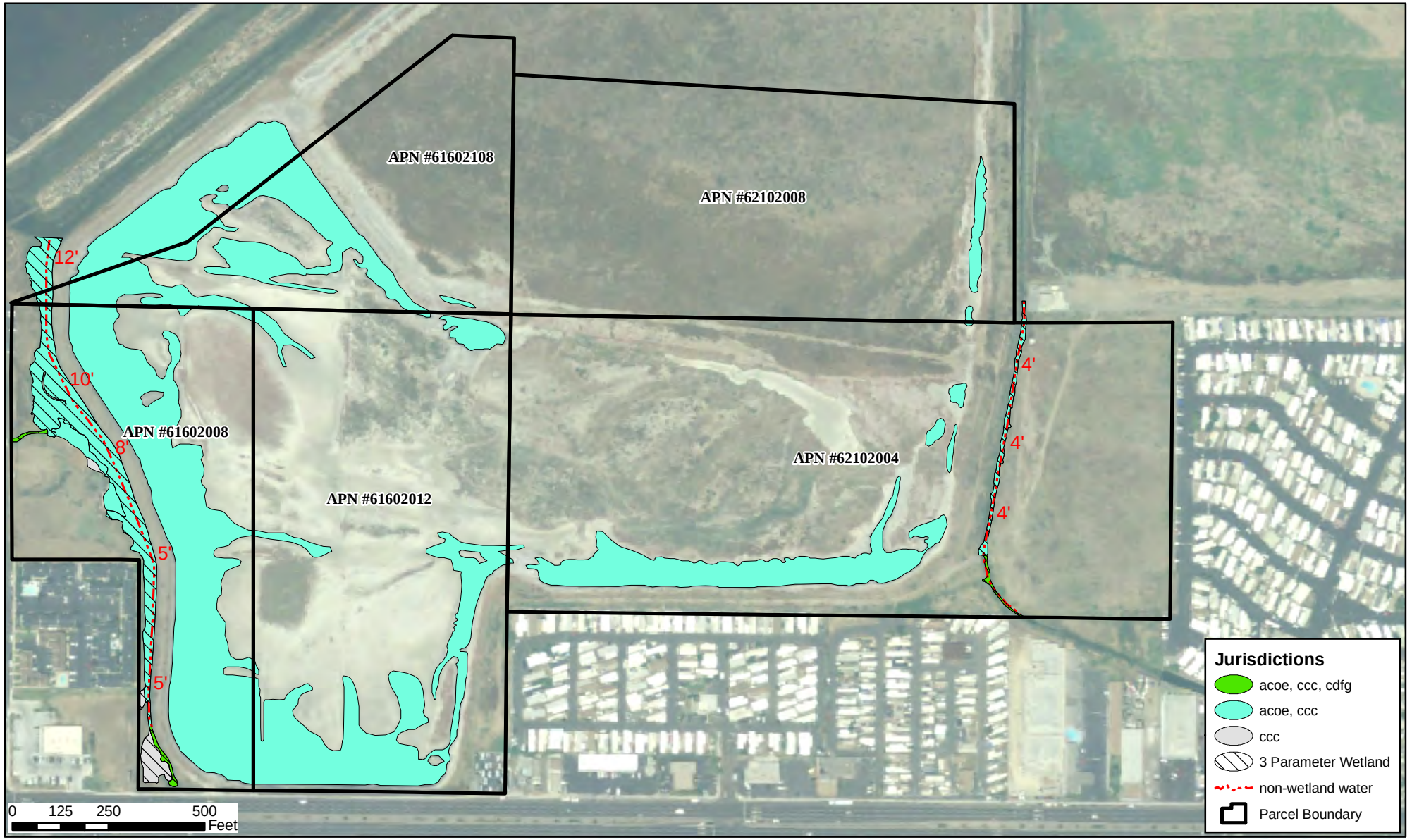
Pond 20B encompasses portions of a sandy outflow alluvial fan laid down during the 1916 flooding by the Otay River when Savage Dam failed below Lower Otay Reservoir. This portion of the pond is somewhat higher than the elevations within Pond 20A. Pond 20B is still surrounded by linear bands of standing water at the inner base of the dike. These low areas are excavated channels from which dike fill material was taken to reconstruct the dikes after the 1916 floods. Pond 20B has ceased to be used for salt pond operations since at least 1944. All subsequent photographs show no evidence of submersion over the broad interior area. This location is presently cloaked in a poorly developed, limited diversity Diegan Coastal Sage Scrub.

A third relatively small area located north of the study area, Pond 20C, has been separated from Pond 20B by berms for most of the last century. Like Pond 20B, this area is defined by a limited amount of non-wetland waters located at the base of constructed dikes. This area was not investigated during the present delineation as it is not within Port properties.

This present delineation is the third delineation performed on the site during this decade. An initial delineation was performed in Pond 20 in March 2000 (Merkel & Associates 2000). At the request of the San Diego Unified Port District (Port) an additional wetland delineation was completed in April and May 2003 over a slightly modified study area (Merkel & Associates 2003). Wetland delineations were conducted in accordance with the 1987 U.S. Army Corps of Engineers' (Corps) Wetland Delineation Manual (Environmental Laboratory 1987) and in accordance with state agency (Coastal Commission and California Department of Fish & Game) jurisdictional standards. Where wetlands were not identified, additional jurisdictional non-wetland waters were mapped using physical evidence of high water conditions as well as a thorough review of inundation history.

None of the jurisdictional waters delineated are substantively affected by recent rulings by the federal Supreme Court on *Solid Waste Agency of Northern Cook County v. Army Corps of Engineers*, (531 U. S. 159) (SWANCC) (2001); *Rapanos v. United States*, (547 U.S. 715) (2006); and *Carabell v. United States Army Corps of Engineers* (04-1384) consolidated with Rapanos's for arguments before the Supreme Court (2006). However, due to atypical situations associated with the prolonged history of salt evaporator pond uses, soil and vegetation conditions within Pond 20 have been substantively and permanently altered. For this reason, regulatory agency staff members were consulted regarding the delineation approach being undertaken and regulatory assertions in comparable environments. These included discussions between Keith Merkel and Mark Durham and Jae Chung of the Corps' Los Angeles District, Regulatory Branch, and John Dixon, and Jonna Engle of the California Coastal Commission. Based on the inability to reliably employ soil and vegetation indicators within the highly saline environment, the delineation within Pond 20 relies substantively on an analysis of inundation frequency based on rainfall records and aerial interpretation, combined with field evidence of site conditions.

The jurisdictional boundaries have been determined and mapped based on an analysis of data accumulated under the present and recent past delineations (2000 and 2003). Field data collected during 2000 and 2003 are in close agreement with the results of the present delineation and were considered to be complementary to the present analytical efforts. Jurisdictional waterways are mapped for three different agencies: Army Corps of Engineers, California Coastal Commission, and California Department of Fish & Game (Figure ES-2).



Wetland and Watercourse Jurisdictional Limits

Pond 20, Imperial Beach

Figure ES-2

Wetlands were determined to exist along both Nestor Creek and the unnamed drainage ditch located along the outer edges of Pond 20. These drainages fall under the regulatory authority of the Army Corps of Engineers, California Coastal Commission, and California Department of Fish & Game. The State Water Resource Control Board operating through the Regional Water Quality Control Board – San Diego Region, has state water quality certification authority under the federal Clean Water Act regulatory authority.

Waters within Pond 20 are principally the result of long-term storm water ponding due to low permeability soils and high groundwater tables that limit drainage from the abandoned salt evaporator pond. While the pond receives water from direct rainfall, it also receives some amount of street run-off from a portion of the urbanized Palm Avenue areas of Imperial Beach. A single storm drain downspout extends from Palm Avenue down the slope to the enclosed Pond 20 basin. No federally regulated wetland habitat was located within Pond 20. However, jurisdictional non-wetland waters of the U.S. are found within the diked boundaries of the pond. Areas considered wetlands under the Coastal Act are also found within Pond 20. Most of this area is situated within the southerly and westerly portions of Pond 20A. No areas regulated by the Department of Fish & Game occur within Pond 20.

Wetland and regulated non-wetland waterways found within the study area are mapped in Figure ES-2 and quantified as follows:

Acres of jurisdictional watercourses by regulatory agency.

	ASSESSOR PARCEL NUMBER					
JURISDICTION	**61602008**	**61602012**	**61602108**	**62102004**	**62102008**	**TOTAL**
ACOE, CCC, CDFG	0.05			0.03		0.08
ACOE, CCC	6.08	3.11	2.16	2.10	0.22	13.67
CCC	0.18					0.18
TOTAL	**6.31**	**3.11**	**2.16**	**2.13**	**0.22**	**13.92**

AGENCY TOTAL	**61602008**	**61602012**	**61602108**	**62102004**	**62102008**	**TOTAL**
ACOE	6.13	3.11	2.16	2.13	0.22	**13.75**
CCC	6.31	3.11	2.16	2.13	0.22	**13.92**
CDFG	0.05			0.03		**0.08**

Acres of habitats comprising the jurisdictional waters.

	ASSESSOR PARCEL NUMBER					
HABITATS	**61602008**	**61602012**	**61602108**	**62102004**	**62102008**	**TOTAL**
Coastal Salt Marsh	1.39		0.03	0.16		1.58
Freshwater Marsh/Dist.	0.05			0.03		0.08
Salt Flats/Pond	4.68	3.11	2.13	1.94	0.22	12.07
Salt Panne	0.19					0.19
TOTAL	**6.31**	**3.11**	**2.16**	**2.13**	**0.22**	**13.92**

INTRODUCTION

PURPOSE

In March 2000, Merkel & Associates, Inc. (M&A) performed a jurisdictional determination and wetland delineation for the Western Salt Pond 20 site, at the request of Ninyo & Moore working under contract to the San Diego Unified Port District (Port). The Pond 20 study area encompasses approximately 92 acres of land. The purpose of this investigation was to determine the extent of jurisdictional waters of the U.S. including wetlands and non-wetland waters regulated under section 404 of the Clean Water Act. A prior delineation found that Pond 20 was not jurisdictional pursuant to section 10 of the Rivers and Harbors Act (RHA) and section 404 of the Clean Water Act (CWA) (Dudek 1997). The Army Corps of Engineers (ACOE) reviewed this determination and concurred with the determination that Pond 20 is not within ACOE section 10 RHA jurisdiction, but disagreed with the conclusions that the site lacked section 404 CWA jurisdiction (ACOE, LA District, Durham, February 22, 2000 letter to Eileen Maher). The ACOE cited physical evidence of flooding and ponding, occurrence of hydrophytic vegetation, and use by migratory waterfowl as reasons for believing that portions of the site may be defined as waters of the U.S. pursuant to 33 CFR 328.1. The 2000 wetland delineation was completed to comply with the Corps request for an updated delineation of the site.

In April and May 2003, M&A completed an update of the previous 2000 wetland delineation at the request of the Port. The purpose of this update was to determine if additional wetlands were located on-site following annual winter rains in 2003 (Merkel & Associates 2003). An additional goal was to ensure that the wetland delineation met the requirements of the California Coastal Commission (CCC), and to determine whether any portions of the site could be considered Environmentally Sensitive Habitat Areas (ESHA).

For the present delineation, the regulatory jurisdiction over wetland and aquatic resources was evaluated for the ACOE, CCC, and California Department of Fish & Game (CDFG). The present delineation revisits the jurisdictional determination within Port owned lands comprising portions of Pond 20 and adjacent lands to the west and east of the pond. This investigation considered data from prior delineations, new field sampling and boundary mapping, application of the new Interim Arid West supplement to the ACOE federal wetland delineation methods, inundation frequency analyses based on annual rainfall accumulation data and aerial photograph interpretation, and the effects of recent Supreme Court decisions regarding federal regulatory jurisdiction over isolated waters.

SITE HISTORY

Several different resources were reviewed to research the inundation and use history of Pond 20:

- A 1928 aerial photo series at the San Diego County Department of Planning and Land Use;
- Historical magazine articles from the turn of the 19th century; as well as newspaper clippings regarding the Salt Works, located at the City of San Diego's main downtown library;
- Discussions with Gene Mullenix, Operations Manager for South Bay Salt Works for many years;
- Aerial Fotobank's archive of aerial photographs that cover the site during numerous years spanning the era from 1945 to 1996;
- U.S. Geological Survey Ortho-photographs from December 1996;
- Dudek & Associates August 1997 wetland delineation for Magnesium Chloride Ponds and Pond 20 reporting October 1996 survey data, and;

- Digital orthorectified photographs from April 1998, October 1998, 2000, February 2001, November 2003, 2005, February 2006 and February 2007 flown by a number of different agencies and aerial photographic companies.

The Western Salt Company has maintained an ongoing salt evaporation and extraction operation that has been in almost continuous operation on San Diego Bay since the Civil War. The Western Salt operations on southernmost San Diego Bay extend at least back into the first decade of the 1900s when approximately 1,000 tons of salt per year were being extracted from an area of the Bay that included Pond 20. The company was purchased by Graham Babcock, who expanded operations over the next few years until the plant produced approximately 5,000 tons of salt per year by 1910. According to Mr. Gene Mullenix, the Operations Manager of South Bay Salt Works, the only significant disruption to the form of the system occurred in 1916, when Savage Dam broke releasing Lower Otay Lake down the Otay River. The flood washed away the community of Otay as well as destroying dikes through much of the salt works and depositing substantial sediment in various ponds including the central core of Pond 20. Restoration work was undertaken and operations were reestablished soon thereafter. Western Salt was purchased by the H. G. Fenton Company**.** Fenton continued to expand the salt harvesting facilities until about 1957.

The Salt Works presently include 36 evaporation ponds with varying states of water level and salinity. Generally there are four categories of ponds (primary, secondary, pickling, and crystalizers). Typically three feet of standing water occurs in each pond, and the evaporation process is approximately 12-18 months (Dudek 1997). Pond 20 has been removed from production use for over 30 years due to economic and logistical constraints. The relatively high elevation of the pond floor and isolation of Pond 20 on the south side of the Otay River made it commercially infeasible to continue to utilize this pond as a cell in the evaporation process due to problems and costs of siphoning increasingly saline brine from pond to pond. During the 1960s, Western Salt attempted to re-incorporate Pond 20 as part of the Salt Works using pumps, but economic inefficiency and technical problems resulted in an abandonment of this effort.

Pond 20 is isolated from tributary fresh or saltwater surface input and experiences occasional storm runoff from the internal pond basin and a roadway surface drain from Palm Avenue. Seasonally water levels in the pond fluctuate significantly and waters are strongly saline due both to the pond's history as a salt concentrator and the continued closed system evaporative processes occurring in the pond today. Years of drought and heavy rainfall influence the levels of standing water in the pond and the rates of fluctuation of water surface levels. At present, limited standing water is found along the lower-lying "channels" that parallel the dike and generally below a nearly complete salt crust. These deeper channels are believed to be borrow areas for the reconstruction and repair of the pond containment dikes. These channels also historically enhanced water collection for pumped transfers within the salt pond system.

AGENCY JURISDICTIONS OVER WETLANDS AND WATERWAYS

Deposition of dredged or fill materials into wetlands and jurisdictional waters is regulated under Section 404 of the Clean Water Act. The California Department of Fish and Game regulates modifications to lakes and streambeds under Sections 1602 of the California Fish & Game Code. The California Coastal Commission (CCC) regulates activities that would impact wetlands occurring throughout the coastal zone under the California Coastal Act. The defining jurisdictional limits of each of these entities over wetlands and aquatic features are further outlined below.

U.S. Army Corps of Engineers Jurisdiction

Under Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers has regulatory authority over the discharge of dredged or fill materials into the waters of the United States (1344 USC). The term "waters of the United States" is defined in 33 CFR Part 328(a) and includes: (1) all navigable waters (including all waters subject to the ebb and flow of the tide); (2) all interstate waters and wetlands; (3) all other waters such as intrastate lakes, rivers, streams, (including intermittent streams), mudflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce; (4) all impoundments of water mentioned above; (5) all tributaries to waters mentioned above; (6) the territorial seas; and, (7) all wetlands adjacent to waters mentioned above.

Wetlands are defined at 33 CFR 328.3(b) as *"those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support ... a prevalence of vegetation typically adapted for life in saturated soil conditions."* To be considered a jurisdictional wetland under the ACOE, all three parameters (hydrophytic vegetation, hydric soils, and hydrology) must be met.

In the absence of wetlands, the limits of ACOE jurisdiction in non-tidal waters, such as intermittent streams, extend to the ordinary high water mark (OHWM) which is defined at 33 CFR 328.3(e) as:

> *... that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.*

In a letter from the Corps dated February 22, 2000, the Corps clarified its position on Pond 20. This letter noted that Pond 20 is not subject to Section 10 of the Rivers and Harbors Act (RHA) of 1899. This determination was based upon the historic meander line, "as presented on a reproduction of an 1870 U.S. Land Office map, entitled Fractional Township NO. 18 South, Range 2 West, San Bernardino Meridian, prepared by the Bureau of Land Management (BLM). The meander (or mean high water, MHW) line is plotted by survey datum points from 1869 by the BLM. This exhibit illustrated that the subject property in its unobstructed, natural state was located above MHW and is not defined as navigable waters, per 33 C.F.R. 329.1." The same letter requested that a new survey be undertaken to address an additional issue of whether portions of the site were subject to Section 404 of the Clean Water Act (CWA). Standing water was noted in September 1996 during a site visit by Corps staff, and migratory waterfowl were observed within the boundaries of the Pond. The Corps did not concur with the findings of the previous determination (Dudek 1997) that there were no lands subject to Section 404 of the CWA, and requested that a new wetland delineation be completed.

Subsequent to the Corps letter, the U.S. Supreme Court narrowed the historic reading of jurisdiction under 33CFR 328(a)(3) through its decision on the case of *Solid Waste Agency of Northern Cook County (SWANCC) v. U.S. Army Corps of Engineers* (January 2001). The Supreme Court ruled that the Corps' use of the "migratory bird rule" to extend jurisdiction of Section 404 of the CWA over isolated waters exceeded the authority granted by that section (Meltz and Copeland 2001). However, in the years following the ruling, SWANCC has been read very narrowly and has been used primarily to reject Corps jurisdiction over isolated waters that are not adjacent to wetlands and to disallow the use of habitat by migratory birds as a means for the Corps to assert authority. In several other cases,

such as *United States vs. Riverside Bayview Homes* (1985) and *Headwaters, Inc. vs. Talent Irrigation District* (2001), courts have ruled that waters adjacent to navigable wetlands are considered "waters of the United States" and fall under the Corps jurisdiction through Section 404 of the CWA (Hennessy and Diffenderfer 2003). In very recent decisions, the Supreme Court held in the matters of *Rapanos v. United States*, (547 U.S. 715) (2006) and *Carabell v. United States Army Corps of Engineers* (04-1384) (2006) (consolidated with Rapanos's for arguments before the Supreme Court), that further limited the scope of federal regulation. Joint EPA and Corps guidance post-Rapanos has sought to articulate where the agencies will assert jurisdiction. These areas include: 1) traditionally navigable waters; 2) wetlands adjacent to traditionally navigable waters; 3) non-navigable tributaries of traditionally navigable waters that are relatively permanent, and; 4) wetlands that directly abut such tributaries within a continuous surface hydrologic connection. Other waters of lesser connectivity to navigable waters are to be regulated based on jurisdiction determined on a case-by-case basis where determined to have a significant nexus with traditionally navigable waters (U.S. EPA and U.S. Army Corps of Engineers, 2007).

Based on these rulings, the Corps would no longer invoke the "migratory bird rule" to imply jurisdiction as they did in the February 2000 letter regarding Pond 20. However, because Pond 20 is directly adjacent to San Diego Bay tidal waters that are traditionally navigable and is separated only by an earthen dike from navigable waters, the Corps has indicated it would assert CWA jurisdiction within Pond 20 where dictated by physical evidence of wetlands or other waters of the U.S. (pers. comm. to K. Merkel, Mark Durham, South Coast Chief, L.A. District Reg. Branch, ACOE and Jae Chung, L.A. District, Reg. Branch, ACOE, July 2008).

California Department of Fish and Game Jurisdiction

The California Department of Fish & Game (CDFG) regulates alterations of "streambeds" through the development of a Streambed Alteration Agreement pursuant to Division 2, Chapter 6, Sections 1600 et seq. of the Fish and Game Code. An Agreement is required whenever a project would "divert, obstruct or change the natural flow or bed, channel or bank of any river, stream or lake designated by the Department."

The breadth of areas subject to regulation by CDFG under Section 1600 are less clearly defined than those regulated by Corps; however, in general, the policies are fairly consistent. It is clear that the California statutes cover all rivers, streams, lakes and streambeds that may exhibit intermittent flows of water. However, Section 1600 *et seq*. does not extend to isolated wetlands and waters such as small ponds not located on a drainage course, wet meadows, vernal pools, or tenajas as does federal jurisdiction. Furthermore, Department jurisdiction does not extend over marine waters that are dominated by the ebb and flow of the tide and lack typical bed and bank form of a stream. However, Section *1600 et seq*. jurisdiction extends over all riparian habitat supported by a river, stream, or lake regardless of the riparian area's federal wetland status.

Within estuary environments, it is not always readily apparent where Section 1600 jurisdiction ends and it becomes necessary to employ a preponderance of evidence standard. Under this standard, the geometry of the water feature, the predominant salinity of the waters, the composition of vegetation, and the predominant fauna area used to determine the limits of Department regulatory authority under section 1600. Where waters are principally marine, aquatic shorelines are shaped principally by tidal current and wave action not by fluvial processes, vegetation is saline marsh and not brackish or freshwater vegetation, and marine fish and invertebrate communities are prevalent, waters are not regulated under section 1600 of the Fish & Game Code. Conversely, where fresh and brackish

salinities prevail, fluvial erosion patterns exist, and freshwater aquatic species dominate, areas are regulated under section 1600.

Pond 20 does not contain a streambed and is isolated from adjacent tidal wetlands. Therefore, Pond 20 is not subject to CDFG jurisdiction. The drainages of Nestor Creek to the east of Pond 20 and the storm drain outlet to the west of Pond 20 exhibit mixed characteristics of an estuary/marine environment. Upper portions of these drainages are regulated under section 1600, while the lower portions are not as these areas are nearly fully marine.

California Coastal Commission

Wetlands

The California Coastal Commission regulates wetlands occurring throughout the California coastal zone through the development of a coastal zone permit. The Coastal Act defines "wetland" in Section 30121 of the Coastal Act as follows:

> *Wetland means lands within the coastal zone that may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats and fens.*

The CCC Administrative Regulations (Section 13577(b)) further expand upon this definition as follows:

> *Wetlands are lands where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent or drastic fluctuations of surface water levels, wave action, water flow, turbidity, or high concentrations of salt or other substances in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within or adjacent to vegetated wetlands or deepwater habitats.*

The CCC uses the same three criteria for defining wetlands as the Corps, however only one of the three criteria need to be present for an area to be classified as a wetland. Unlike the CDFG, the CCC extends beyond streambeds to include all tidal areas and isolated wetlands; however, jurisdiction is limited to areas within the coastal zone. The entire Pond 20 site falls within the coastal zone.

The CCC wetland definition is generally more encompassing than either the Corps or CDFG definition in most respects. However, the language of the Section 13577(b) of the Administrative Regulations would suggest that, where conditions are not capable of supporting hydric soils or hydrophytic vegetation, hydrologic indicators of saturation or surface waters should be expressed on an annual basis ("*at some time during each year*") not just under ordinary high water conditions as is the case under the federal regulatory standard. As a result, the Coastal Act definition of wetlands would appear to be more limited than the federal act where no soil or vegetation indicators exist.

Environmentally Sensitive Habitat Areas (ESHA)

The California Coastal Act (Section 30107.5) defines Environmentally Sensitive Habitat Areas as:

> *any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments*

In the context of this study, an ESHA may include wetland habitats and areas of nesting waterfowl or shorebirds.

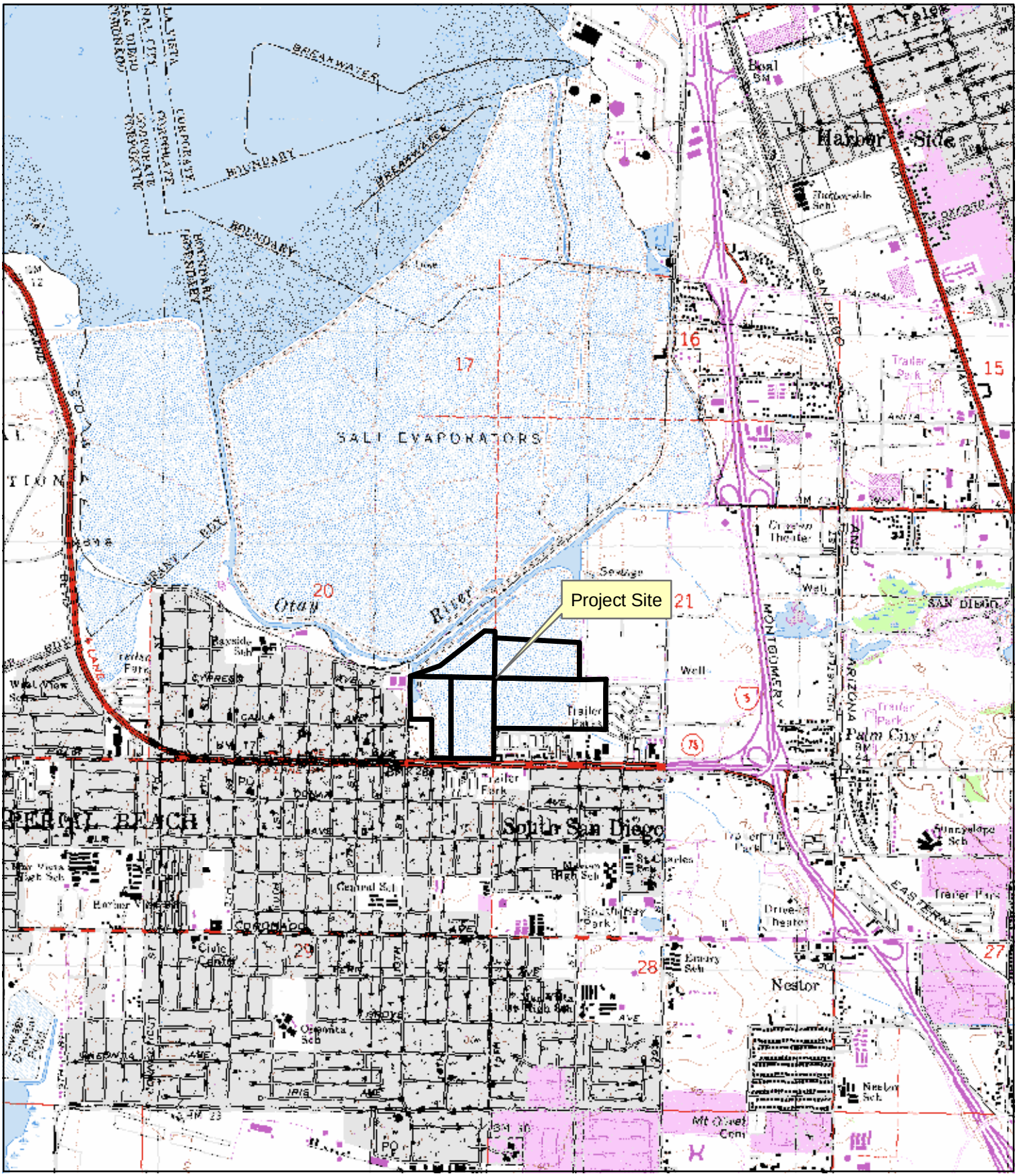
SITE LOCATION

The investigated site consists of Port District owned properties at the south end of San Diego Bay. The properties are located in San Diego County, on the northern boundary of Imperial Beach. The site lies south of the Otay River channel, north of Palm Avenue, east of 13th Street, and west of Saturn Boulevard in Imperial Beach (Figure 1). It is situated in Section 20 of Township 18 South, Range 2 West, of the San Bernardino Base and Meridian; USGS Imperial Beach 7.5' Quadrangle. The delineation site is dominated by the southern end of a former brine concentration pond, Pond 20, of the Western Salt South Bay Saltworks. In addition to remnant features of Pond 20, the study area also includes tidal and non-tidal drainage features along Nestor Creek to the east and an unnamed ditch (Palm Avenue Storm Drain) to the Otay River Estuary to the west of Pond 20 (Figure 2). The site is wholly located with the Coastal Zone. A local surface street drain discharges into the southern end of Pond 20. The southern eastern and western boundaries of the site are generally fenced and the northern boundary of the site is not fenced. Gated access exists near the southwestern corner of the property and in the northeastern portion of the property from the San Diego Bay National Wildlife Refuge (NWR).

GENERAL PHYSIOGRAPHY

Over the past century, various internal berms have been constructed, repaired, and removed by operational changes and flooding. These changes have resulted in changing topographic conditions. The Pond 20 site is defined by internal dikes that include three smaller pond cells. South to north, these have been termed Ponds 20A, 20B, and 20C (Figure 2). Areas involved in the present delineation are portions of Pond 20A and 20B.

The western portion of Pond 20A may have historically supported middle to high salt marsh habitat in the 1800s, prior to its conversion near the turn of the last century for salt production. Historic aerial photographs of the area in the 1940s show some vestigial salt marsh south of Pond 20A immediately south of Palm Avenue in areas that have since been filled and developed. The eastern portion of Pond 20A, immediately north of an off-site mobile home park, includes an area that retains evidence of long-ago isolated braided stream patterns associated with the historic mouth of Nestor Creek. The diversion of Nestor Creek by the construction of the Pond 20 dikes, changed the route of the creek to follow its present northerly course along the eastern edge of Pond 20. Pond 20A was last regularly used as an evaporator pond in the 1940s with a failed subsequent effort in the 1960s to reintegrate the pond into the evaporator process of the salt works.



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Project Vicinity Map

Source: 7.5' USGS Imperial Beach, CA Quadrangle

Figure 1

Local Settings Map

Pond 20, Imperial Beach

Figure 2

Pond 20B encompasses portions of a sandy outflow alluvial fan laid down during the 1916 flooding by the Otay River when Savage Dam failed below Lower Otay Reservoir. This portion of the pond is somewhat higher than the elevations within Pond 20A. Pond 20B is still surrounded by linear bands of lowered terrain at the inner base of the dike. These low areas are excavated channels from which dike fill material was taken to reconstruct the dikes after the 1916 floods. These lowered perimeter channels were subsequently maintained to provided for the collection of concentrate water for transfer along the evaporation pond system. Pond 20B has ceased to be used for salt pond operations since at least 1944. All subsequent photographs show no evidence of submersion over the broad interior area. This location is presently cloaked in a poorly developed, limited diversity Diegan Coastal Sage Scrub indicating that the porous sediments laid down during the 1916 flood have been adequately leached of salt concentrate to support salinity intolerant upland vegetation.

On-site topography consists of a relatively shallow basin that is surrounded by a raised earthen dike (the term berm(s) is utilized in this report for interior raised features within the higher dike). The elevation of the basin floor ranges from approximately 2.92 feet to 10.01 feet (MSL) (Dudek 1997). The western half of the Pond 20A "floor" is generally lower than the adjacent Pond 20B and supports a diminishing veneer of salt, calcium sulfate, and other crystallized salt water derivatives. This veneer is the result of historic salt production operations as part of the salt works operations located to the north. In 2000, this veneer was described as being of varying in thickness from approximately 0.5 to 5 inches (Merkel & Associates, 2000). This crust has been substantially reduced over much of the more elevated areas although less soluble calcium salts are still found throughout much of the site. Within the peripheral pond, a solid salt crust persists over a brine solution in deep areas and to the sediment surface in shallower areas.

The eastern portion of the Pond 20A supports an elevated alluvial deposit composed of primarily dark to pale sandy loams and relatively pure sand. This feature appears to be the historic outflow delta of Nestor Creek as evidenced by the coarse mineral deposits and the remnant channel forms existing in the fan.

To the north, Pond 20B is no longer separated by a berm from Pond 20A, but it is visually distinctive from the lower lying Pond 20A. Pond 20B is vegetated by low quality sage scrub. Pond 20B has not been inundated by water since at least 1944. Moreover, it does not have the veneer of salt and saltwater evaporative by-products that are found over the western section of Pond 20A or low-lying areas of Pond 20C. Pond 20C is located to the north of the present study area and is therefore not discussed here.

Aerial photographs from 1928 show Pond 20B with water, however, this was the only photograph located which showed evidence of full inundation. Linear ponds of standing water exist around most of the periphery of the site, at the foot of the surrounding berm. Most of the "breaks" along this linear channel are due to historical changes in the pond (*e.g.*, roads into the pond areas).

The site's soils are mapped as Huerhuero urban land complex along the southern periphery of Pond 20A, Grangeville fine sandy loam in Pond 20B and 20C, and open water within Pond 20A on the USDA Soil Conservation Service maps of San Diego County (based on 1967-1968 aerial photography and field reviews; Bowman 1973). It was during this period that Western Salt was attempting to reintegrate Pond 20 into the salt evaporator system. Under close inspection associated with excavation of soils pits, it is clear that soils within the pond range from fluvial sands and gravels, to mineral and organic derived clays and silts within low-lying and depressional areas of the pond. Notably, at least one depressional area supports an approximately 1-inch thick band of true peat below the present soil surface – a relatively anomalous character for southern California

wetlands. It is likely that this accumulation of peat was associated with unique water chemistry developed in the pond during salt concentration operations. While the presence of peat is interesting, its narrow distribution and historic development is more of a curiosity than a factor of interest in the present delineation.

METHODS

For survey methods of the 2000 and 2003 wetland delineation, refer to Merkel & Associates 2000. The present wetland delineation and jurisdictional determination work was completed by M&A biologists Keith Merkel, Rebecca Erickson, and Bradford Kelly. Supporting the delineation effort were Eileen Maher and William Zhang. Delineation work was conducted in June and July 2008 in accordance with Table 1.

Table 1. Summary of the survey dates, times, conditions, and staff.

Date	Purpose	Staff
6/30/08	Investigate Pond 20, conduct sampling, examine hydrology of pond	Keith Merkel, Rebecca Erickson, William Zhang, Eileen Maher (Port)
7/01/08	Investigate Pond 20, conduct sampling, conduct delineation of Nestor Creek and western storm drain ditch	Rebecca Erickson, Bradford Kelly, William Zhang
7/07/08	Investigate Pond 20, conduct sampling, conduct delineation of Nestor Creek and western storm drain ditch	Rebecca Erickson, Bradford Kelly, William Zhang

The wetland delineations of the site were performed using the routine on-site determination methods noted in the 1987 *U.S. Army Corps of Engineers'* (ACOE) *Wetland Delineation Manual* (Environmental Laboratory 1987) and the 2006 *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (U.S. Army Corps of Engineers 2006). In addition, the delineation was expanded to identify wetlands/non-wetland waters of the U.S. as well as coastal wetlands and streambeds under federal and state jurisdiction, respectively.

Evidence supporting jurisdictional determinations were recorded on wetland field data forms (Appendix 1) and depicted in ground level photographs (Appendix 2). Wetland habitats and jurisdictional waterways were recorded using a Trimble® geoexplorer GPS unit and/or were plotted on an orthorectified high-resolution (1-foot pixel resolution) February 2007 aerial photograph with topographic overlay.

In addition to the site-specific investigations, the long history of salt pond use has resulted in producing hydric soil and vegetation conditions that are highly atypical in nature and which do not necessarily reflect on-going environmental influences. The 100+ years of salt concentration pond use has both resulted in development of hydric soils and a highly saline environment that both precludes most vegetation growth and sustains saturated hydric soil conditions due to the hydrophilic properties of salts in the soil. Interestingly, soils were sometimes found to be saturated within silty clay near the surface and dry within fine sands at depth. For this reason, field investigations were supplemented with a comprehensive review of regional rainfall history and aerial photograph reviews intended to examine historic inundation conditions within Pond 20 following cessation of salt concentrator uses.

On April 5, 2000 the Port District contracted for a 1-foot resolution aerial topographic survey to facilitate site investigations (SanLo Aerial Surveys 2000). Site conditions have changed little since this survey was conducted. This topographic survey was employed to assess the potential for marine source groundwater to support water levels or to prevent drain-out of surface waters following rain events.

WETLAND FIELD INDICATORS

The following text describes the three parameters, 1) hydrophytic vegetation, 2) wetland hydrology, and 3) hydric soils; used to determine the presence/absence of wetlands and non-wetland waters found within the survey area. Additional information on the overall delineation process and regulatory jurisdictions may be found in the federal delineation manual (ACoE 1987), enacting legislation, or through guidance provided by judicial interpretation, solicitors' opinions, and regulatory guidance issued to District Corps' offices. The presence or absence of parameters was assessed throughout the site to determine if an area was a jurisdictional wetland (see data forms and photo points, Appendices 1 and 2). These indicator parameters are discussed below.

Vegetation

Hydrophytic vegetation is defined as "the community of macrophytes that occurs in areas where inundation and soil saturation is either permanent, or of sufficient frequency and duration to exert a controlling influence on the plant species present" (U.S. Army Corps of Engineers 2006).

Hydrophytic vegetation is present when vegetation communities are dominated by a preponderance (>50%) of species classified as obligate wetland plants (OBL) (estimated probability of occurring in wetlands, >99%), facultative wetland plants (FACW) (estimated probability of occurring in wetlands, 67% to 99%), or facultative plants (FAC) (estimated probability of occurring in wetlands, 33% to 67%) based on the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), on-line Plants Database (ACOE approved plant list) the National List of Plant Species that Occur in Wetlands (U.S. Fish & Wildlife Service 1988). It should be noted that per the ACOE *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* plus (+) and (-), modifiers are not used (e.g., FAC-, FAC, and FAC+ plants are all considered to be FAC). Dominant vegetation by stratum was noted on the Arid West Region data form at each datapoint and classified according to the designations described above or as "no indicator" (NI) or upland (UPL).

Hydrophytic vegetation is present if any one of three indicator tests is satisfied, as generally applied in the following sequence (U.S. Army Corps of Engineers 2006):

1. The dominance test (Indicator 1) is satisfied when "more than 50 percent of the dominant plant species across all strata are rated OBL, FACW, or FAC".
2. The prevalence test (Indicator 2) is used when a wetland plant community fails the dominance test, but indicators of wetland hydrology and hydric soils are present; this test "takes into consideration all plant species in the community, not just a few dominants".
3. In addition, a plant morphological adaptations test (Indicator 3) can be used to distinguish certain wetland plant communities, where indicators of wetland hydrology and hydric soils are present.

The interior of Pond 20 generally does not support vegetation "in areas where inundation and soil saturation is either permanent, or of sufficient frequency and duration to exert a controlling influence on the plant species". This is the result of extreme soil salinity resulting from the long history of site

use as a salt concentrator. Effectively, the soils exert a "salinity toxicity" that exceeds the capacity for even salt marsh species to survive. For this reason, the interior floor of Pond 20 is considered atypical with respect to vegetation indictors of wetland conditions. This circumstance only applies to the salt concentrator pond and not areas outside of the historically flooded pond floor.

Soils

Hydric soil indicators are present when soil conditions "have formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part" (USDA, NRCS 2007).

Soils were examined by digging test pits at each datapoint and evaluating excavated soils to determine the profile description. Hydric soil presence/absence was assessed using the chroma index from the Munsell Soil Color Charts (Munsell Color 2000) and the presence or absence of additional hydric soil indicators as described in the 2006 *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (U.S. Army Corps of Engineers 2006).

To confirm the presence of hydric soils, soil test pits were excavated using a shovel. Soils taken from depths ranging from 0 to 18 inches were examined for physical and chemical evidence of hydric conditions. Excavated soils were evaluated using the chroma indices from the **Munsell Soil Color Charts** (Munsell Color 2000). Additional indicators of hydric soils, such as vertical streaking, high organic matter content in the surface horizon, mottling, and sulfidic odor, were evaluated during the delineation.

As with vegetation, the interior Pond 20 basin has been highly modified with respect to soil conditions by historic use as a salt concentrator pond. The hydric conditions within the soils that were developed over the long history of use have been sustained in the pond through a combination of factors including the extreme salt content and the tight clay/silt composition of soils that have developed in the lowered portions of the basin. The hydrophilic nature of salt and the tight matrix of the silty clay soils sustain hydric properties of the soil in the absence of suitable supporting hydrology.

While much of the soils in the Pond exhibit hydric character, conditions within the pond are atypical since soils reflect historic modification rather than on-going exposure to processes leading to hydric soil development. Thus, the wetland indicator status of soils within Pond 20 is generally questionable and should be viewed as a potential indicator of wetland conditions rather than a definite indicator of such status.

In an analogous situation, historic sewage sludge drying beds support hydric soil conditions as a result if the wet operations of the beds. When activities cease, hydric soil properties remain for some time although hydrology is removed and the area has lost all proximate wetland character. Further, when sludge bed soils are removed and used elsewhere, the soil properties will be retained, pending ultimate soil changes, even though the full context of wetland conditions are no longer retained in the soil.

Hydrology

Hydrologic wetland indicators included both surficial characteristics (*e.g.*, visual observation of surface flow, drainage patterns, watermarks, and drift lines) and sub-surficial characteristics (*e.g.*, presence of free water in the test pit). Hydrologic indicators were also used to define non-wetland

waters of the United States and waters of the State. This information consisted of drainage patterns and waterborne debris accumulated at the base of existing vegetation, indicators of standing water along shorelines including scarping by wind wave scour, algal or suspended sediment rings. In many instances, presence of a dissolved mineral crust can also be used as an indicator of hydrology. However, caution must be applied within Pond 20 where historic salt concentration activities have created highly saline conditions that include a variety of mineral salts with variable solubilities.

Rainfall Frequency Analysis

Because of the unique characteristics of Pond 20 that limit the utility of salt crusts as an indicator of hydrology, additional elements were used to assist in evaluating normal circumstances as they pertain to site inundation and soil saturation. To assess the ordinary high water conditions within the pond, historic precipitation data was collected to determine the return frequency for annual rainfall accumulation levels reflected in historic areal photographic record for the site. As was previously indicated, a single street drain discharges surface run-off from Palm Avenue to the interior of Pond 20. A combination of tight silty clay soils, near surface tidal waters, and extreme salinity retards drainage outward from the pond, result in accumulation of water in the pond basin, both from local rain and drainage off of Palm Avenue.

Monthly precipitation data were collected and summarized by annual water-year (October-September) for the period 1851 through 2007 (San Diego County Water Authority 2008). From these data, water-years were ranked and an analysis was conducted to determine the probability of exceeding accumulated annual rainfall levels. In addition, the return frequency was calculated for annual rainfall levels. These data are summarized in following sections and the annual data are included in Appendix 3.

Historic Photograph Review

To best understand the conditions within Pond 20, an historic photograph review was undertaken to track the evolution of the current site conditions. Within the last decade, several geospatially rectified aerial images have been available and these were used to assess changes in Pond 20 inundation and saturated soil conditions relative to annual rainfall return frequency (Appendix 4). The intent of this analysis was to determine conditions within the Pond under ordinary high water conditions. If the return frequency can be determined for available registered imagery and the "ordinary high water mark" can be established along with the distribution of saturated soils at or near the surface, it is possible to rely on the photographic evidence as a strong indicator of hydrology.

RESULTS AND DISCUSSION

HISTORIC REVIEW OF POND 20 CONDITIONS

Over the last century Pond 20 has undergone several alterations, resulting at varying times in substantial changes in the proportion of the Pond inundated with standing water. At the present time, the pond's industrial uses are considered abandoned and a prolonged period of salt leaching is underway. This has been slowly resulting in a conversion of higher lands to upland habitats and concentration of salts to form crystalline surfaces within lower elevations. The following describes the history and present status of the Pond 20 site.

1900-1910 Era

The Western Magazine (Volume 1, #3) includes a 1904 generalized relief map of the south end of San Diego Bay which indicates the tidal portion of the Bay may not have included the area now known as Pond 20. The Bay ends abruptly rather than extending farther southward towards Palm Avenue. It is not known at what date this map was drawn. It does show a sandy area beyond the southern Bay that extends southward into the approximate area of Pond 20; which may indicate mud flats and/or a tidal slough were present. The veracity of this map is not known; however the configuration of the remainder of the Bay is generally similar in outline to what is known to be the Bay's dimensions.

The Western Magazine from October 1906 shows another relief drawing of the south end of the Bay. This includes a "proposed" Wharf to the immediate west of the northwestern corner of Pond 20, as well as an existing rectangular basin approximately where the western half of Pond 20 is situated. The basin is contiguous with the Bay. Within this basin are two parallel sets of six smaller rectangles; each set is separated by a narrow expanse of water. These small rectangular areas may account for the exposed wooden post bases and wooden footings that are still present in linear arrangements in the western portion of Pond 20A. It is not known how these wooden walkways were utilized; only traces of their foundations remain.

1928 Aerial Photograph

The 1928 photograph of the Pond 20 area (County Aerial, Sheet 77C4) shows the site divided into two ponds. A first pond (Pond 20A), lower in elevation, occupies the south and the west; while a higher elevational pond (Pond 20B) of roughly comparable size is situated in the northeast. In the extreme north is a small area (Pond 20C). Both Ponds 20B and 20C show signs of the 1916 flood, with vestiges of a channels coursing across the extreme corner of the property; and originating from off-site to the east as well as terminal bar formation in a flood delta pattern. In subsequent aerial photographs over the next six decades the small northernmost area, Pond 20C, is separated by a large berm from the two large southern impoundments (this berm was absent by the 2000 survey). The historic berm is situated approximately where the historical river channel can be discerned. From the aerial photographs this appears to be a braided channel of the Otay River that is a remnant from the 1916 flood. In 1928 the dike running entirely around Pond 20, isolates the area completely from all sides, including the channelized Otay River that now runs parallel to the northern portion of the dike.

Unlike all subsequent aerial photographs, both Pond 20A and 20B are flooded in the 1928 photograph. A small irregular portion of Pond 20B in the extreme northeast was above water.

1945 Aerial Photograph

In this aerial photograph, Pond 20A is submersed and Ponds 20B and 20C are above water. Pond 20A was underwater in 1945 and all subsequent photographs into the early 1990s. In almost all of the twenty-three photographs from different dates examined from 1953-1991, a portion of Pond 20A in the eastern arm/extension was above the inundation level. The acreage of these exposed areas varies from photograph to photograph; however, the general shape remains the same.

In all subsequent photographs Pond 20B was exposed except for a narrow channel that runs along the periphery of this area at the foot of the dike. This channel was the borrow area for materials used to construct the Pond 20 containment dike. Similar conditions were observed for Pond 20C.

1953 Aerial Photograph

Conditions observed in 1953 photographs were similar to that noted in 1945 photographs.

1960s Aerial Photographs

Photographs of the site were examined from February 4, 1964 (an oblique); September 20, 1966; September 6, 1968; April 17, 1969; December 12, 1969; and December 29, 1969. All photographs exhibit similar conditions as the photos reviewed from 1945 and 1953.

During this period, Western Salt reported having attempted the re-establishment of production use of Pond 20, however efforts were not successful and no further attempts were made to use this site as a part of the salt works production area.

1970s Aerial Photographs

Photographs of the site were examined from November 8, 1970; June 16, 1971; August 5, 1972; July 2, 1974; November 30, 1976; August 3, 1977; and July 19, 1978. During this period conditions remain roughly the same as in recent previous decades.

1980s Aerial Photographs

Photographs of the site were examined from July 1, 1982; October 9, 1982; March 4, 1983; November 26, 1983 (oblique); and September 7, 1985. During this period conditions remain roughly the same as in recent previous decades.

1990s Aerial Photographs

A photograph from March 3, 1991 shows more of the northeastern portion of Pond 20A exposed than was typical in prior photographs. However, it also shows that Pond 20C which had been primarily dry since the 1945 aerials was now inundated in both the east (approximately 1/3 of this small area) and west (also approximately 1/3 of this small area). These changes suggest that a portion of the berms separating the various sub-ponds may have failed between 1985 and 1991 allowing some of the water from Pond 20A to be redistributed to Pond 20C. It is not known for sure that berms failed since a similar situation was also observed in the March 4, 1983 photograph. However, other photos generally show two very small linear areas of standing water only, along the southern boundary of Pond 20C, and thus, the extensive flooding in Pond 20C is not considered to be ordinary in the context of ponding conditions.

Within the 1995 Aerial Foto-map Book, Pond 20A is approximately 70-80% exposed. Pond 20B has changed little since 1945. In the USGS 1996 photograph, inundation conditions were comparable to those observed in the early 1990s. Less extensive inundation was observed in the 1998 Navy photograph.

Analysis of Historical Photos and Uses

Based on the review of site photo documentation and reports of past production uses of Pond 20, it can be concluded that the industrial process uses of Pond 20 at the Western Salt facility have been abandoned for over thirty years and are abandoned in a regulatory sense. The historic application of abandonment assessments by the Los Angeles District has revolved around timeframes of 1 to 2

years of inactivity on a site. In a recent instance, the Corps concluded that a sand mining operation had not been abandoned, even though no mining had been done for several years. However, this situation is distinguished by the fact that the operation had been ordered by the Courts to cease and desist and had not quit mining willfully. Further the record indicated that the operator had continued to seek to reclaim the site for several years and had even obtained permits and approvals but was slowed by regulatory processes and on-going conflicts beyond the operators individual control. In the present situation, the record suggests that no such complications existed in the cessation of use of Pond 20 by Western Salt; rather, it became economically disadvantageous considering the operation costs and logistical constraints to continue to use this pond in the facilities operation.

During the recent 2000, 2003 and the present 2008 delineation, only a narrow perimeter ditches around much of Pond 20A supported any surface water. In 2000 and 2003, it was noted that the majority of the salt crust in Pond 20A was exposed and showed little evidence of recent inundation. Interestingly, in the present 2008 delineation, the flats away from the perimeter ditch generally showed high salt levels, but not the same surface crystallization observed earlier this decade. Conversely, the perimeter ditch supported a very stable salt block of several inches to feet thick with open fissures of deep brine pools that extended under the crystallized formation. This condition differs from the much thinner and more fragile salt crust in the perimeter ditch observed in 2000 and 2003. The conditions of the salt crust are reminiscent of thick ice in areas affected by fluctuating water levels. Close field observations over the past eight year survey period suggest that salts are being gradually leached from higher ground and transported down towards the perimeter ditch where greater salt accumulation is occurring. This is suggested both by the surface salt characteristics observed as well as the growing presence of vegetation within higher portions of the Pond 20A site.

Pond 20B appears similar to most photos of the 1945-1990 period. This area retains sage scrub components and show only limited inundation with sporadic and relatively minor evidence of salt crystallization in low-lying areas around the periphery of the pond.

Given the long period since this site was last used for production of salt, it is believed the varying periods of high and low inundation levels are indicative of normal, interannual variability in rainfall and evaporation rates. The pond is dependent both on local precipitation in the pond and run-off from Palm Avenue. Absent changes in storm drainage patterns, it is anticipated that physical site conditions would remain relatively constant well into the future.

RAINFALL AND HYDROLOGIC ANALYSIS

Annualized rainfall data are presented by water-year for the latest 157-year period from 1851 through 2007 in Chart 1. The percent exceedence has been calculated and presented for rainfall levels experienced over the record period (Chart 2). Finally, the calculated return period has been determined for each recorded year and the return period curve has been developed from the recorded data (Chart 3).

For the recent two decades, both the extremes of rainfall and drought have been represented (Table 3). During El Nino years of 1993, 1995, 1998, and 2005 rainfall had return periods of 31.4 years, 15.7 years, 17.4 years, and 52.3 years, respectively. The 2005 water-year was the third wettest year in the 157-year review period. Conversely, 2002 was the driest year recorded within the 157-year period. The years 1989, 1996, 2000, 2002, and 2004 all rank within the lowest 20 percent for precipitation levels during the reviewed history.

Table 2. Summary of recent rainfall record and statistics for San Diego (1987-2007).*

Water Year	Rainfall	Rank	P(exceed)	ReturnRate
1987	9.3	83	0.529	1.9
1988	12.44	36	0.229	4.4
1989	5.88	131	0.834	1.2
1990	7.62	110	0.701	1.4
1991	12.31	37	0.236	4.2
1992	12.48	35	0.223	4.5
1993	18.26	5	0.032	31.4
1994	9.93	66	0.420	2.4
1995	17.13	10	0.064	15.7
1996	5.18	140	0.892	1.1
1997	7.73	108	0.688	1.5
1998	**17.16**	**9**	**0.057**	**17.4**
1999	6.5	121	0.771	1.3
2000	**5.75**	**134**	**0.854**	**1.2**
2001	**8.57**	**96**	**0.611**	**1.6**
2002	3.3	157	1.000	1.0
2003	**10.31**	**63**	**0.401**	**2.5**
2004	5.18	140	0.892	1.1
2005	**22.6**	**3**	**0.019**	**52.3**
2006	**5.97**	**129**	**0.822**	**1.2**
2007	**3.59**	**155**	**0.987**	**1.0**

*Bolded records denote the presence of rectified aerial photographs included in this review (Appendix 4).

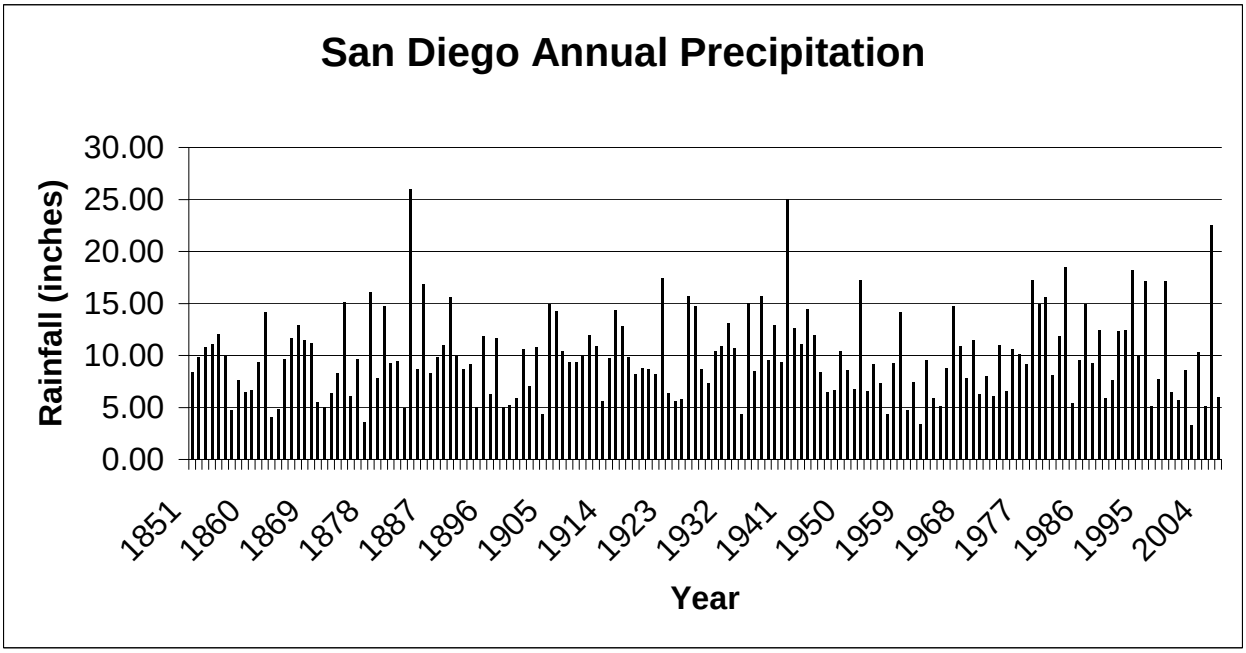


Figure 3. Annual precipitation levels by water-year (Oct.-Sept.) for San Diego.

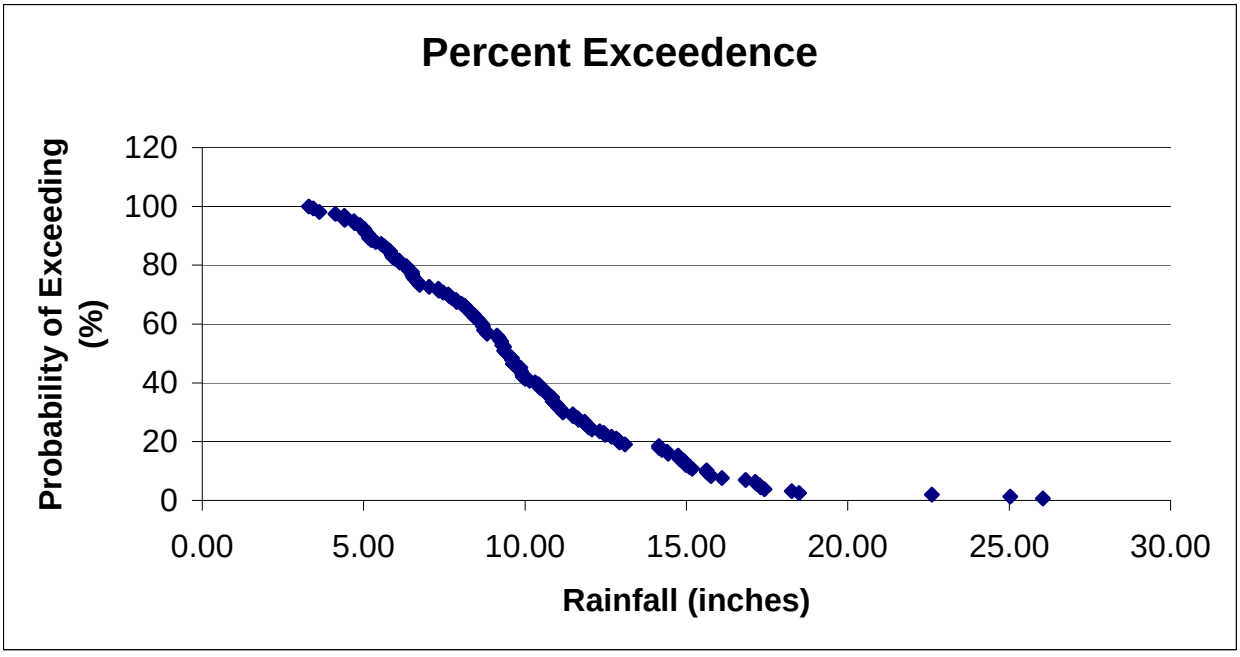


Figure 4. Probability of exceeding rainfall levels based on annual rainfall totals (1851-2007).

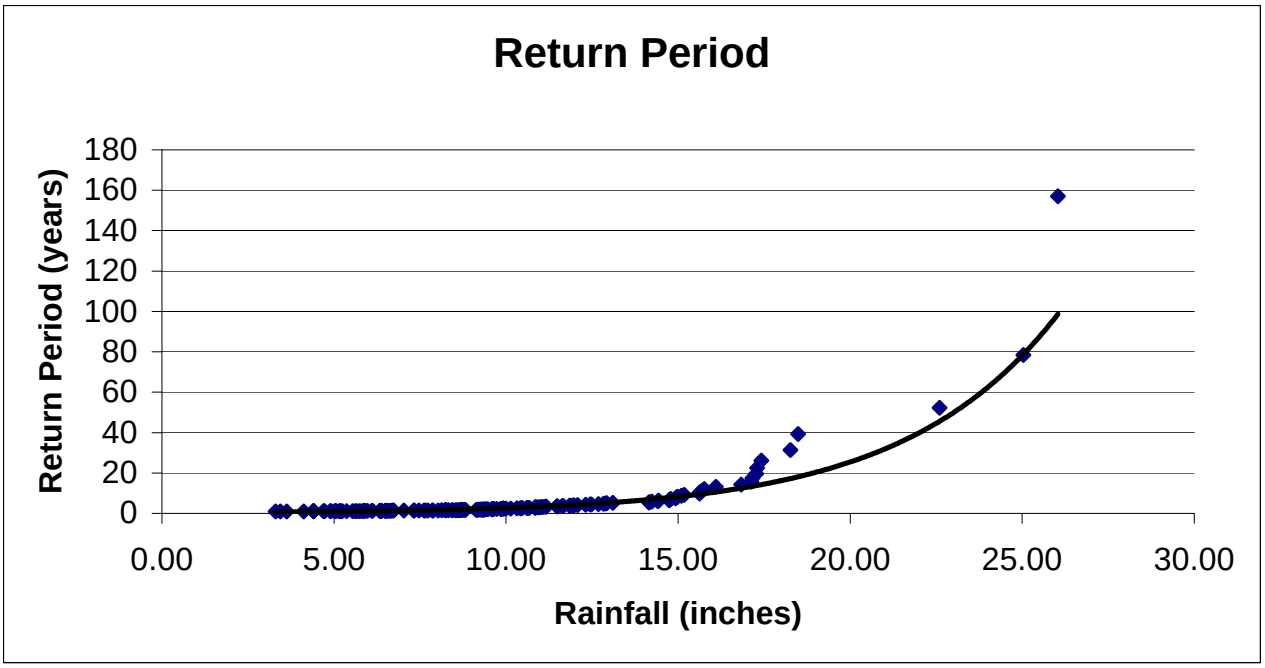


Figure 5. Return period for annual rainfall levels based on rainfall totals for the period 1851-2007.

Because Pond 20 is isolated from tidal surface water connections, topography does not provide a good indicator of potential hydrologic influences as it does in fully tidal environments. However, an existing Palm Avenue street drain discharges to the pond along its southern boundary and sustains intermittent presence of surface water within the peripheral ditch around portions of Pond 20A. Under most years, the peripheral ditch supports only limited surface water exposed along the incomplete closure fissures of a salt crust across the ditch. However in some years, the ditch is filled with brine solution and soils in lowered terrain is darkened by near surface saturation. When reviewing the site soil conditions and hydrologic indicators, it is clear that the patterns expressed by intermittent hydrologic indicators fit well with the conditions expressed by recent high water levels within Pond 20. These features are most likely driven by the high annual rainfall conditions of 2005. This year yielded rainfall exceeding a 52-year return period, however, due to the relatively defined basin form of the perimeter ditch within Pond 20, the 2005 aerial photograph did not suggest conditions highly different from that experience in other wet years such as 1998 (Appendix 4). For this reason, the waterline and soil saturation conditions detectible within the 2005 photograph were used to complete the boundaries of waters where field evidence became unclear or was unmanageable do to boundary complexity.

DETERMINATION OF THE DISTRIBUTION OF WATERS OF THE U.S.

Wetland hydrology indicators were used in combination with indicators of hydric soil and hydrophytic vegetation to determine whether an area is a wetland under the ACOE Manual (U.S. Army Corps of Engineers 2006). Wetland hydrology is indicated by the presence of surficial characteristics or sub-surficial hydrology characteristics, which may include observation of surface water or darkened saturated soils, evidence of recent inundation, evidence of recent soil saturation, or evidence from other site conditions or data. Where weak hydrology indicators were found or indicators are confounded by residual conditions associated with historic uses of Pond 20 as a salt concentrator, aerial photographic evidence and rainfall data were used to assess inundation and saturation to the surface.

Soils in test pits, hydrologic indicators, and vegetation composition were all utilized to estimate the extent of wetlands and non-wetland waters. The distribution of sampling followed the necessity to distinguish boundaries and to confirm presumed regulatory status of particular areas (Figure 6). In addition, another hydrologic indicator, sharp irregularly formed salt crystals, was used to delineate the boundaries of areas that were more recently inundated (see discussion in Methods). In the majority of instances, test pits with hydric soils and/or saturated soils also had irregularly shaped salt crystals on the surface.

For purposes of conducting wetland determinations, this document addresses the regulatory jurisdiction of the ACOE, CCC, and CDFG. In the present situation, jurisdictional boundaries are frequently coincident between agencies and as such, they have been mapped in a manner that indicates which jurisdictions exist over what areas (Figure 6). As mentioned above, the state definition of wetlands is broader than the federal definition due to the state requirement to meet hydrology, hydric soils, or hydrophytic vegetation whereas the federal requirement is to meet all three parameters under normal circumstances. Because wetlands are a subset of waters of the U.S., federal jurisdiction may extend beyond the limits of areas meeting three-parameter wetland criteria. As a result, wetlands have been mapped as an overlay to the federal regulatory jurisdiction that is defined by the hydrology parameter only.

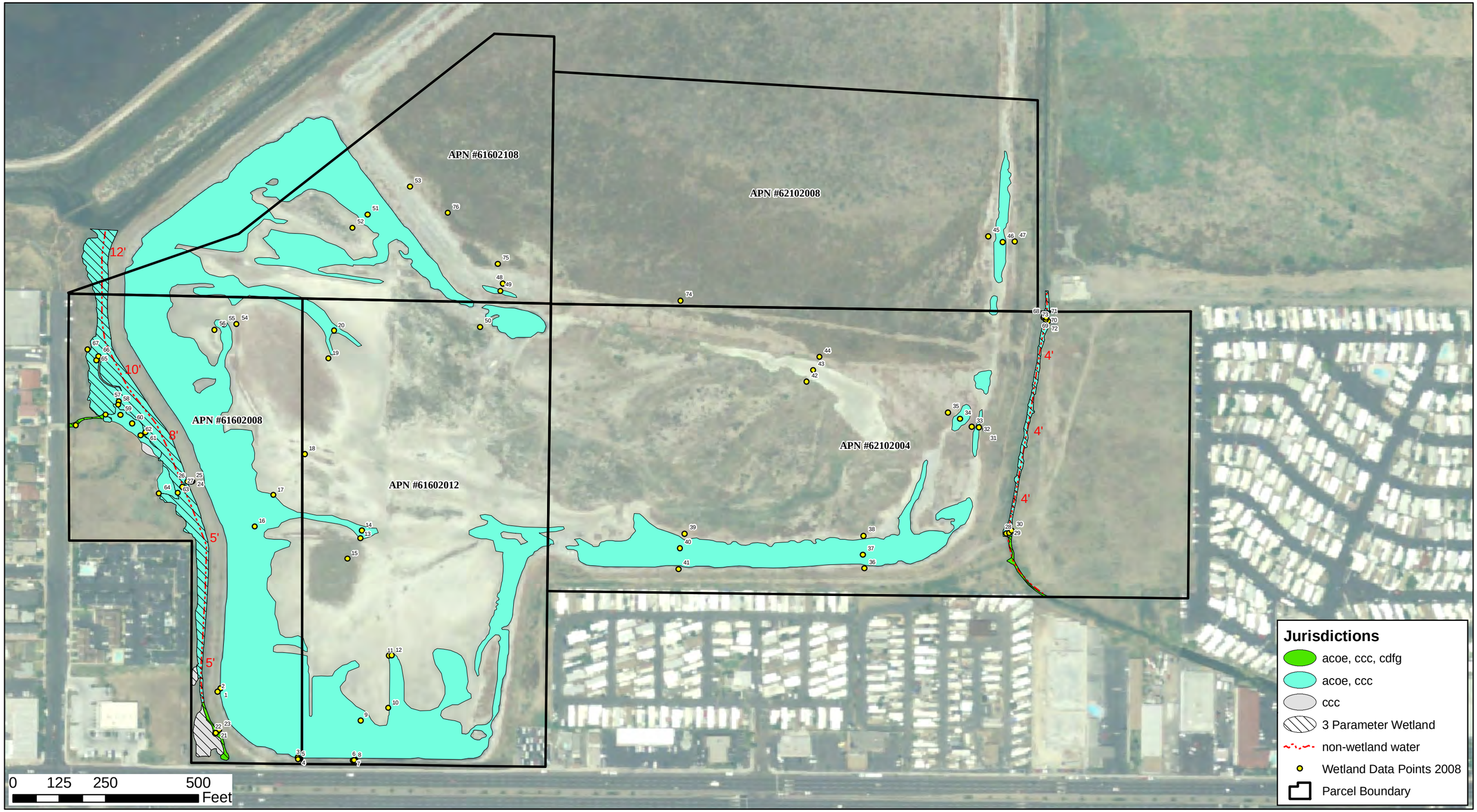
While not explicitly relevant to the determination of jurisdictional boundaries, the regulated areas within the study area support differing habitats. In that these habitat features play a role in defining beneficial uses and are useful in describing the characteristics of the regulated areas, they have been mapped and are referenced in the subsequent sections of this document (Figure 7).

Federal Wetlands (ACOE)

Federal wetlands are those areas that meet all requirements of the three-parameter definition of the Corps of Engineers wetland delineation manual (ACoE 1987) under normal circumstances. The Corps clarified the term normal circumstances in a regulatory guidance letter issued in 1986 (RGL 86-9) and, in part indicated that the Corps does not intend to regulate areas that are not aquatic, but experience an abnormal presence of aquatic vegetation. The Corps pointed out that some aquatic species are able to persist in upland situations simply because the high salt content of the soil precluded the occurrence of upland vegetation. The RGL further indicated that the Corps does not intend to regulate prior converted wetlands that have been transformed into dry lands, but rather those that exist at present.

Federal wetlands were found to exist both along the narrow levee-contained ditch that defines Nestor Creek as it crosses the study area from south to north along the eastern portion of the site and within the Palm Avenue Storm Drain ditch as it runs south to north along the western portion of the site. In both of these areas, the very southern (upper) end of the drainage supports disturbed freshwater marsh vegetation while the northern (lower) end of the drainage supports typical southern coastal salt marsh vegetation (Figure 7). The low gradient drainages transition rapidly from freshwater vegetation dominance to salt marsh near the highest tide line as a result of the low freshwater inflow rates throughout most of the year.

As was the case in the 2003 delineation, the 2008 delineation found no jurisdictional wetlands within Pond 20. While much of Pond 20 lacks vegetation, where present, vegetation within the pond at the time of the 2008 delineation was dominated by Slender-leaved Iceplant (*Mesembryanthemum nodiflorum*), a facultative upland species. Five-horn Smotherweed (*Bassia hyssopifolia*), a



N
W E
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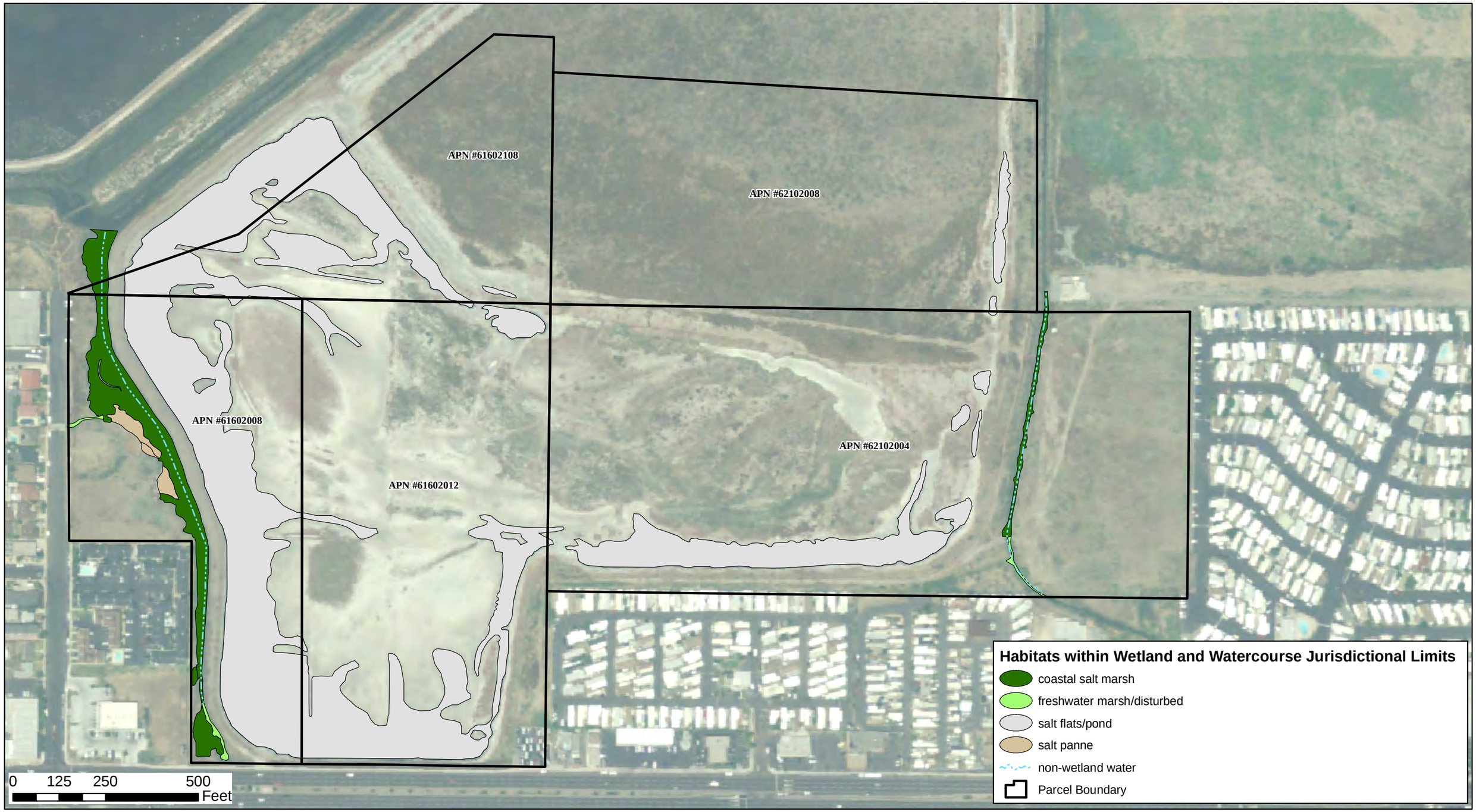
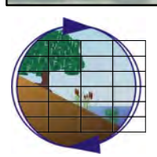
Wetland and Watercourse Jurisdictional Limits

Pond 20, Imperial Beach

Figure 6





N
W E
S

Wetland and Watercourse Jurisdictional Limits

Pond 20, Imperial Beach

Figure 7

facultative species was common within higher portions of the pond in non-clay soils where salts had been substantively leached out. Slender-leaved Iceplant, forms a mat over a large portion of Pond 20A and 20B. Areas that supported hydrophytes such as Salt Heliotrope (*Heliotropium curvassavicum*) and Halberd-leaf Saltbush (*Atriplex triangularis*) failed to meet the requirements of being predominated by hydrophytes and were determined to fail the vegetation criterion for being considered wetlands (Appendix 1). These areas also generally failed one or both of the other two defining parameters as well.

Other Waters of the U.S. (ACOE)

During 2008, a substantial portion of the study site was determined to be non-wetland waters of the U.S. These areas are characterized as salt flats and ponds (Figure 4). The determination of the extent of non-wetland waters was based on physical hydrologic indicators such as erosion scarps, debris lines, standing surface water, sharply defined salt crystals in salt crusts helped to define the high water line in these areas. Aerial photographic evidence of inundation or saturated soils in recent years was also used to determine the limits of waters.

Because of the strong dependence of Pond 20 on rainfall and Palm Avenue runoff, the evidence of surface hydrology is relatively transitory from year to year. As a result, the surface waters and indications of soil saturation that were represented in wet year photographs were used to map jurisdictional boundaries where field evidence is presently lacking in the pond.

Coastal Act Wetlands (CCC)

Under the Coastal Act, any of three parameters (hydrology, hydric soils, or hydrophytic vegetation) may be used to distinguish an area as a wetland. The single parameter of hydrology is used in the determination of an area as a water of the U.S. and thus the Commission shares much of the same jurisdiction as the ACOE with respect to waters. However, there are a small number of areas along the western margin of the site where the Coastal Commission jurisdiction extends over high salt marsh vegetation (dominated by salt grass (*Distichlis spicata*), salt heliotrope) that fails to meet soils and hydrologic characteristics. Similarly, there are salt pannes that exist above the highest high tide line that meet hydric soil criteria, but fail to meet hydrology or vegetation characteristics (Figure 4).

Streambeds (CDFG)

The freshwater segments of Nestor Creek and the Palm Avenue Storm Drain ditch are considered to be streambeds regulated by the California Department of Fish & Game. These areas include disturbed freshwater marsh dominated by soft-flag cattail (*Typha latifolia*), wild radish (Raphanus satevus), cyperus (*Cyperus eragostis*), and tree tobacco (*Nicotiana glauca*) (Figure 4). The low inflow drains do not contribute enough flow on a regular basis to support riparian conditions or physical characteristics of a fluvial system in any portion of the drainage where regular tidal waters penetrate. In these areas, purely marine environments dominate and, despite the confined geometry of the two ditches, the areas are considered to be marine slough channels and not streambeds. As a result, the CDFG jurisdiction extends only about 100 feet into the southern portion of the study area on both the eastern and western boundaries of the site.

INDIVIDUAL AGENCY JURISDICTIONS AS REGULATED WATERBODIES

Table 3 summarizes the extent of regulatory jurisdiction determined over wetlands and watercourses by various agencies and by assessor's parcel numbers.

Table 4 provides the breakdown of habitats falling within the regulated waterways. There has been no effort made to break habitats down to narrower community definitions, as this was not the objective of this investigation.

Table 3. Acres of jurisdictional watercourses by regulatory agency.

	ASSESSOR PARCEL NUMBER					
JURISDICTION	**61602008**	**61602012**	**61602108**	**62102004**	**62102008**	**TOTAL**
ACOE, CCC, CDFG	0.05			0.03		0.08
ACOE, CCC	6.08	3.11	2.16	2.10	0.22	13.67
CCC	0.18					0.18
TOTAL	**6.31**	**3.11**	**2.16**	**2.13**	**0.22**	**13.92**

AGENCY TOTAL	**61602008**	**61602012**	**61602108**	**62102004**	**62102008**	**TOTAL**
ACOE	6.13	3.11	2.16	2.13	0.22	**13.75**
CCC	6.31	3.11	2.16	2.13	0.22	**13.92**
CDFG	0.05			0.03		**0.08**

Table 4. Acres of habitats comprising the jurisdictional waters.

	ASSESSOR PARCEL NUMBER					
HABITATS	**61602008**	**61602012**	**61602108**	**62102004**	**62102008**	**TOTAL**
Coastal Salt Marsh	1.39		0.03	0.16		1.58
Freshwater Marsh/Dist.	0.05			0.03		0.08
Salt Flats/Pond	4.68	3.11	2.13	1.94	0.22	12.07
Salt Panne	0.19					0.19
TOTAL	**6.31**	**3.11**	**2.16**	**2.13**	**0.22**	**13.92**

ENVIRONMENTAL SENSITIVE HABITAT AREAS

The Coastal Act wetland habitat mapped within the study area would be considered an ESHA by the California Coastal Commission. In 2003, black-necked stilts were observed nesting along the western portion of Pond 20, however during the current investigations, no shorebird use was noted within Pond 20. Both the lateness of the season and the loss of a water barrier along the southern, eastern, and western portions of the pond may contribute to the absence of detected shorebird use at the present time. It would not be unexpected to see shorebirds, particularly birds such as killdeer and black-necked stilts that nest on flats away from other birds, to make use of portions of Pond 20 as a nesting area, this would be especially true when the perimeter ditch holds water and creates somewhat of a moat that protects the Pond interior from mammalian predators.

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APPENDIX 1.
WETLAND DATA FORMS

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 6/30/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP1/PP1

Investigator(s): Keith Merkel/Rebecca Erickson/Eileen Maher Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): Slope of berm Local relief (concave, convex, none): none Slope (%): ~25%

Subregion (LRR): C Lat: 6298534.45483 Long: 1793572.13269 Datum: NAD83

Soil Map Unit Name: Huerhuero - Urban Land Complex NWI classification: PEMh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:

DP1 is not located within a wetland. ACOE/CCC jurisdictional. Please refer to hydrology notes.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. -			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:			
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

No vegetation present.

SOIL

Sampling Point: DP1

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	2.5 YR 3/1							Silty Clay Loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- X Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- X Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X **No** _____

Remarks:

Deposits of sand throughout matrix. DP1 located within salt crust berm. Hydric soil present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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)
- X 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- X 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes X **No** _____

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

Remarks:

2005 Aerial Imagery and rainfall data. Hydrology present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 6/30/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP2/PP2

Investigator(s): Keith Merkel/Rebecca Erickson/Eileen Maher Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): Slope of berm Local relief (concave, convex, none): none Slope (%): ~30%

Subregion (LRR): C Lat: 6298526.95922 Long: 1793563.48884 Datum: NAD83

Soil Map Unit Name: Huerhuero - Urban Land Complex NWI classification: PEMh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:

DP2 is not located within a wetland. ACOE/CCC jurisdictional. Please refer to hydrology notes.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. -			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:			
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

No vegetation present.

SOIL

Sampling Point: DP2

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	2.5 YR 3/1							Silty Clay

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- X Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- X Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X **No** _____

Remarks:

DP2 located on slope of berm. Hydric soil present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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)
- X 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- X 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes X **No** _____

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

Remarks:

2005 Aerial Imagery and rainfall data. Hydrology present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 6/30/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP3/PP3

Investigator(s): Keith Merkel/Rebecca Erickson/Eileen Maher Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): Toe of berm Local relief (concave, convex, none): none Slope (%): ~5%

Subregion (LRR): C Lat: 6298743.57368 Long: 1793386.17497 Datum: NAD83

Soil Map Unit Name: Huerhuero - Urban Land Complex NWI classification: PEMh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:

ACOE/CCC jurisdictional. Please refer to hydrology notes.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. -			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:			
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

No vegetation present.

SOIL

Sampling Point: DP3

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	2.5 YR 2.5/1							Loamy sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- X 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

Tide +3.5. DP pit filling up with water. Hydrogen sulfide odor. Hydric soils present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- X High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- X 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): _____

Water Table Present? Yes X No ___ Depth (inches): 7-12

Saturation Present? (includes capillary fringe) Yes ___ No ___ Depth (inches): _____

Wetland Hydrology Present? Yes X No ___

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

Remarks:

Hydrology present due to presence of water in pit. 2005 Aerial Imagery and rainfall data.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 6/30/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP4/PP4

Investigator(s): Keith Merkel/Rebecca Erickson/Eileen Maher Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): Slope of berm Local relief (concave, convex, none): none Slope (%): ~15%

Subregion (LRR): C Lat: 6298744.56695 Long: 1793381.11994 Datum: NAD83

Soil Map Unit Name: Huerhuero - Urban Land Complex NWI classification: PEMh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

DP4 is not located within a wetland. Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	10		FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	10%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 90% % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

No hydrophytic vegetation present.

SOIL

Sampling Point: DP4

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5 YR 3/3							Loamy sand
12-20	7.5 YR 2.5/1							Loamy sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No evidence of hydric soil to 12 inches. 12 inches - 20 inches hydric.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

DP pit fills with water at 20 inches.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 6/30/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP5/PP5

Investigator(s): Keith Merkel/Rebecca Erickson/Eileen Maher Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): Slope of berm Local relief (concave, convex, none): none Slope (%): ~15%

Subregion (LRR): C Lat: 6298743.66277 Long: 1793380.56664 Datum: NAD83

Soil Map Unit Name: Huerhuero - Urban Land Complex NWI classification: PEMh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____ No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	

Remarks:

Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	50	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	50%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 50% % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

No hydrophytic vegetation present.

SOIL

Sampling Point: DP5

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	7.5 YR 5/4							Sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No hydric soil present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

No evidence of hydrology.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 6/30/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP6/PP6

Investigator(s): Keith Merkel/Rebecca Erickson/Eileen Maher Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): Toe of berm Local relief (concave, convex, none): none Slope (%): ~15%

Subregion (LRR): C Lat: 6298897.20044 Long: 1793380.51311 Datum: NAD83

Soil Map Unit Name: Huerhuero - Urban Land Complex NWI classification: PEMh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:

ACOE/CCC jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. -			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:			
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

No vegetation present.

SOIL

Sampling Point: DP6

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5 YR 2.5/1							Loamy Sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- X 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

Tide +3.5. DP pit filling up with water. Hydrogen sulfide odor. Hydric soils present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- X High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- X 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): _____

Water Table Present? Yes X No ___ Depth (inches): 7-12"

Saturation Present? (includes capillary fringe) Yes ___ No ___ Depth (inches): _____

Wetland Hydrology Present? Yes X No ___

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

Remarks:

Hydrology present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 6/30/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP7/PP7

Investigator(s): Keith Merkel/Rebecca Erickson/Eileen Maher Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): Toe of berm Local relief (concave, convex, none): none Slope (%): ~25%

Subregion (LRR): C Lat: 6298892.01797 Long: 1793377.33932 Datum: NAD83

Soil Map Unit Name: Huerhuero - Urban Land Complex NWI classification: PEMh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:

DP7 is not located within a wetland. Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	10		FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	10%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 90% % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

No hydrophytic vegetation present.

SOIL

Sampling Point: DP7

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5 YR 3/3							Loamy sand
12-20	7.5 YR 2.5/1							Loamy sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

12 inches - 20 inches hydric. No evidence of hydric soil to 12 inches.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X 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)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes X No _____

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

Remarks:

Pit saturated to surface (more than DP4)

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 6/30/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP8/PP8

Investigator(s): Keith Merkel/Rebecca Erickson/Eileen Maher Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): none Slope (%): ~25%

Subregion (LRR): C Lat: 6298895.29951 Long: 1793378.57166 Datum: NAD83

Soil Map Unit Name: Huerhuero - Urban Land Complex NWI classification: PEMh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	50	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	50%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 50% % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

No hydrophytic vegetation present.

SOIL

Sampling Point: DP8

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	7.5 YR 5/4							Sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No hydric soil present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

No evidence of hydrology.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 6/30/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP9/PP9

Investigator(s): Keith Merkel/Rebecca Erickson/Eileen Maher Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): Salt panne Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6298912.48400 Long: 1793485.82589 Datum: NAD83

Soil Map Unit Name: Huerhuero - Urban Land Complex NWI classification: PEMh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:

ACOE/CCC jurisdictional. Please refer to hydrology notes.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. -			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:			
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

No vegetation present.

SOIL

Sampling Point: DP9

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	2.5 YR 4/1							Silty Clay
5-12	2.5 YR 2.5/1							Silty Clay

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Hydric soil present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- X 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? **Yes** _____ **No** X

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

Remarks:

2005 Aerial Imagery and rainfall data. Hydrology present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 6/30/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP10/PP10

Investigator(s): Keith Merkel/Rebecca Erickson/Eileen Maher Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): salt panne Local relief (concave, convex, none): convex Slope (%): 0%

Subregion (LRR): C Lat: 6298987.44067 Long: 1793519.61260.82589 Datum: NAD83

Soil Map Unit Name: Huerhuero - Urban Land Complex NWI classification: PEMh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:

ACOE/CCC jurisdictional. Please see hydrology notes.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	25		FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	25%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 75% % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

No hydrophytic vegetation present.

SOIL

Sampling Point: DP10

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	2.5 YR 4/1							Silty Clay
4-20	5 YR 3/4							Sandy clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

Data Point 10 on top of slightly elevated, created berm. First 4 inches are depleted dark surface. Hydric soils present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- X 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): _____

Water Table Present? Yes ___ No ___ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 4-20

Wetland Hydrology Present? Yes X No ___

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

Remarks:

2005 Aerial Imagery and rainfall data. Hydrology present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 6/30/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP11/PP11

Investigator(s): Keith Merkel/Rebecca Erickson/Eileen Maher Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): salt panne Local relief (concave, convex, none): convex Slope (%): 0%

Subregion (LRR): C Lat: 6298988.79085 Long: 1793660.95105 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification: PEMh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:

ACOE/CCC jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	25		FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	25%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 75% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: ____ (A)

Total Number of Dominant Species Across All Strata: ____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

No hydrophytic vegetation present.

SOIL

Sampling Point: DP11

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	2.5 YR 4/1							Silty Clay
4-20	5 YR 3/4							Sandy clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- X Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

On top of slightly elevated, created berm. First 4 inches are depleted dark surface. Hydric soil present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- X 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): _____

Water Table Present? Yes ___ No ___ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 4-20

Wetland Hydrology Present? Yes X No ___

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

Remarks:

2005 Aerial Imagery and rainfall data. Hydrology present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 6/30/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP12/PP12

Investigator(s): Keith Merkel/Rebecca Erickson/Eileen Maher Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): salt panne Local relief (concave, convex, none): convex Slope (%): 0%

Subregion (LRR): C Lat: 6298996.70381 Long: 1793661.38753 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification: PEMh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:

ACOE/CCC jurisdictional. Please refer to hydrology notes.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	25		FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	25%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 75 % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

No hydrophytic vegetation present.

SOIL

Sampling Point: DP12

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12								Black Mucky Clay

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- X 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

On top of slightly elevated, created berm. Hydric soils present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- X 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): ___

Water Table Present? Yes ___ No ___ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 4-20

Wetland Hydrology Present? Yes X No ___

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

Remarks:

2005 Aerial Imagery and rainfall data. Hydrology present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 6/30/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP13/PP13

Investigator(s): Keith Merkel/Rebecca Erickson/Eileen Maher Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): salt panne Local relief (concave, convex, none): concave Slope (%): 0%

Subregion (LRR): C Lat: 6298911.80172 Long: 1793977.33310 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification: PEMh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:

ACOE/CCC jurisdictional. Refer to hydrology notes.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	60		
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	60%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 40% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: ____ (A)

Total Number of Dominant Species Across All Strata: ____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

No hydrophytic vegetation present.

SOIL

Sampling Point: DP13

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	white							Salt
2-6	5 YR 3/1							Clay Loam
6-12	5 YR 3/2							Loamy sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

On top of slightly elevated, created berm. First 4 inches are depleted dark surface. Hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- X 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): _____

Water Table Present? Yes ___ No ___ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 4-20

Wetland Hydrology Present? Yes X No ___

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

Remarks:

2005 Aerial Imagery and rainfall data. Hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 6/30/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP14/PP14

Investigator(s): Keith Merkel/Rebecca Erickson/Eileen Maher Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): salt panne Local relief (concave, convex, none): concave Slope (%): 0%

Subregion (LRR): C Lat: 6298915.60568 Long: 1793998.69290 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification: PEMh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:

ACOE/CCC jurisdictional. Refer to hydrology notes.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	30		
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	30%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 70% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: ____ (A)

Total Number of Dominant Species Across All Strata: ____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

No hydrophytic vegetation present.

SOIL

Sampling Point: DP14

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10 YR 3/3							Peat (clay loam)
2-12	2.5 YR 3/1							Silty Clay Loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- X Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

Hydric soils present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- X 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): ___

Water Table Present? Yes ___ No ___ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ___ Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

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

Remarks:

2005 Aerial Imagery and rainfall data. Hydrologic indicators present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 6/30/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP15/PP15

Investigator(s): Keith Merkel/Rebecca Erickson/Eileen Maher Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): salt panne Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6298877.41957 Long: 1793921.99442 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification: PEMh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

DP15 not located within a wetland. Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	80	Yes	FACU
2. Salsola tragus	14	Yes	NI
3. Atriplex triangularis	5	No	FACW
4. Bassia hyssopifolia	1	No	FAC
5.			
6.			
7.			
8.			
Total Cover:	100%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 0% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species 5	x 2 =	10
FAC species 1	x 3 =	3
FACU species 80	x 4 =	320
UPL species 11	x 5 =	55
Column Totals: 97 (A)		388 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

Hydrophytic vegetation not dominant.

SOIL

Sampling Point: DP15

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4								Salt
4-12	2.5 YR 3/2							Loamy Sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** X

Remarks:

No hydric soil present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? **Yes** _____ **No** X

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

Remarks:

Historic salt crust not indicator of hydrology.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 6/30/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP16/PP16

Investigator(s): Keith Merkel/Rebecca Erickson/Eileen Maher Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): salt panne Local relief (concave, convex, none): concave Slope (%): 0%

Subregion (LRR): C Lat: 6298627.32302 Long: 1794009.12714 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification: PEMh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:

ACOE/CCC jurisdictional. Refer to hydrology notes.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. -			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:			
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

No vegetation present.

SOIL

Sampling Point: DP16

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4								Salt
4-12								Black muck - silty clay

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- X 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

Hydric soil present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- X 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- X 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): _____

Water Table Present? Yes ___ No ___ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 4-12

Wetland Hydrology Present? Yes X No ___

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

Remarks:

2005 Aerial Imagery and rainfall data. Hydrology present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 6/30/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP17/PP17

Investigator(s): Keith Merkel/Rebecca Erickson/Eileen Maher Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): salt panne Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6298677.21002 Long: 1794093.73916 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification: PEMh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:

ACOE/CCC jurisdictional. See hydrology notes.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesenbryanthemum nodiflorum	35		FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	35%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 65% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: ____ (A)

Total Number of Dominant Species Across All Strata: ____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

No hydrophytic vegetation present.

SOIL

Sampling Point: DP17

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10 YR 4/2							Loamy sand
3-12	Black							Black muck - silty clay

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- X Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

Hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- X 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): ___

Water Table Present? Yes ___ No ___ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ___ Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

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

Remarks:

2005 Aerial Imagery and rainfall data. Hydrology present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 6/30/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP18/PP18

Investigator(s): Keith Merkel/Rebecca Erickson/Eileen Maher Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): salt panne Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6298762.58882 Long: 1794204.81533 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification: PEMh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesenbryanthemum nodiflorum	60		FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	60%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 40% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

No hydrophytic vegetation present.

SOIL

Sampling Point: DP18

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6								Salt
6-12	5 YR 3/2							Silty clay

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

No indicators of hydrology.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 6/30/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP19/PP19

Investigator(s): Keith Merkel/Rebecca Erickson/Eileen Maher Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): salt panne Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6298825.91036 Long: 1794462.08841 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification: PEMh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:

Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesenbryanthemum nodiflorum	60		FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	60%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 40% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: ____ (A)

Total Number of Dominant Species Across All Strata: ____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

No hydrophytic vegetation present.

SOIL

Sampling Point: DP19

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6								Calcium carbonate
6-12	5 YR 3/2							Silty clay

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No redox concentrations present. Soil salinity is high and prevents this chemical process where it would normally occur. Hydric soil indicators not present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- X Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes X No _____ Depth (inches): 6-12

Wetland Hydrology Present? Yes X No _____

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

Remarks:

Indicators of hydrology evident in saturation at 6-12 inches. Salt crust is relictual in nature. Hydrologic indicators present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 6/30/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP20/PP20

Investigator(s): Keith Merkel/Rebecca Erickson/Eileen Maher Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): salt panne Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6298841.57354 Long: 1794537.74461 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification: PEMh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:

ACOE/CCC jurisdictional. See hyrdology notes.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. -			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:			
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: ____ (A)

Total Number of Dominant Species Across All Strata: ____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

No vegetation present.

SOIL

Sampling Point: DP20

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6								Salt
6-12	7.5 YR 2.5/1							Silty clay

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- X Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Hydric soils evident in 6-12".

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- X Surface Soil Cracks (B6)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- X 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? **Yes** X **No** _____

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

Remarks:

2005 Aerial Imagery and rainfall data. Hydrology present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP21/PP21

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): bank Local relief (concave, convex, none): none Slope (%): 45%

Subregion (LRR): C Lat: 6298522.43715 Long: 1793453.41491 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Glebionis coronarium	<5	No	UPL
2. Nicotiana glauca	<5	No	FAC
3. Voucher #l (exotic ornan)	<5	No	UPL
4.			
5.			
6.			
7.			
8.			
Total Cover:	15%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 85% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species <5	x 3 = <15
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = >3

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

DP21 on bank in disturbed upland. No hydrophytic vegetation.

SOIL

Sampling Point: DP21

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5 YR 3/2							Loamy sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No redox concentrations visible. No indicators of hydric soils.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

No hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP22/PP22

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): marsh Local relief (concave, convex, none): concave Slope (%): 0%

Subregion (LRR): C Lat: 6298521.44964 Long: 1793452.26708 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X No ____	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

Freshwater marsh jurisdictional under ACOE, CCC.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Typha latifolia	100	Yes	OBL
2. Cyperus eragostis	50	Yes	FACW
3. Sarcocarnia pacificia	5	No	OBL
4.			
5.			
6.			
7.			
8.			
Total Cover:	155%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	105	x 1 =	105
FACW species	50	x 2 =	100
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	155 (A)		205 (B)

Prevalence Index = B/A = 1.3

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

Hydrophytic vegetation dominant.

SOIL

Sampling Point: DP22

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	5 YR 2.5/1							Sandy clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- X 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

Hydrogen sulfide odor. High organic content. Hydric soils present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- X Surface Water (A1)
- ___ High Water Table (A2)
- X 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No ___ Depth (inches): 2

Water Table Present? Yes ___ No ___ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 0-12

Wetland Hydrology Present? Yes X No ___

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

Remarks:

2 inches of standing water. DP located in center of stream channel. Channel 12 feet wide. Bank to bank ~ 15 feet. Hydrology present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP23/PP23

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): bank Local relief (concave, convex, none): none Slope (%): ~45%

Subregion (LRR): C Lat: 6298531.03220 Long: 1793460.33389 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

DP23 located in upland habitat on bank of channel. Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	80	Yes	FACU
2. Ambrosia psilostachya	5	No	FAC
3. Glebioinis coronarium	<5	No.	UPL
4.			
5.			
6.			
7.			
8.			
Total Cover:	90%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 10% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species 5	x 3 =	15
FACU species 80	x 4 =	320
UPL species 5	x 5 =	25
Column Totals: 90 (A)		360 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

DP23 on bank (berm). Hydrophytic vegetation not dominant.

SOIL

Sampling Point: DP23

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5 YR 3/2							Sandy loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Root structures throughout matrix. No redox concentrations visible. No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

DP23 located on bank of channel in disturbed upland vegetation. No hydrologic indicators present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP24/PP24

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): bank Local relief (concave, convex, none): none Slope (%): ~35%

Subregion (LRR): C Lat: 6298458.73172 Long: 1794130.88929 Datum: NAD83

Soil Map Unit Name: Huerhuero-Urban land complex NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. -			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:			
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

Unvegetated berm slope. No vegetation present.

SOIL

Sampling Point: DP24

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	2.5 YR 4/1							Silty clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Hydric soil present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? **Yes** _____ **No** X

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

Remarks:

No evidence of hydrology.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP25/PP25

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): bank Local relief (concave, convex, none): none Slope (%): 25%

Subregion (LRR): C Lat: 6298456.09291 Long: 1794130.04729 Datum: NAD83

Soil Map Unit Name: Huerhuero-Urban land complex NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X No ____	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

ACOE/CCC jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Sarcocornia pacifica	30	Yes	OBL
2. Batis maritima	10	No	OBL
3. Frankenia salina	10	No	FACW
4.			
5.			
6.			
7.			
8.			
Total Cover:	50%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 50% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	40	x 1 =	40
FACW species	10	x 2 =	20
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	50 (A)		60 (B)

Prevalence Index = B/A = 1.2

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

Hydrophytic vegetation dominant.

SOIL

Sampling Point: DP25

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	2.5 YR 4/1							Silty clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Hydric soil present. Large sand deposits throughout matrix. Data Point at toe of berm slope.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? **Yes** X **No** _____

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

Remarks:

Covered in salt crust. Hydrologic indicators present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP26/PP26

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): bank Local relief (concave, convex, none): none Slope (%): 20%

Subregion (LRR): C Lat: 6298445.33995 Long: 1794129.72810 Datum: NAD83

Soil Map Unit Name: Huerhuero-Urban land complex NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X No ____	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

ACOE/CCC jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Sarcocornia pacifica	100	Yes	OBL
2. Batis maritima	10	No	OBL
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	110%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species 100	x 1 =	100
FACW species ____	x 2 =	____
FAC species ____	x 3 =	____
FACU species ____	x 4 =	____
UPL species ____	x 5 =	____
Column Totals: ____ (A)		____ (B)

Prevalence Index = B/A = 1

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

Hydrophytic vegetation dominant.

SOIL

Sampling Point: DP26

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	5 YR 3/1		2.5 YR 4/8	30	D	RC		Silty clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- X Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

Root matter throughout. Root channel mottling present. Hydric soils present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- X Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- X Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): _____

Water Table Present? Yes ___ No ___ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 0-12

Wetland Hydrology Present? Yes X No ___

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

Remarks:

Hydrology present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP27/PP27

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): bank Local relief (concave, convex, none): none Slope (%): ~10%

Subregion (LRR): C Lat: 6298431.67188 Long: 1794115.82452 Datum: NAD83

Soil Map Unit Name: Huerhuero-Urban land complex NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X No ____	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

DP27 located on west side of channel, on lower bank. ACOE/CCC jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Sarcocornia pacifica	50	Yes	OBL
2. Frankenia salina	50	Yes	FACW
3. Batis maritima	10	No	OBL
4.			
5.			
6.			
7.			
8.			
Total Cover:	110%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	60	x 1 =	60
FACW species	50	x 2 =	100
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	110 (A)		160 (B)

Prevalence Index = B/A = 1.45

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

Hydrophytic vegetation present.

SOIL

Sampling Point: DP27

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	5 YR 3/1		2.5 YR 4/8	30	D	RC		Silty clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- X Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

Root matter throughout. Root channel mottling present. Hydric soils present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- X 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- X 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): _____

Water Table Present? Yes ___ No ___ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 0-12

Wetland Hydrology Present? Yes X No ___

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

Remarks:

2005 Aerial Imagery and rainfall data. Hydrology present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP28/PP28

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): bank Local relief (concave, convex, none): none Slope (%): ~10%

Subregion (LRR): C Lat: 6300654.82949 Long: 173990.28509 Datum: NAD83

Soil Map Unit Name: Huerhuero-Urban land complex NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes ____ No X	

Remarks:

CDFG/CCC only 15 feet.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Frankenia salina	50	Yes	FACW
2. Glebionis coronarium	20	No	UPL
3. Lolium multiflorum	15	No	FAC
4. Distichlis spicata	15	No	FACW
5.			
6.			
7.			
8.			
Total Cover:	100%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 0% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species 65	x 2 =	130
FAC species 15	x 3 =	45
FACU species	x 4 =	
UPL species 20	x 5 =	100
Column Totals: 100 (A)		275 (B)

Prevalence Index = B/A = 2.75

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

Hydrophytic vegetation dominant.

SOIL

Sampling Point: DP28

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Could not dig due to the presence of rocks in soil.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

DP28 on bank of stream channel. No evidence of hydrologic indicators.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP29/PP29

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): stream channel Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6300662.36328 Long: 1793991.55012 Datum: NAD83

Soil Map Unit Name: Huerhuero-Urban land complex NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:

ACOE jurisdictional to 4 feet. CCC/CDFG jurisdictional to 15 feet.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. -			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:			
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: ____ (A)

Total Number of Dominant Species Across All Strata: ____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

Unvegetated stream bed. No vegetation rooted within channel.

SOIL

Sampling Point: DP29

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

Stream channel. Soils assumed to be hydric.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- X 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)
- X 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- X 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No ___ Depth (inches): 4.0 "

Water Table Present? Yes ___ No ___ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ___ Depth (inches): _____

Wetland Hydrology Present? Yes X No ___

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

Remarks:

Depth of water 4 inches. PP29 located in center of channel. ACOE 4 feet OHWM. 2005 Aerial Imagery and rainfall data. Hydrology present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP30/PP30

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): bank Local relief (concave, convex, none): none Slope (%): ~40%

Subregion (LRR): C Lat: 6300668.94613 Long: 1793998.22912 Datum: NAD83

Soil Map Unit Name: Huerhuero-Urban land complex NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes ____ No X	

Remarks:

CDFG/CCC only 7.5 feet from center of channel.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Frankenia salina	50	Yes	FACW
2. Glebionis coronarium	20	No	UPL
3. Lolium multiflorum	15	No	FAC
4. Distichlis spicata	15	No	FACW
5.			
6.			
7.			
8.			
Total Cover:	100%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 0% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	65	x 2 =	130
FAC species	15	x 3 =	45
FACU species	0	x 4 =	0
UPL species	20	x 5 =	100
Column Totals:	100 (A)		275 (B)

Prevalence Index = B/A = 2.75

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

Hydrophytic vegetation dominant.

SOIL

Sampling Point: DP30

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Could not dig due to presence of rocks in soil.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

DP30 on bank of stream channel. No hydrologic indicators present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP31/PP31

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): salt panne Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6300598.32462 Long: 1794270.65379 Datum: NAD83

Soil Map Unit Name: Huerhuero loam NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:

ACOE/CCC jurisdictional. Please see hydrology notes.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	100	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	100%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 0% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species 100	x 4 =	400
UPL species	x 5 =	
Column Totals: 100 (A)		400 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

No hydrophytic vegetation present.

SOIL

Sampling Point: DP31

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5 YR 3/1							Loamy sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

At 12 inches, clay layer with mottling. In upper 12 inches, no mottles but presence of depleted matrix. Hydric soils present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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)
- X 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- X 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): ___

Water Table Present? Yes ___ No ___ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ___ Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

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

Remarks:

Hydrologic indicators present. 2005 Aerial Imagery and rainfall data.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP32/PP32

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): salt panne Local relief (concave, convex, none): concave Slope (%): 0%

Subregion (LRR): C Lat: 6300580.59129 Long: 1794276.81948 Datum: NAD83

Soil Map Unit Name: Huerhuero loam NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:

ACOE/CCC jurisdictional. Please see hydrology notes.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	50	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	50%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 50% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species 50	x 4 =	200
UPL species	x 5 =	
Column Totals: 50 (A)		200 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

No hydrophytic vegetation present.

SOIL

Sampling Point: DP32

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	7.5YR 3/1							Loamy sand
6-12	2.5Y 2.5/1		10R 3/4	75	C	M		Silty clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- X Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X **No** ___

Remarks:

For 0-6 inches, same as DP31 with sand chunks. For 6-12 inches, mottling throughout. Hydric soils present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- X Surface Soil Cracks (B6)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- X Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): ___

Water Table Present? Yes ___ No ___ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ___ Depth (inches): ___

Wetland Hydrology Present? Yes X **No** ___

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

Remarks:

DP32 within channel. Hydrologic indicators present. 2005 Aerial Imagery and rainfall data.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP33/PP33

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): salt panne Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6300561.32461 Long: 1794277.99182 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	30	No	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	30%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 70% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species 30	x 4 =	120
UPL species	x 5 =	
Column Totals: 30 (A)		120 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

No hydrophytic vegetation present.

SOIL

Sampling Point: DP33

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	2.5YR 3/2							Loamy sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Loamy sand. No redox concentrations evident. Soil not hydric.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

Hydrology indicators not present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP34/PP34

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): salt panne Local relief (concave, convex, none): concave Slope (%): 0%

Subregion (LRR): C Lat: 6300529.60454 Long: 1794299.32206 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:

ACOE/CCC jurisdictional. See hydrology notes.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	50	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	50%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 50% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species 50	x 4 =	200
UPL species	x 5 =	
Column Totals: 50 (A)		200 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

No hydrophytic vegetation present.

SOIL

Sampling Point: DP34

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	7.5YR 3/1							Loamy sand
6-12	2.5Y 2.5/1		10R 3/4	75	C	M		Silty clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- X Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X **No** ___

Remarks:

For 0-6 inches, same as DP31 with sand chunks. For 6-12 inches, mottling throughout. Hydric soils present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- X Surface Soil Cracks (B6)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- X 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): ___

Water Table Present? Yes ___ No ___ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ___ Depth (inches): ___

Wetland Hydrology Present? Yes X **No** ___

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

Remarks:

DP34 within channel. Hydrology present. 2005 Aerial Imagery and rainfall data.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP35/PP35

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): salt panne Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6300497.00697 Long: 1794316.72177 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	30	No	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	30%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 70% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species 30	x 4 =	120
UPL species	x 5 =	
Column Totals: 30 (A)		120 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

No hydrophytic vegetation present.

SOIL

Sampling Point: DP35

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	2.5YR 3/2							Loamy sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Loamy sand. No redox concentrations evident. Soil not hydric.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

Hydrology indicators not present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP36/PP36

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): salt panne Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6300271.59172 Long: 1793895.78783 Datum: NAD83

Soil Map Unit Name: Huerhuero-Urban land complex NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

DP36 located om raised area upslope of DP35. Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	30	No	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	30%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 70% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species 30	x 4 =	120
UPL species	x 5 =	
Column Totals: 30 (A)		120 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

No hydrophytic vegetation present.

SOIL

Sampling Point: DP36

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	2.5YR 3/2							Loamy sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Loamy sand. No redox concentrations evident. Soil not hydric.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

Hydrology indicators not present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP37/PP37

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): salt panne Local relief (concave, convex, none): convex Slope (%): 0%

Subregion (LRR): C Lat: 6300267.75698 Long: 1793932.82653 Datum: NAD83

Soil Map Unit Name: Huerhuero-Urban land complex NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:

ACOE/CCC jurisdictional. See hydrology notes.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. -			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:			
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: ____ (A)

Total Number of Dominant Species Across All Strata: ____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

No vegetation present.

SOIL

Sampling Point: DP37

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-2								Salt
2-8	5Y 3/1							Sandy clay
8-12	2.5Y 2.5/1							Sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- X Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

For 8-12 inches, two 1 centimeter layers of 2.5Y 3/2 sand. Hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- X Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): ___

Water Table Present? Yes ___ No ___ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ___ Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

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

Remarks:

On high island created by drainage patterns in center of channel. Hydrology indicators present. 2005 Aerial Imagery and rainfall data.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP38/PP38

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): salt panne Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6300269.58600 Long: 1793983.96883 Datum: NAD83

Soil Map Unit Name: Huerhuero-Urban land complex NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____ No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes ____ No X	

Remarks:

DP38 on raised area upslope of DP35. Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	30	No	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	30%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 70% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species 30	x 4 =	120
UPL species	x 5 =	
Column Totals: 30 (A)		120 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

No hydrophytic vegetation present.

SOIL

Sampling Point: DP38

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	25YR 3/2							Loamy sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Loamy sand. No redox concentrations evident. Soil not hydric.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

Hydrology indicators not present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP39/PP39

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): salt panne Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6299786.85244 Long: 1793989.74519 Datum: NAD83

Soil Map Unit Name: Huerhuero-Urban land complex NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____ No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes ____ No X	

Remarks:

Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	30	No	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	30%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species 30	x 4 =	120
UPL species	x 5 =	
Column Totals: 30 (A)		120 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

No hydrophytic vegetation present.

SOIL

Sampling Point: DP39

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	25YR 3/2							Loamy sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Loamy sand. No redox concentrations evident. Soil not hydric.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

Hydrology indicators not present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP40/PP40

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): salt panne Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6299774.64289 Long: 1793950.53876 Datum: NAD83

Soil Map Unit Name: Huerhuero-Urban land complex NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____ No X	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X No ____	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

ACOE/CCC jurisdictional. Please see hydrology notes.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. -			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:			
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: ____ (A)

Total Number of Dominant Species Across All Strata: ____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

Unvegetated salt panne. No vegetation present.

SOIL

Sampling Point: DP40

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X **No** ___

Remarks:

Unable to dig due to presence of salt pan. Presumed hydric soil based on previous data.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- X Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): _____

Water Table Present? Yes ___ No ___ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ___ Depth (inches): _____

Wetland Hydrology Present? Yes X **No** ___

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

Remarks:

In center of channel. Hydrologic indicators present. 2005 Aerial Imagery and rainfall data.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP41/PP41

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): salt panne Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6299770.20498 Long: 1793893.94392 Datum: NAD83

Soil Map Unit Name: Huerhuero-Urban land complex NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Camissonia cheiranthifolia	40	Yes	UPL
2. Mesembryanthemum nodiflorum	15	Yes	FACU
3. Salsola tragus	15	No	FACU
4.			
5.			
6.			
7.			
8.			
Total Cover:	70%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 30% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species 30	x 4 =	120
UPL species 40	x 5 =	200
Column Totals: 70 (A)		320 (B)

Prevalence Index = B/A = 4.57

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

No hydrophytic vegetation present.

SOIL

Sampling Point: DP41

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	25YR 3/2							Loamy sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Loamy sand. No redox concentrations evident. Soil not hydric.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

Hydrology indicators not present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP42/PP42

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): flat upland Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6300115.58102 Long: 1794399.67270 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Camissonia cheiranthifolia	40	Yes	UPL
2. Mesembryanthemum nodiflorum	15	Yes	FACU
3. Salsola tragus	15	No	FACU
4.			
5.			
6.			
7.			
8.			
Total Cover:	70%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 30% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species 30	x 4 =	120
UPL species 40	x 5 =	200
Column Totals: 70 (A)		320 (B)

Prevalence Index = B/A = 4.57

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

Hydrophytic vegetation not dominant. DP42 located in disturbed upland.

SOIL

Sampling Point: DP42

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12								Sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No evidence of hydric soil.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

Upland. No hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP43/PP43

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): flat upland Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6300133.59308 Long: 1794431.19380 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	80	Yes	FACU
2. Cressa truxillensis	20	No	FACW
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	100%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 0% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	0	x 3 =	0
FACU species	80	x 4 =	320
UPL species	0	x 5 =	0
Column Totals:	100 (A)		360 (B)

Prevalence Index = B/A = 3.6

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

Hydrophytic vegetation not dominant. DP43 located within disturbed upland.

SOIL

Sampling Point: DP43

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5YR 3/2							Clay

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Top 1 inch is peat. (Fine platy structure.) No mottles. Soils not hydric.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

No evidence of hydrology.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP44/PP44

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): flat upland Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6300150.77496 Long: 1794466.12170 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Camissonia cheiranthifolia	40	Yes	UPL
2. Mesembryanthemum nodiflorum	15	Yes	FACU
3. Salsola tragus	15	No	FACU
4.			
5.			
6.			
7.			
8.			
Total Cover:	70%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 30% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species 30	x 4 =	120
UPL species 40	x 5 =	200
Column Totals: 70 (A)		320 (B)

Prevalence Index = B/A = 4.57

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

Hydrophytic vegetation not dominant. DP44 located in disturbed upland.

SOIL

Sampling Point: DP44

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12								Sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No evidence of hydric soil.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

Upland. No hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP45/PP45

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): flat upland Local relief (concave, convex, none): concave Slope (%): 0%

Subregion (LRR): C Lat: 6300606.13722 Long: 1794791.78106 Datum: NAD83

Soil Map Unit Name: Grangeville fine sandy loam NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Camissonia cheiranthifolia	40	Yes	UPL
2. Mesembryanthemum nodiflorum	15	Yes	FACU
3. Salsola tragus	15	No	FACU
4.			
5.			
6.			
7.			
8.			
Total Cover:	70%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 30% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species 30	x 4 =	120
UPL species 40	x 5 =	200
Column Totals: 70 (A)		320 (B)

Prevalence Index = B/A = 4.57

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

Hydrophytic vegetation not dominant.

SOIL

Sampling Point: DP45

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	7.5YR 4/2							Loamy sand
7-12	7.5YR 3/2							Silty clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No mottles present 0-12 inches. Hydric soils not present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

Hydrology indicators not present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP46/PP46

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): flat upland Local relief (concave, convex, none): concave Slope (%): 0%

Subregion (LRR): C Lat: 6300644.72393 Long: 1794776.25562 Datum: NAD83

Soil Map Unit Name: Grangeville fine sandy loam NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:

ACOE/CCC jurisdictional. See hydrology notes.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. -			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:			
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: ____ (A)

Total Number of Dominant Species Across All Strata: ____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

Unvegetated. No hydrophytic vegetation present.

SOIL

Sampling Point: DP46

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	7.5YR 2.5/3							Loamy sand
5-12	Black							Muck

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- X Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

Hydric soils present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- X 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- X 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): _____

Water Table Present? Yes ___ No ___ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 5-12

Wetland Hydrology Present? Yes X No ___

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

Remarks:

DP46 located in the center of channel, currently dry. Saturated in 5-12 inches. Hydrologic indicators present. 2005 Aerial Imagery and rainfall data.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP47/PP47

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): flat upland Local relief (concave, convex, none): concave Slope (%): 0%

Subregion (LRR): C Lat: 6300677.14463 Long: 1794778.08433 Datum: NAD83

Soil Map Unit Name: Grangeville fine sandy loam NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Camissonia cheiranthifolia	40	Yes	UPL
2. Mesembryanthemum nodiflorum	15	Yes	FACU
3. Salsola tragus	15	No	FACU
4.			
5.			
6.			
7.			
8.			
Total Cover:	70%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 30% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species 30	x 4 =	120
UPL species 40	x 5 =	200
Column Totals: 70 (A)		320 (B)

Prevalence Index = B/A = 4.57

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

Hydrophytic vegetation not dominant.

SOIL

Sampling Point: DP47

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	7.5YR 4/2							Loamy sand
7-12	7.5YR 3/2							Silty clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No mottles present 0-12 inches. Hydric soils not present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

Hydrology indicators not present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP48/PP48

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): flat upland Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6299296.62841 Long: 1794664.33664 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	15	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	15%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 85% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species 15	x 4 =	60
UPL species	x 5 =	
Column Totals: 15 (A)		60 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

No hydrophytic vegetation present.

SOIL

Sampling Point: DP48

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5YR 3/2							Sandy clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No mottles present. Hydric soils not present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

No hydrology indicators.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP49/PP49

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): flat upland Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6299289.64822 Long: 1794644.21020 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:

ACOE/CCC jurisdictional. See hydrology notes.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	50	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	50%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 50% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

No hydrophytic vegetation present.

SOIL

Sampling Point: DP49

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	5Y 2.5/1							Sandy clay
3-12	7.5YR 3/1							Sandy clay

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

Hydric soils present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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)
- X 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- X 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): ___

Water Table Present? Yes ___ No ___ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ___ Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

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

Remarks:

Hydrologic indicators present. 2005 Aerial Imagery and rainfall data.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP50/PP50

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): flat upland Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6299234.93214 Long: 1794547.11843 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No ____
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	60	Yes	FACU
2. Bassia hyssopifolia	30	No	FAC
3. Atriplex prostrata	5	No	NO
4.			
5.			
6.			
7.			
8.			
Total Cover:	95%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 5% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species 30	x 3 =	90
FACU species 60	x 4 =	240
UPL species 5	x 5 =	25
Column Totals: 95 (A)		555 (B)

Prevalence Index = B/A = 5.84

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

Hydrophytic vegetation not dominant.

SOIL

Sampling Point: DP50

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	2.5YR 3/3							Sandy clay

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Wet but not saturated. Presence of diatoms and roots. Hydric soil indicators not present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

Hydrology not present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP51/PP51

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): flat upland Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6298931.18573 Long: 1794850.48135 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:

ACOE/CCC jurisdictional. See hydrology notes.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	90	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	90%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 10% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: ____ (A)

Total Number of Dominant Species Across All Strata: ____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

No hydrophytic vegetation present.

SOIL

Sampling Point: DP51

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5YR 3/1							Silty clay

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Hydric soils present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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)
- X 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- X 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? **Yes** X **No** _____

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

Remarks:

Hydrologic indicators present. 2004 Aerial Imagery and rainfall data.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP52/PP52

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): flat upland Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6298890.97020 Long: 1794814.55516 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____ No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

Non-jurisdictional. See hydrology notes.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	75	Yes	FACU
2. Bassia hyssopifolia	5	No	FAC
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	80%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 20% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species 5	x 3 =	15
FACU species 75	x 4 =	300
UPL species	x 5 =	
Column Totals: 80 (A)		315 (B)

Prevalence Index = B/A = 3.9

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

Hydrophytic vegetation not dominant.

SOIL

Sampling Point: DP52

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5YR 4/2							Silty clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No mottles present. Hydric soils not present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes X No _____

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

Remarks:

Salt crust only hydrologic indicator; caused by high-evaporation levels of soil from historic inundation only. Not current indicator.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP53/PP53

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): flat upland Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6299045.52106 Long: 1794925.37121 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:

Non-jurisdictional. See hydrology notes.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. -			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:			
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: ____ (A)

Total Number of Dominant Species Across All Strata: ____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

No vegetation present.

SOIL

Sampling Point: DP53

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	7.5YR 4/3							Silty clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ **No** X

Remarks:

Could not dig beyond 4 inches due to hard clay. No hydric soil indicators presumed beyond 4 inches.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes X **No** _____

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

Remarks:

Salt crust only hydrologic indicator; caused by high-evaporation levels of soil from historic inundation only. Not current indicator.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP54/PP54

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): flat upland Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6298931.18573 Long: 1794850.48135 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____ No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

Non-jurisdictional. See hydrology notes.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	90	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	90%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 10% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

No hydrophytic vegetation present.

SOIL

Sampling Point: DP54

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6								Salt/sandy loam
6-12	7.5YR 3/3							Silty clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Clay concretions and sand concretions throughout matrix. Hydric soils not present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes X No _____

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

Remarks:

Salt crust only hydrologic indicator; caused by high-evaporation levels of soil from historic inundation only. Not current indicator.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/1/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP55/PP55

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6298543.35967 Long: 1794553.86825 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	No X	**Is the Sampled Area within a Wetland?** Yes X No
Hydric Soil Present?	Yes X	No	
Wetland Hydrology Present?	Yes X	No	

Remarks:

ACOE/CCC jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	40	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	40%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 60% % Cover of Biotic Crust

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes No X

Remarks:

No hydrophytic vegetation present.

SOIL

Sampling Point: DP55

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6								Salt crust
6-7	2.5Y 3/1							Peat layer
7-12	7.5YR 3/2		2.5Y 4/1	40	C	M	Clay	Loamy sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

Clay chunks throughout the loamy sand; platy structures are very fine in peat layer. Hydric soils present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- X 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): _____

Water Table Present? Yes ___ No ___ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 7-12

Wetland Hydrology Present? Yes X No ___

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

Remarks:

Hydrologic indicators present. 2005 Aerial Imagery and rainfall data.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/7/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP56/PP56

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): salt panne Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6298518.65044 Long: 1794539.51731 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification: PEMh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____ No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesenbryanthemum nodiflorum	60		FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	60%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 40% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: ____ (A)

Total Number of Dominant Species Across All Strata: ____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

No hydrophytic vegetation present.

SOIL

Sampling Point: DP56

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6								Calcium carbonate
6-12	5 YR 3/2							Silty clay

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No redox concentrations present. Soil salinity is high and prevents this chemical process where it would normally occur. Hydric soil indicators not present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- X Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes X No _____ Depth (inches): 6-12

Wetland Hydrology Present? Yes X No _____

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

Remarks:

Indicators of hydrology evident in saturation at 6-12 inches. Salt crust is relictual in nature. Hydrologic indicators present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/7/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP57/PP57

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): flat salt marsh Local relief (concave, convex, none): concave Slope (%): 0%

Subregion (LRR): C Lat: 6298260.40336 Long: 1794346.49891 Datum: NAD83

Soil Map Unit Name: Huerhuero-Urban land complex NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X No ____	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

ACOE/CCC jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Sarcocornia pacifica	70	Yes	OBL
2. Batis maritima	20	No	OBL
3. Frankenia salina	10	No	FACW
4.			
5.			
6.			
7.			
8.			
Total Cover:	100%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 0% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	90	x 1 =	90
FACW species	10	x 2 =	20
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	100 (A)		110 (B)

Prevalence Index = B/A = 1.1

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

DP57 located within Coastal Salt Marsh. Hydrophytic vegetation dominant.

SOIL

Sampling Point: DP57

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5YR 4/1							Silty clay

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

High organic matter content noted throughout 0-12 inches. No mottles. Hydric soil present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- X Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- X Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No ___ Depth (inches): <1

Water Table Present? Yes ___ No ___ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 0-12

Wetland Hydrology Present? Yes X No ___

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

Remarks:

Hydrology present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/7/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP58/PP58

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): flat salt marsh Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6298259.00724 Long: 1794337.16382 Datum: NAD83

Soil Map Unit Name: Huerhuero-Urban land complex NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X No ____	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

ACOE/CCC jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Batis maritima	20	Yes	OBL
2. Sarcocornia pacifica	5	No	OBL
3. Frankenia salina	5	No	FACW
4.			
5.			
6.			
7.			
8.			
Total Cover:	30%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 70% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	25	x 1 =	25
FACW species	5	x 2 =	10
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	30 (A)		35 (B)

Prevalence Index = B/A = 1.17

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

Hydrophytic vegetation present.

SOIL

Sampling Point: DP58

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	2.5Y 3/1		2.5YR 3/3	20	C	M		Silty clay

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

Sand deposits throughout. Mottles present 0-12 inches. Hydric soil present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X 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)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): _____

Water Table Present? Yes ___ No ___ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 8-12

Wetland Hydrology Present? Yes X No ___

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

Remarks:

Soil is wet but not saturated (0-12 inches). Hydrology present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/7/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP59/PP59

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): unvegetated salt pan Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6298264.24085 Long: 1794310.30353 Datum: NAD83

Soil Map Unit Name: Huerhuero-Urban land complex NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:

CCC jurisdictional only.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. -			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:			
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: ____ (A)

Total Number of Dominant Species Across All Strata: ____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

No vegetation present.

SOIL

Sampling Point: DP59

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-11	7.5YR 3/2							Silty loam
12-15	7.5YR 4/1		2.5YR 3/3	5	C	M		Silty clay

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No mottling (0-11 inches). No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- X 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)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes X No _____

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

Remarks:

Hydrology present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/7/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP60/PP60

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): unvegetated salt pan Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6298295.76398 Long: 1794286.90536 Datum: NAD83

Soil Map Unit Name: Huerhuero-Urban land complex NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____ No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

CCC jurisdictional only.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. -			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:			
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: ____ (A)

Total Number of Dominant Species Across All Strata: ____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

No vegetation present.

SOIL

Sampling Point: DP60

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-11	7.5YR 3/2							Silty loam
12-15	7.5YR 3/1							Sandy clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** X

Remarks:

No mottles present (0-15 inches). Hydric soil indicators not present 0-11 inches.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- X 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)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? **Yes** X **No** _____

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

Remarks:

Hydrology present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/7/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP61/PP61

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): flat salt marsh Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6298331.90366 Long: 1794263.18558 Datum: NAD83

Soil Map Unit Name: Huerhuero-Urban land complex NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X No ____	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

ACOE/CCC jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Frankenia salina	10	Yes	FACW
2. Limonium californicum	5	No	OBL
3. Arthrocnemum subterminale	5	No	OBL
4.			
5.			
6.			
7.			
8.			
Total Cover:	20%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 80% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	10	x 2 =	20
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	20 (A)		30 (B)

Prevalence Index = B/A = 1.5

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

Hydrophytic vegetation present.

SOIL

Sampling Point: DP61

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	7.5YR 3/2							Silty loam
5-12	7.5YR 3/1							Sandy clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

No mottling present (5-12 inches). Sand deposits in 5-12 inches. Hydric soil present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- X Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? **Yes** X **No** _____

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

Remarks:

Within high tide line, evident by water marks. Hydrology present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/7/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP62/PP62

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): salt panne Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6298319.13020 Long: 1794254.36408 Datum: NAD83

Soil Map Unit Name: Huerhuero-Urban land complex NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

CCC jurisdictional only.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Frankenia salina	5	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	5%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 95% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species 5	x 2 =	10
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: 5 (A)		10 (B)

Prevalence Index = B/A = 2.0

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

Hydrophytic vegetation is present.

SOIL

Sampling Point: DP62

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	7.5YR 3/3							Sandy clay

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ **No** X

Remarks:

Could not dig past 6 inches due to soil compaction. Hydric soil not present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- X 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 Living Roots (C3)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Presence of Reduced Iron (C4)
- ___ Surface Soil Cracks (B6)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Other (Explain in Remarks)
- ___ Water-Stained Leaves (B9)

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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes X **No** _____

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

Remarks:

Thick salt crust. Hydrology present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/7/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP63/PP63

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): flat salt marsh Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6298419.20001 Long: 1794100.09479 Datum: NAD83

Soil Map Unit Name: Huerhuero-Urban land complex NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X No ____	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

ACOE/CCC jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Sarcocornia pacifica	10	Yes	OBL
2. Frankenia salina	10	No	FACW
3. Batis maritima	5	No	OBL
4.			
5.			
6.			
7.			
8.			
Total Cover:	25%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 75% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	15	x 1 =	15
FACW species	10	x 2 =	20
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	25 (A)		35 (B)

Prevalence Index = B/A = 1.4

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

Hydrophytic vegetation present.

SOIL

Sampling Point: DP63

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	7.5YR 3/1							Clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

Could not dig past 4 inches due to heavy clay layers. Hydric soil present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- X Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): _____

Water Table Present? Yes ___ No ___ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 0-4

Wetland Hydrology Present? Yes X No ___

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

Remarks:

Hydrology present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/7/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP64/PP64

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): flat upland Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6298368.70892 Long: 1794097.78247 Datum: NAD83

Soil Map Unit Name: Huerhuero-Urban land complex NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	30	Yes	FACU
2. Sarcocornia pacifica	5	No	OBL
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	35%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 65% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	5	x 1 =	5
FACW species		x 2 =	
FAC species		x 3 =	
FACU species	30	x 4 =	120
UPL species		x 5 =	
Column Totals:	35 (A)		125 (B)

Prevalence Index = B/A = 3.57

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

Hydrophytic vegetation not dominant.

SOIL

Sampling Point: DP64

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	7.5YR 3/3							Sandy loam
8-12	7.5YR 4/1							Silty clay

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** X

Remarks:

Hydric soil not present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? **Yes** _____ **No** X

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

Remarks:

Hydrologic indicators not present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/7/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP65/PP65

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): flat salt marsh Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6298199.82981 Long: 1794457.87543 Datum: NAD83

Soil Map Unit Name: Huerhuero-Urban land complex NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X No ____	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

ACOE/CCC jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Batis maritima	50	Yes	OBL
2. Sarcocornia pacifica	30	Yes	OBL
3. Frankenia salina	20	No	FACW
4.			
5.			
6.			
7.			
8.			
Total Cover:	100%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 0% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	80	x 1 =	80
FACW species	20	x 2 =	40
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	100 (A)		120 (B)

Prevalence Index = B/A = 1.2

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

DP65 located in coastal salt marsh. Hydrophytic vegetation dominant.

SOIL

Sampling Point: DP65

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	2.5Y 3/2							Silty clay

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- X 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X **No** ___

Remarks:

High organic content throughout. Black streaking throughout matrix. No mottles. Hydric soil present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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)
- X Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): ___

Water Table Present? Yes ___ No ___ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ___ Depth (inches): ___

Wetland Hydrology Present? Yes X **No** ___

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

Remarks:

2 inches of standing water. Hydrology present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/7/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP66/PP66

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): bank slope Local relief (concave, convex, none): convex Slope (%): 45%

Subregion (LRR): C Lat: 6298205.48471 Long: 1794468.33033 Datum: NAD83

Soil Map Unit Name: Huerhuero-Urban land complex NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Atriplex polycarpa	60	Yes	FACU
2. Arthrocnermum subterminale	5	No	OBL
3. Frankenia salina	5	No	FACW
4. Sarcocornia pacifica	5	No	OBL
5.			
6.			
7.			
8.			
Total Cover:	75%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 25% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	5	x 2 =	10
FAC species		x 3 =	
FACU species	60	x 4 =	240
UPL species		x 5 =	
Column Totals:	75 (A)		260 (B)

Prevalence Index = B/A = 3.46

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

Hydrophytic vegetation not dominant.

SOIL

Sampling Point: DP66

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5YR 3/3							Sandy clay

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No hydric soil present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

DP66 located on bank of berm. Slope is about 45%. No hydrology present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/7/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP67/PP67

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): flat upland Local relief (concave, convex, none): concave Slope (%): 0%

Subregion (LRR): C Lat: 6298126.26031 Long: 1794486.43696 Datum: NAD83

Soil Map Unit Name: Huerhuero-Urban land complex NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Atriplex polycarpa	15	Yes	FACU
2. Glebionis coronarium	10	No	UPL
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	25%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 75% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species 15	x 4 =	60
UPL species 10	x 5 =	50
Column Totals: 25 (A)		110 (B)

Prevalence Index = B/A = 4.4

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

Hydrophytic vegetation not present.

SOIL

Sampling Point: DP67

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	2.5YR 3/3							Sandy loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No hydric soil present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

DP67 at top of the fill slope. No hydrology present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/7/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP68/PP68

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): bank slope Local relief (concave, convex, none): concave Slope (%): 0%

Subregion (LRR): C Lat: 6300754.84457 Long: 1794572.91687 Datum: NAD83

Soil Map Unit Name: Huerhuero loam NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes ____ No X	

Remarks:

DP68 edge of Sarcocornia pacifica on east side of creek; CCC/CDFG jurisdictional only to east side of bank 7.5 from center of channel.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Sarcocornia pacifica	50	Yes	OBL
2. Salsola tragus	20	No	FACU
3. Mesembryanthemum nodiflorum	10	No	FACU
4. Glebionis coronarium	10	No	UPL
5.			
6.			
7.			
8.			
Total Cover:	90%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 10% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	50	x 1 =	50
FACW species		x 2 =	
FAC species		x 3 =	
FACU species	30	x 4 =	120
UPL species	10	x 5 =	50
Column Totals:	90 (A)		220 (B)

Prevalence Index = B/A = 2.44

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

Hydrophytic vegetation present.

SOIL

Sampling Point: DP68

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	2.5YR 3/2							Sandy loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No mottles. Hydric soil not present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

Hydrology not present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/7/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP69/PP69

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): bank slope Local relief (concave, convex, none): convex Slope (%): 0%

Subregion (LRR): C Lat: 6300757.44453 Long: 1794575.81922 Datum: NAD83

Soil Map Unit Name: Huerhuero loam NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes ____ No X	

Remarks:

CCC/CDFG jurisdictional only.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Sarcocornia pacifica	75	Yes	OBL
2. Frankenia salina	10	No	FACW
3. Mesembryanthemum nodiflorum	10	No	FACU
4. Salsola tragus	5	No	FACU
5. Glebionis coronarium	<1	No	UPL
6.			
7.			
8.			
Total Cover:	100%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 0% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	75	x 1 =	75
FACW species	10	x 2 =	20
FAC species	15	x 3 =	45
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	100 (A)		140 (B)

Prevalence Index = B/A = 1.4

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

Hydrophytic vegetation present.

SOIL

Sampling Point: DP69

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5YR 3/2							Sandy clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

0-12 inches wet but not saturated. No mottles. Hydric soil indicators not present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

DP located on bank above creek. Hydrologic indicators not present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/7/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP70/PP70

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): bank slope Local relief (concave, convex, none): convex Slope (%): 0%

Subregion (LRR): C Lat: 6300761.47484 Long: 1794566.94086 Datum: NAD83

Soil Map Unit Name: Huerhuero loam NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

CCC/CDFG jurisdiction only.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Sarcocornia pacifica	65	Yes	OBL
2. Frankenia salina	25	Yes	FACW
3. Schoenoplectus californicus	10	No	OBL
4.			
5.			
6.			
7.			
8.			
Total Cover:	100%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 0% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	75	x 1 =	75
FACW species	25	x 2 =	50
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	100 (A)		125 (B)

Prevalence Index = B/A = 1.25

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

Hydrophytic vegetation present.

SOIL

Sampling Point: DP70

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5YR 3/2							Sandy clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No mottling. Hydric soil indicators not present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes X No _____ Depth (inches): 0-12

Wetland Hydrology Present? Yes X No _____

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

Remarks:

DP70 on bank of creek. Hydrology present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/7/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP71/PP71

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): creek bank Local relief (concave, convex, none): convex Slope (%): 0%

Subregion (LRR): C Lat: 6300762.15502 Long: 1794572.88259 Datum: NAD83

Soil Map Unit Name: Huerhuero loam NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X No ____	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

ACOE jurisdiction to width of lower incised channel bottom (4 feet). CCC/CDFG jurisdictional from center of bottom channel (to 7.5 feet).

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Sarcocornia pacifica	50	Yes	OBL
2. Frankenia salina	30	Yes	FACW
3. Schoenoplectus californicus	20	Yes	OBL
4.			
5.			
6.			
7.			
8.			
Total Cover:	100%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 0% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	70	x 1 =	70
FACW species	30	x 2 =	60
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	100 (A)		130 (B)

Prevalence Index = B/A = 1.3

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

Hydrophytic vegetation present.

SOIL

Sampling Point: DP71

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X **No** _____

Remarks:

Assumed hydric.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- X 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)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- X Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No _____ Depth (inches): 10 "

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes X **No** _____

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

Remarks:

DP71 located at edge of stream channel. Hydrology present. Standing water 10 inches. Width of channel is 4 feet.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/7/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP72/PP72

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): creek bank Local relief (concave, convex, none): convex Slope (%): 0%

Subregion (LRR): C Lat: 6300763.57737 Long: 1794566.39264 Datum: NAD83

Soil Map Unit Name: Huerhuero loam NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

CCC/CDFG jurisdiction only.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Sarcocornia pacifica	50	Yes	OBL
2. Frankenia salina	50	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	100		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	50	x 1 =	50
FACW species	50	x 2 =	100
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	100 (A)		150 (B)

Prevalence Index = B/A = 1.5

Hydrophytic Vegetation Indicators:

- ___ Dominance Test is >50%
- X Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

Hydrophytic vegetation present.

SOIL

Sampling Point: DP72

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5YR 3/2							Sandy clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No mottles. Hydric soil not present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes X No _____

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

Remarks:

Hydrology present. DP72 on bank of channel.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/7/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP73/PP73

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): bank slope Local relief (concave, convex, none): convex Slope (%): 0%

Subregion (LRR): C Lat: 6300767.14402 Long: 1794563.01737 Datum: NAD83

Soil Map Unit Name: Huerhuero loam NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes ____ No X	

Remarks:

CCC/CDFG jurisdiction to 7.5 feet from center of channel. DP73 constitutes this limit. Non-ACOE jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Distichlis spicata	40	Yes	FACW
2. Frankenia salina	30	Yes	FACW
3. Sarcocornia pacifica	5	No	OBL
4. Glebionis coronarium	5	No	UPL
5. Bromus diandrus	5	No	NI
6. Cressa truxillensis	5	No	FACW
7.			
8.			
Total Cover:	90%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 10% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	5	x 1 =	5
FACW species	75	x 2 =	150
FAC species		x 3 =	
FACU species		x 4 =	
UPL species	10	x 5 =	50
Column Totals:	90 (A)		205 (B)

Prevalence Index = B/A = 2.27

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

Hydrophytic vegetation dominant.

SOIL

Sampling Point: DP73

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5YR 3/2							Sandy loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No mottles. Hydric soil not present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

Hydrology not present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/7/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP74/PP74

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): flat upland Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6299776.34700 Long: 1794618.50054 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	70	Yes	FACU
2. Arthrocnemum subterminale	20	Yes	OBL
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	90%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 10% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species		x 2 =	
FAC species		x 3 =	
FACU species	70	x 4 =	280
UPL species		x 5 =	
Column Totals:	90 (A)		300 (B)

Prevalence Index = B/A = 3.33

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

Hydrophytic vegetation not present.

SOIL

Sampling Point: DP74

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	7.5YR 3/2							Loamy sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Could not dig past 8 inches. Hydric soil not present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

No hydrologic indicators present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/7/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP75/PP75

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): flat upland Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6299282.64127 Long: 1794717.05502 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

Non-jurisdictional.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	60	Yes	FACU
2. Baccharis salicifolia	15	No	FACW
3. Atriplex prostrata	5	No	FACU
4.			
5.			
6.			
7.			
8.			
Total Cover:	80%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 20% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species	15	x 2 =	30
FAC species		x 3 =	
FACU species	65	x 4 =	260
UPL species		x 5 =	
Column Totals:	80 (A)		290 (B)

Prevalence Index = B/A = 3.63

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

Hydrophytic vegetation not present.

SOIL

Sampling Point: DP75

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	7.5YR 3/2							Loamy sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Hydric soil not present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

No hydrologic indicators present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pond 20 City/County: Imperial Beach/San Diego Sampling Date: 7/7/08

Applicant/Owner: Port of San Diego State: CA Sampling Point: DP76/PP76

Investigator(s): Rebecca Erickson/Brad Kelly Section, Township, Range: S20; T18S; R2W

Landform (hillslope, terrace, etc.): flat upland Local relief (concave, convex, none): none Slope (%): 0%

Subregion (LRR): C Lat: 6299147.73317 Long: 1794854.99997 Datum: NAD83

Soil Map Unit Name: Drainage/perennial NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Mesembryanthemum nodiflorum	80	Yes	FACU
2. Camissonia cheiranthifolia	20	No	UPL
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	100%		
Woody Vine Stratum			
1. -			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 0% % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species 80	x 4 =	320
UPL species 20	x 5 =	100
Column Totals: 100 (A)		420 (B)

Prevalence Index = B/A = 4.2

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

Hydrophytic vegetation not present.

SOIL

Sampling Point: DP76

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	7.5YR 3/2							Loamy sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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)
- ___ Sandy Gleyed Matrix (S4)
- ___ 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)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Hydric soil not present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

Hydrology not present.

APPENDIX 2.
PHOTO POINTS

Photo Point 1. Data point 1 is located mid-slope of an unvegetated berm, within the southwestern portion of the site. Photo is directed southwest and was taken June 30, 2008.

Photo Point 2. Data point 2 is located mid-slope of an unvegetated berm, above salt line, immediately southwest of DP 1, within the southwestern portion of the site. Photo is directed north and was taken June 30, 2008.

Photo Point 3. Data point 3 is located at the toe of the southern berm, which runs parallel to Palm Avenue. Photo is directed east and was taken June 20, 2008.

Photo Point 4. Data point 4 is located mid-slope of the southern berm, immediately south of DP 3. Photo is directed east and was taken June 30, 2008.

Photo Point 5. Data point 5 is located at top of slope of the southern berm (2.0' south of Data Point 4). Photo is directed east and was taken June 30, 2008.

Photo Point 6. Data point 6 is located east of DP 5 at the toe of the southern berm, which runs parallel to Palm Avenue. Photo is directed east and was taken June 20, 2008.

Photo Point 7. Data point 7 is located mid-slope of the southern berm, immediately south of DP 6. Photo is directed east and was taken June 30, 2008.

Photo Point 8. Data point 8 is located mid-slope of the southern berm, immediately south of DP 7. Photo is directed east and was taken June 30, 2008.

Photo Point 9. Data point 9 is located on salt panne within the southern portion of study area, north of DP 8. Photo is directed east and was taken June 30, 2008.

Photo Point 10. Data point 10 is located along an old berm in southern portion of site, northeast of DP 9. Photo is directed south and was taken June 30, 2008.

Photo Point 11. Data point 11 is located along an old berm in southern portion of site, north of DP 10. Photo is directed north and was taken June 30, 2008.

Photo Point 12. Data point 12 is located just east of the edge of the old berm referenced in DP 10 and 11, above. Photo is directed east and was taken June 30, 2008.

Photo Point 13. Data point 13 is located in the south-central portion of study area, northwest of DP 12, at the slightly elevated edge of a historically flooded area. Photo is directed northwest and was taken June 30, 2008.

Photo Point 14. Data point 14 is located in the south-central portion of study area, north of DP 13, within a historically flooded area. Photo is directed west and was taken June 30, 2008.

Photo Point 15. Data point 15 is located in upland area south of DP 13 and 14. Photo is directed west and was taken June 30, 2008.

Photo Point 16. Data point 16 is located in the southwest portion of site within a historically flooded area northwest of DP 15. Photo is directed southwest and was taken June 30, 2008.

Photo Point 17. Data point 17 is located in the west-central portion of study area, north of DP 16. Photo is directed southeast and was taken June 30, 2008.

Photo Point 18. Data point 18 is located in an upland portion of the west-central portion of study area, northeast of DP 17. Photo is directed west and was taken June 30, 2008.

Photo Point 19. Data point 19 is located in the northwestern portion of study area, north of DP 18. Photo is directed northeast and was taken June 30, 2008.

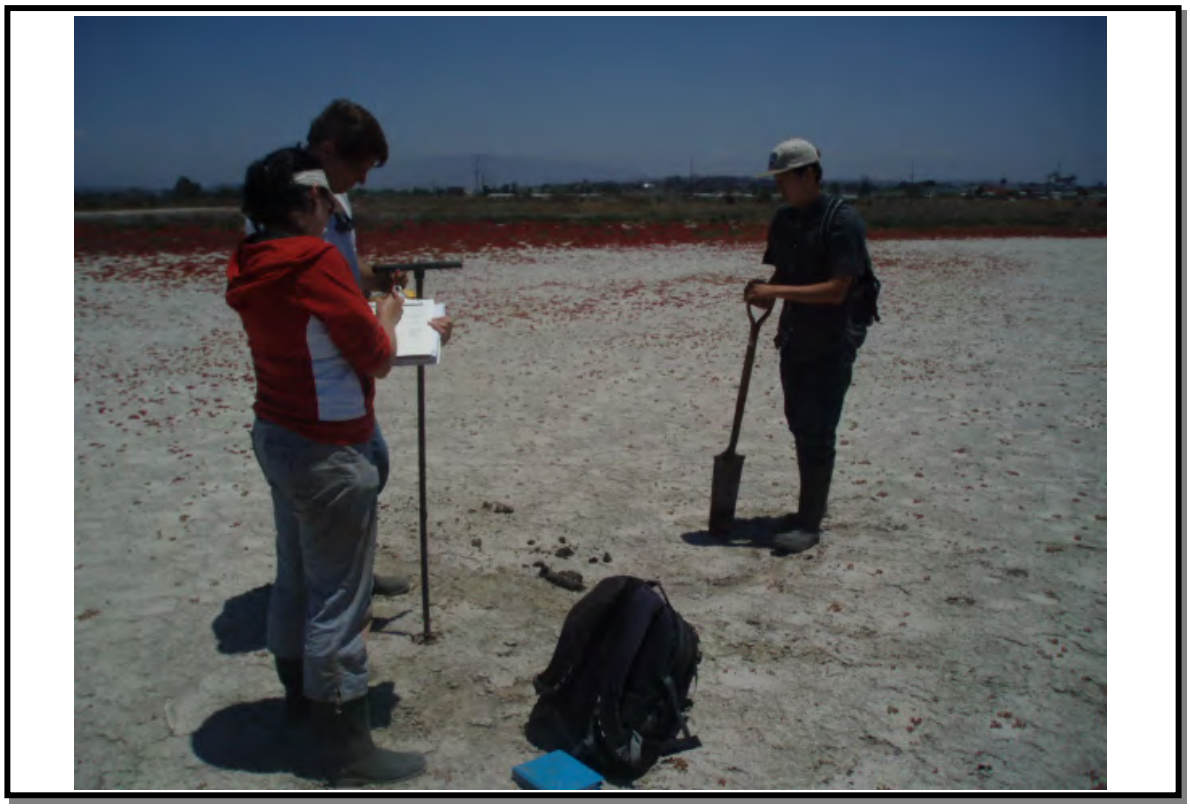

Photo Point 20. Data point 20 is located in the northwestern portion of study area, north of DP 19, in an area known to be flooded during large rain events. Photo is directed northeast and was taken June 30, 2008.

Photo Point 21. Data point 21 is located on the west bank of a channel which runs perpendicular to Palm Avenue on the southwest side of the study area, known to receive runoff from the surrounding area. Photo is directed south and was taken July 1, 2008.

Photo Point 22. Data point 22 is located in center of the channel, east of DP 21. Photo is directed southeast and was taken July 1, 2008.

Photo Point 23. Data point 23 is located on west bank of the channel in DP 22. Photo is directed northwest and was taken July 1, 2008.

Photo Point 24. Data point 24 is located on the west-central bank of the western berm, northwest of DP 23. Photo is directed southwest, downslope and was taken July 1, 2008.

Photo Point 25. Data point 25 is located at the toe of slope, immediately west of DP 24. Photo is directed south and was taken July 1, 2008.

Photo Point 26. Data point 26 is located on the lower bank on east side of western stream channel, west of DP 25. Photo is directed south and was taken July 1, 2008.

Photo Point 27. Data point 27 is located on the lower bank on west side of western stream channel, west of DP 26. Photo is directed south and was taken July 1, 2008.

Photo Point 28. Data point 28 is located on the western bank of eastern stream channel. Photo is directed north and was taken July 1, 2008.

Photo Point 29. Data point 29 is located within center of eastern stream channel. Photo is directed north and was taken July 1, 2008.

Photo Point 30. Data point 30 is located on the eastern bank of eastern stream channel. Photo is directed north and was taken July 1, 2008.

Photo Point 31. Data point 31 is located in the southeastern portion of study area. Photo is directed north and was taken July 1, 2008.

Photo Point 32. Data point 32 is located in a slight depression created by historical drainage patterns in the southeastern portion of study area, immediately northwest of DP 31. Photo is directed north and was taken July 1, 2008.

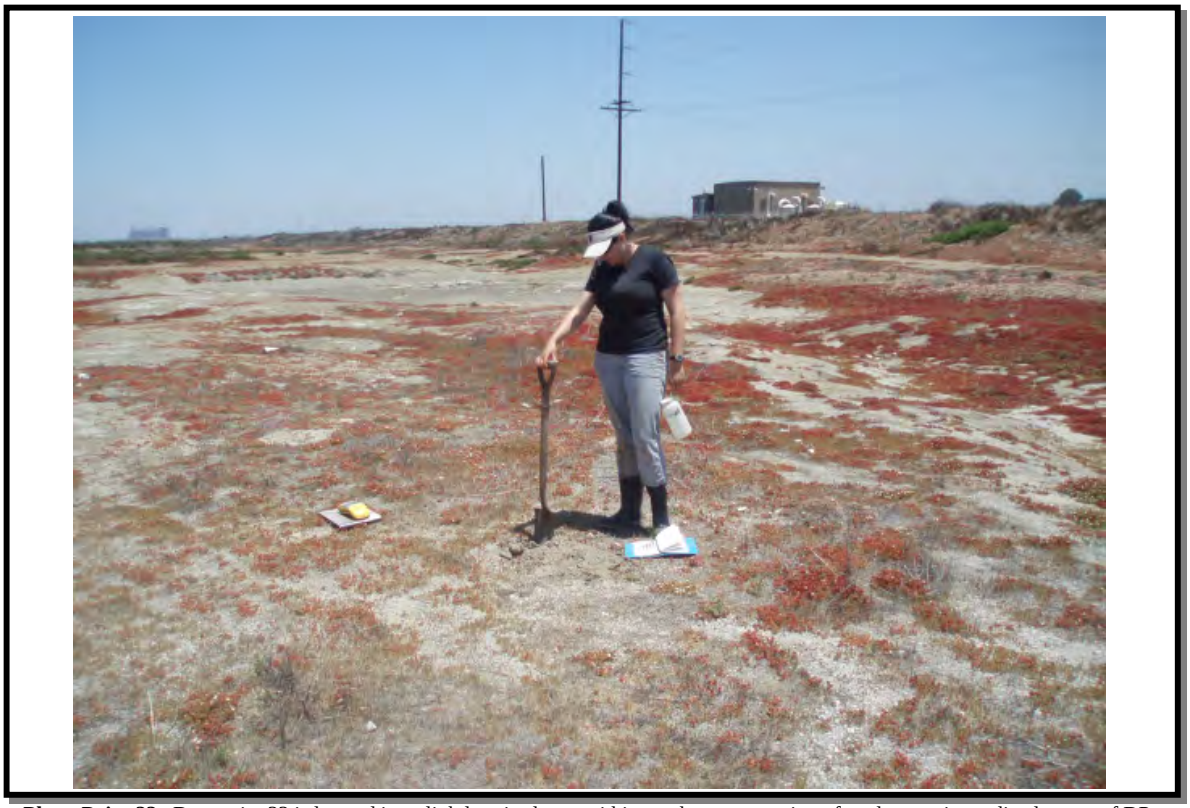

Photo Point 33. Data point 33 is located in a slightly raised area within southeastern portion of study area, immediately west of DP 32. Photo is directed northeast and was taken July 1, 2008.

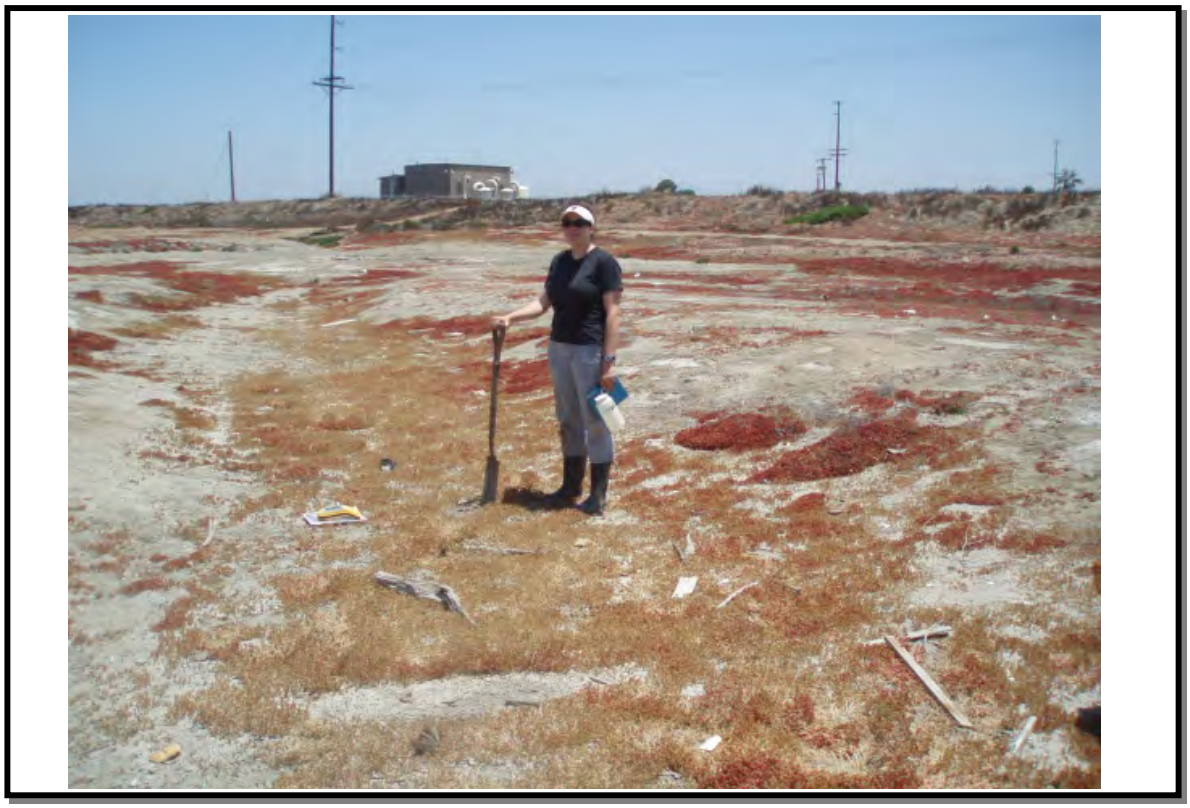

Photo Point 34. Data point 34 is located in a slight depression created by historical drainage patterns in southeastern portion of study area, immediately northwest of DP 33. Photo is directed northeast and was taken July 1, 2008.

Photo Point 35. Data point 35 is located in a slightly raised area within southeastern portion of study area, immediately northwest of DP 34. Photo is directed northeast and was taken July 1, 2008.

Photo Point 36. Data point 36 is located at the bottom of the southeastern berm. Photo is directed east and was taken July 1, 2008.

Photo Point 37. Data point 37 is located on island within center of channel, comprised of drift deposits and salt crusts, created by historical drainage patterns. DP 37 is located immediately north of DP 36. Photo is directed east and was taken July 1, 2008.

Photo Point 38. Data point 38 is located on the northern outside edge of the historic channel in DP 37. Photo is directed east and was taken July 1, 2008.

Photo Point 39. Data point 39 is located directly west of DP 38, along the same outside edge, within southeastern portion of study area. Photo is directed east and was taken July 1, 2008.

Photo Point 40. Data point 40 is located within salt panne, directly west of DP 37. This area exhibits historic drainage patterns parallel to the southern berm surrounding the site. Photo is directed east and was taken July 1, 2008.

Photo Point 41. Data point 41 is located directly west of DP 36, in upland habitat. Photo is directed east and was taken July 1, 2008.

Photo Point 42. Data point 42 is located within the east-central portion of the study area in upland habitat. Photo is directed southeast and was taken July 1, 2008.

Photo Point 43. Data point 43 is located within the east-central portion of the study area in upland habitat, north of DP 42. Photo is directed east and was taken July 1, 2008.

Photo Point 44. Data point 44 is located within the east-central portion of the study area in upland habitat, north of DP 43. Photo is directed east and was taken July 1, 2008.

Photo Point 45. Data point 45 is located on a slightly elevated area, which defines the western edge of a historic drainage in the northeastern corner of the study area. Photo is directed north and was taken July 1, 2008.

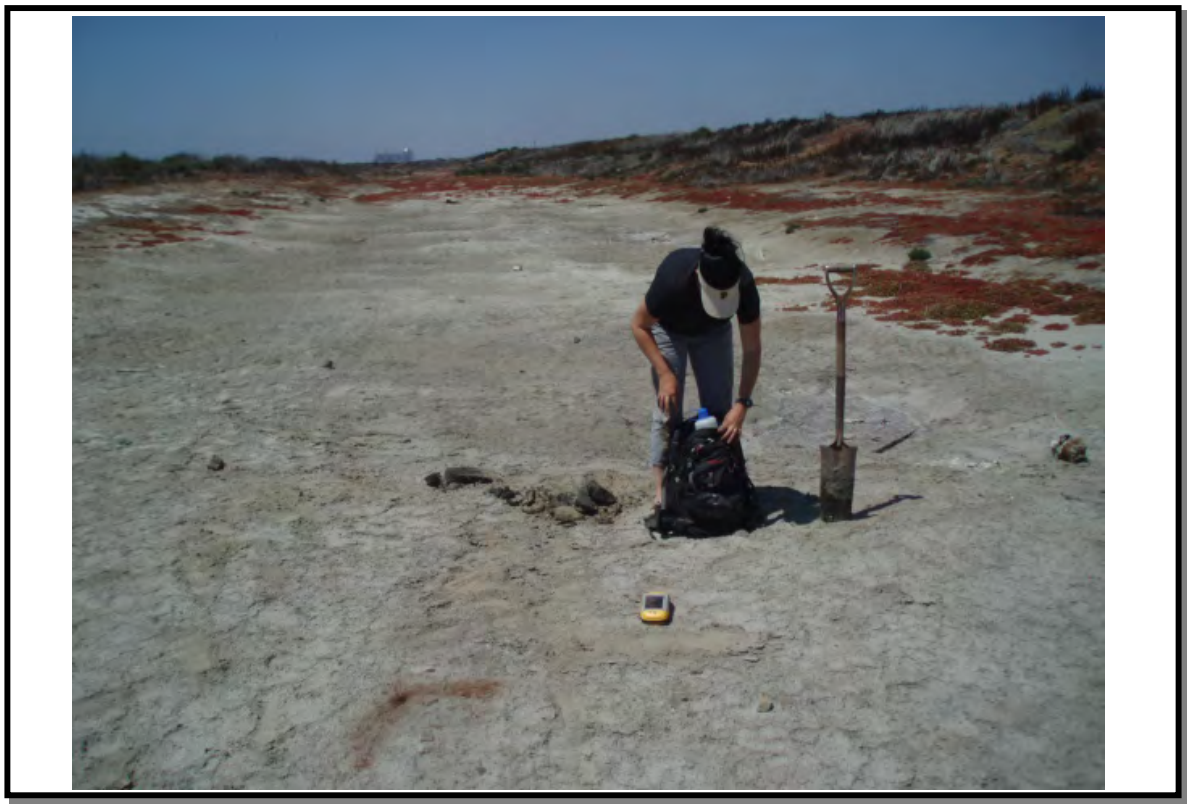

Photo Point 46. Data point 46 is located within a historically flooded channel in northeastern portion of site, east of DP 45. Photo is directed north and was taken July 1, 2008.

Photo Point 47. Data point 47 is located at the eastern limit of the historically flooded channel in DP 46, above. Photo is directed north and was taken July 1, 2008.

Photo Point 48. Data point 48 is located within an upland area in the north-central portion of the site. Photo is directed east and was taken July 1, 2008.

Photo Point 49. Data point 49 is located in the north-central portion of study area in an area of sediment deposits caused by historical hydrologic processes, immediately south of DP 48. Photo is directed east and was taken July 1, 2008.

Photo Point 50. Data point 50 is located within upland habitat in the north-central portion of study area, south of DP 49. Photo is directed east and was taken July 1, 2008.

Photo Point 51. Data point 51 is located in an area subject to historical flooding, in the northwestern portion of the study area. Photo is directed southeast and was taken July 1, 2008.

Photo Point 52. Data point 52 is located within upland area just southwest of DP 51. Photo is directed southeast and was taken July 1, 2008.

Photo Point 53. Data point 53 is located on the northwestern outside edge of the area in DP 51. Photo is directed southeast and was taken July 1, 2008.

Photo Point 54. Data point 54 is located on the outside edge of an area subject to historic flooding, within the northwestern portion of the study area. Photo is directed south and was taken July 1, 2008.

Photo Point 55. Data point 55 is located within an area subject to historic flooding, within the northwestern portion of the study area. Photo is directed south and was taken July 1, 2008.

Photo Point 56. Data point 56 is located along slightly elevated area that defines the western limit of the historically flooded area of DP 55. Photo is directed south and was taken July 1, 2008.

Photo Point 57. Data point 57 is located west of berm in the western portion of the study area. DP 57 is located within an area subject to tidal influence. Photo is directed east and was taken July 7, 2008.

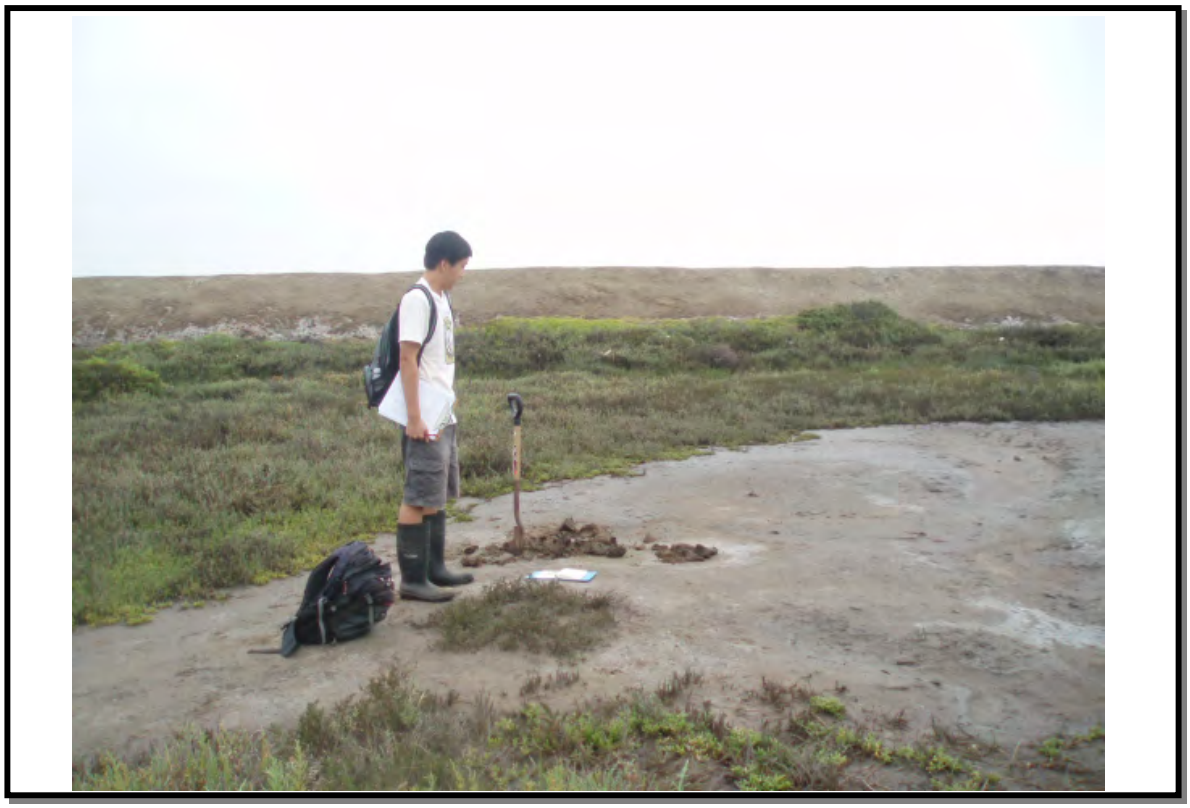

Photo Point 58. Data point 58 is located west of berm in the western portion of the study area. DP 58 is located within an area subject to tidal influence. Photo is directed east and was taken July 7, 2008.

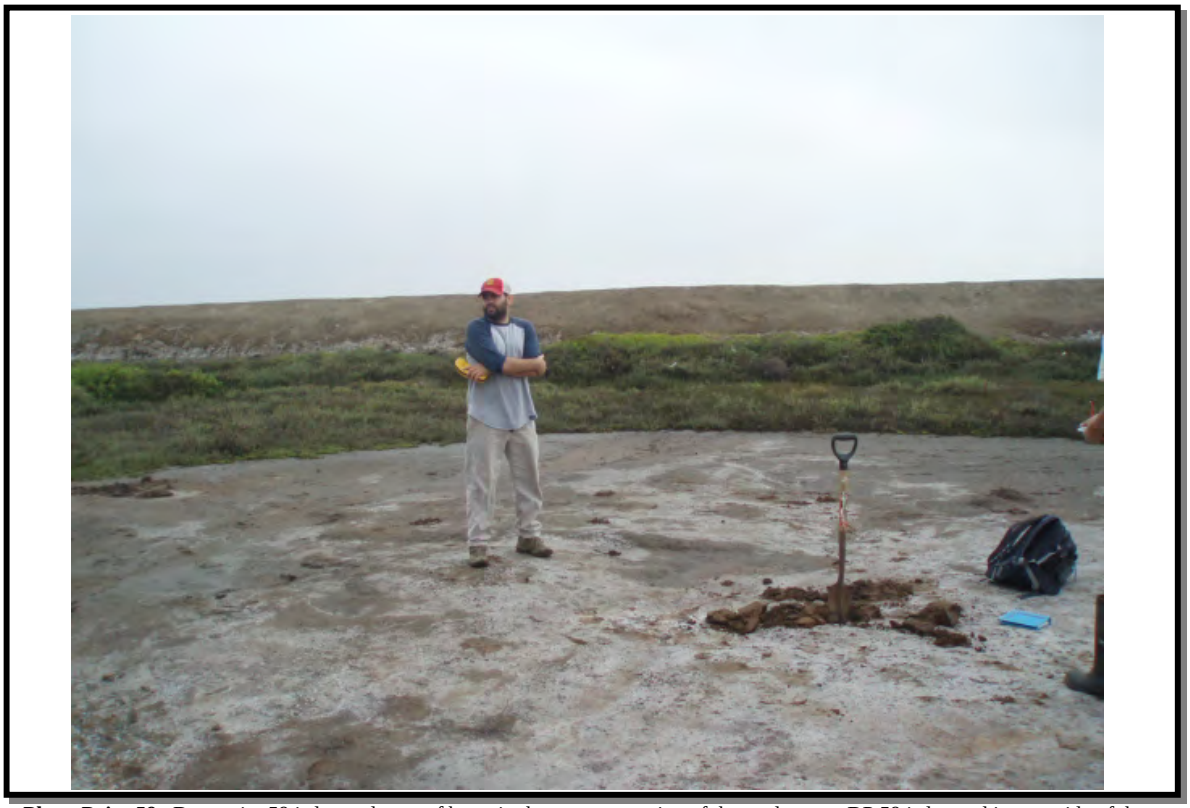

Photo Point 59. Data point 59 is located west of berm in the western portion of the study area. DP 59 is located just outside of the area subject to tidal influence, southwest of DP 58. Photo is directed east and was taken July 7, 2008.

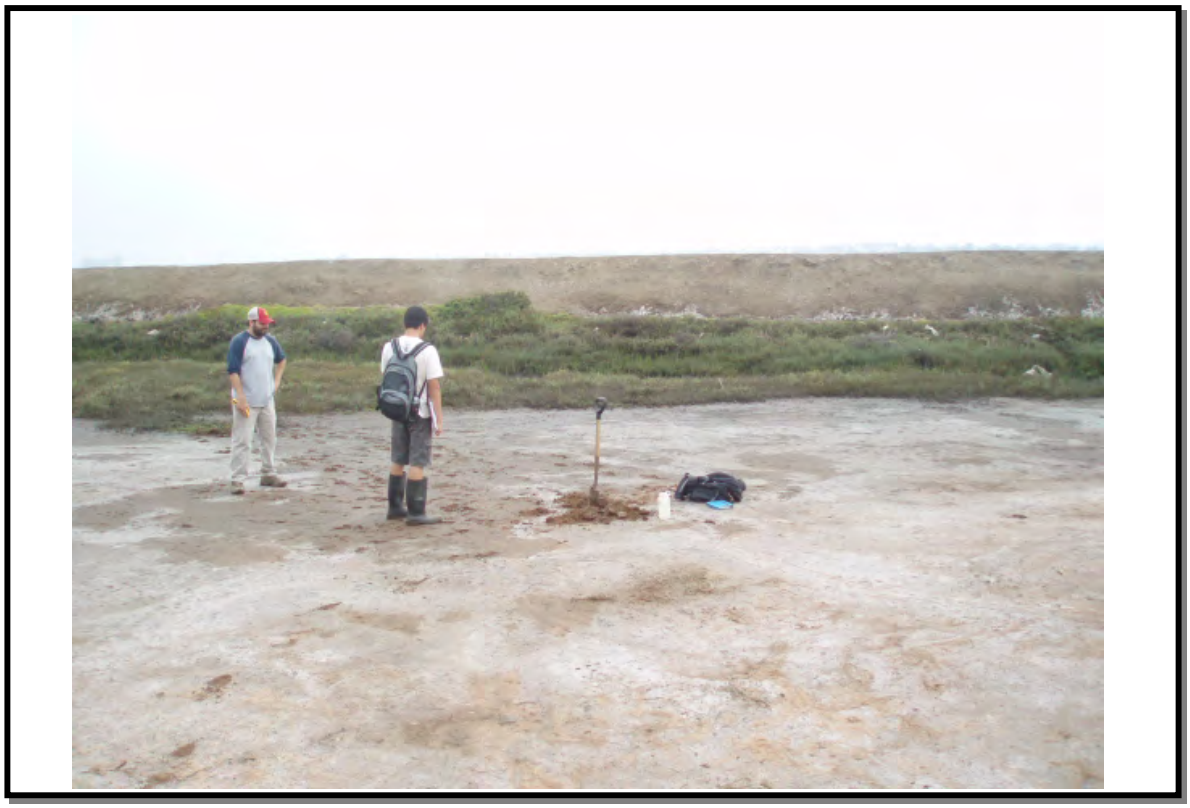

Photo Point 60. Data point 60 is located west of berm in the western portion of the study area. DP 60 is located along the outside edge of area subject to tidal influence, southeast of DP 59. Photo is directed northeast and was taken July 7, 2008.

Photo Point 61. Data point 61 is located west of berm in the western portion of the study area. DP 61 is located along the inside edge of the area subject to tidal influence, southeast of DP 60. Photo is directed north and was taken July 7, 2008.

Photo Point 62. Data point 62 is located west of berm in the western portion of the study area. DP 62 is located along outside edge of area subject to tidal influence, west of DP 61. Photo is directed north and was taken July 7, 2008.

Photo Point 63. Data point 63 is located west of berm in the western portion of the study area. DP 63 is located along the inside edge of an area subject to tidal influence, southeast of DP 62. Photo is directed north and was taken July 7, 2008.

Photo Point 64. Data point 64 is located west of the berm in the western portion of the study area. DP 64 is located along the outside edge of area subject to tidal influence, west of DP 63. Photo is directed south and was taken July 7, 2008.

Photo Point 65. Data point 65 is located west of the berm in the northwestern portion of the study area. DP 65 is located in an area subject to tidal influence just outside of the channel, northwest of DP 64. Photo is directed south and was taken July 7, 2008.

Photo Point 66. Data point 66 is located west of the berm in the northwestern portion of the study area, on a slope going up to the road. DP 66 is located west of DP 65. Photo is directed northwest and was taken July 7, 2008.

Photo Point 67. Data point 67 is located in the northwestern portion of the study area on the road overlooking the study area. DP 67 is located west of DP 66. Photo is directed southeast and was taken July 7, 2008.

Photo Point 68. Data point 68 is located along the upper bank of the channel that defines the eastern limits of the study area. Photo is directed south and was taken July 7, 2008.

Photo Point 69. Data point 69 is located along the mid-bank of the channel that defines the eastern limits of the study area, immediately east of DP68. Photo is directed south and was taken July 7, 2008.

Photo Point 70. Data point 70 is located along the lower portion of the channel that defines the eastern limits of the study area, immediately east of DP69. Photo is directed south and was taken July 7, 2008.

Photo Point 71. Data point 71 is located along the inside edge of the bottom of the channel that defines the eastern limits of the study area, immediately east of DP 70. Photo is directed south and was taken July 7, 2008.

Photo Point 72. Data point 72 is located along the lower portion of the channel that defines the eastern limits of the study area, immediately east of DP 71. Photo is directed south and was taken July 7, 2008.

Photo Point 73. Data point 73 is located along the upper bank of the channel that defines the eastern limits of the study area, immediately east of DP 72. Photo is directed south and was taken July 7, 2008.

Photo Point 74. Data point 74 is located within upland area in the north-central portion of the site. Photo is directed west and was taken July 7, 2008.

Photo Point 75. Data point 75 is located within upland area in the north-central portion of the site, northeast of DP 74. Photo is directed west and was taken July 7, 2008.

Photo Point 76. Data point 76 is located within upland area in the northwestern portion of the site, northeast of DP 75. Photo is directed southeast and was taken July 7, 2008.

APPENDIX 3.
RAINFALL HISTORY AND RETURN FREQUENCY

City of San Diego
Water-Year (Oct.-Sept.) Rainfall Accumulation History

Water Year	Rainfall	Rank	P(exceed)	Exceed%	ReturnRate
1851	8.43	99	0.631	63.057	1.586
1852	9.86	69	0.439	43.949	2.275
1853	10.84	55	0.350	35.032	2.855
1854	11.08	49	0.312	31.210	3.204
1855	12.08	38	0.242	24.204	4.132
1856	9.92	67	0.427	42.675	2.343
1857	4.72	148	0.943	94.268	1.061
1858	7.65	109	0.694	69.427	1.440
1859	6.49	122	0.777	77.707	1.287
1860	6.70	116	0.739	73.885	1.353
1861	9.35	82	0.522	52.229	1.915
1862	14.16	28	0.178	17.834	5.607
1863	4.12	153	0.975	97.452	1.026
1864	4.89	147	0.936	93.631	1.068
1865	9.63	73	0.465	46.497	2.151
1866	11.63	44	0.280	28.025	3.568
1867	12.93	31	0.197	19.745	5.065
1868	11.49	45	0.287	28.662	3.489
1869	11.17	47	0.299	29.936	3.340
1870	5.54	137	0.873	87.261	1.146
1871	5.06	143	0.911	91.083	1.098
1872	6.36	124	0.790	78.981	1.266
1873	8.27	101	0.643	64.331	1.554
1874	15.18	17	0.108	10.828	9.235
1875	6.10	128	0.815	81.529	1.227
1876	9.63	73	0.465	46.497	2.151
1877	3.63	154	0.981	98.089	1.019
1878	16.10	12	0.076	7.643	13.083
1879	7.88	106	0.675	67.516	1.481
1880	14.79	22	0.140	14.013	7.136
1881	9.30	83	0.529	52.866	1.892
1882	9.47	78	0.497	49.682	2.013
1883	4.91	146	0.930	92.994	1.075
1884	26.04	1	0.006	0.637	157.000
1885	8.73	91	0.580	57.962	1.725
1886	16.83	11	0.070	7.006	14.273
1887	8.33	100	0.637	63.694	1.570
1888	9.86	69	0.439	43.949	2.275
1889	11.01	50	0.318	31.847	3.140
1890	15.63	15	0.096	9.554	10.467
1891	9.90	68	0.433	43.312	2.309

Water Year	Rainfall	Rank	P(exceed)	Exceed%	ReturnRate
1892	8.67	94	0.599	59.873	1.670
1893	9.21	86	0.548	54.777	1.826
1894	5.02	145	0.924	92.357	1.083
1895	11.86	41	0.261	26.115	3.829
1896	6.33	125	0.796	79.618	1.256
1897	11.66	43	0.274	27.389	3.651
1898	5.05	144	0.917	91.720	1.090
1899	5.24	139	0.885	88.535	1.129
1900	5.90	130	0.828	82.803	1.208
1901	10.60	59	0.376	37.580	2.661
1902	7.03	114	0.726	72.611	1.377
1903	10.84	55	0.350	35.032	2.855
1904	4.40	152	0.968	96.815	1.033
1905	14.98	19	0.121	12.102	8.263
1906	14.24	27	0.172	17.197	5.815
1907	10.43	61	0.389	38.854	2.574
1908	9.36	80	0.510	50.955	1.963
1909	9.41	79	0.503	50.318	1.987
1910	10.00	65	0.414	41.401	2.415
1911	11.98	39	0.248	24.841	4.026
1912	10.93	52	0.331	33.121	3.019
1913	5.67	135	0.860	85.987	1.163
1914	9.73	72	0.459	45.860	2.181
1915	14.41	26	0.166	16.561	6.038
1916	12.83	33	0.210	21.019	4.758
1917	9.85	71	0.452	45.223	2.211
1918	8.23	102	0.650	64.968	1.539
1919	8.82	89	0.567	56.688	1.764
1920	8.73	91	0.580	57.962	1.725
1921	8.23	102	0.650	64.968	1.539
1922	17.42	6	0.038	3.822	26.167
1923	6.39	123	0.783	78.344	1.276
1924	5.62	136	0.866	86.624	1.154
1925	5.82	133	0.847	84.713	1.180
1926	15.70	14	0.089	8.917	11.214
1927	14.74	24	0.153	15.287	6.542
1928	8.69	93	0.592	59.236	1.688
1929	7.33	112	0.713	71.338	1.402
1930	10.47	60	0.382	38.217	2.617
1931	10.86	53	0.338	33.758	2.962
1932	13.10	30	0.191	19.108	5.233
1933	10.68	57	0.363	36.306	2.754
1934	4.41	150	0.955	95.541	1.047

Water Year	Rainfall	Rank	P(exceed)	Exceed%	ReturnRate
1935	15.09	18	0.115	11.465	8.722
1936	8.53	97	0.618	61.783	1.619
1937	15.76	13	0.083	8.280	12.077
1938	9.59	76	0.484	48.408	2.066
1939	12.90	32	0.204	20.382	4.906
1940	9.36	80	0.510	50.955	1.963
1941	25.03	2	0.013	1.274	78.500
1942	12.68	34	0.217	21.656	4.618
1943	11.14	48	0.306	30.573	3.271
1944	14.43	25	0.159	15.924	6.280
1945	11.94	40	0.255	25.478	3.925
1946	8.44	98	0.624	62.420	1.602
1947	6.51	120	0.764	76.433	1.308
1948	6.65	117	0.745	74.522	1.342
1949	10.42	62	0.395	39.490	2.532
1950	8.63	95	0.605	60.510	1.653
1951	6.73	115	0.732	73.248	1.365
1952	17.27	8	0.051	5.096	19.625
1953	6.54	119	0.758	75.796	1.319
1954	9.13	88	0.561	56.051	1.784
1955	7.32	113	0.720	71.975	1.389
1956	4.41	150	0.955	95.541	1.047
1957	9.26	85	0.541	54.140	1.847
1958	14.15	29	0.185	18.471	5.414
1959	4.70	149	0.949	94.904	1.054
1960	7.47	111	0.707	70.701	1.414
1961	3.44	156	0.994	99.363	1.006
1962	9.59	76	0.484	48.408	2.066
1963	5.88	131	0.834	83.439	1.198
1964	5.15	142	0.904	90.446	1.106
1965	8.81	90	0.573	57.325	1.744
1966	14.76	23	0.146	14.650	6.826
1967	10.86	53	0.338	33.758	2.962
1968	7.86	107	0.682	68.153	1.467
1969	11.48	46	0.293	29.299	3.413
1970	6.33	125	0.796	79.618	1.256
1971	8.03	105	0.669	66.879	1.495
1972	6.12	127	0.809	80.892	1.236
1973	10.99	51	0.325	32.484	3.078
1974	6.59	118	0.752	75.159	1.331
1975	10.64	58	0.369	36.943	2.707
1976	10.14	64	0.408	40.764	2.453
1977	9.18	87	0.554	55.414	1.805

Water Year	Rainfall	Rank	P(exceed)	Exceed%	ReturnRate
1978	17.30	7	0.045	4.459	22.429
1979	14.93	21	0.134	13.376	7.476
1980	15.62	16	0.102	10.191	9.813
1981	8.13	104	0.662	66.242	1.510
1982	11.85	42	0.268	26.752	3.738
1983	18.49	4	0.025	2.548	39.250
1984	5.37	138	0.879	87.898	1.138
1985	9.60	75	0.478	47.771	2.093
1986	14.95	20	0.127	12.739	7.850
1987	9.30	83	0.529	52.866	1.892
1988	12.44	36	0.229	22.930	4.361
1989	5.88	131	0.834	83.439	1.198
1990	7.62	110	0.701	70.064	1.427
1991	12.31	37	0.236	23.567	4.243
1992	12.48	35	0.223	22.293	4.486
1993	18.26	5	0.032	3.185	31.400
1994	9.93	66	0.420	42.038	2.379
1995	17.13	10	0.064	6.369	15.700
1996	5.18	140	0.892	89.172	1.121
1997	7.73	108	0.688	68.790	1.454
1998	17.16	9	0.057	5.732	17.444
1999	6.50	121	0.771	77.070	1.298
2000	5.75	134	0.854	85.350	1.172
2001	8.57	96	0.611	61.146	1.635
2002	3.30	157	1.000	100.000	1.000
2003	10.31	63	0.401	40.127	2.492
2004	5.18	140	0.892	89.172	1.121
2005	22.60	3	0.019	1.911	52.333
2006	5.97	129	0.822	82.166	1.217
2007	3.59	155	0.987	98.726	1.013

APPENDIX 4.
RECENT AERIAL PHOTOGRAPHS OF THE STUDY AREA


N
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APN #62102008
APN #62102004
APN #61602008
APN #61602012
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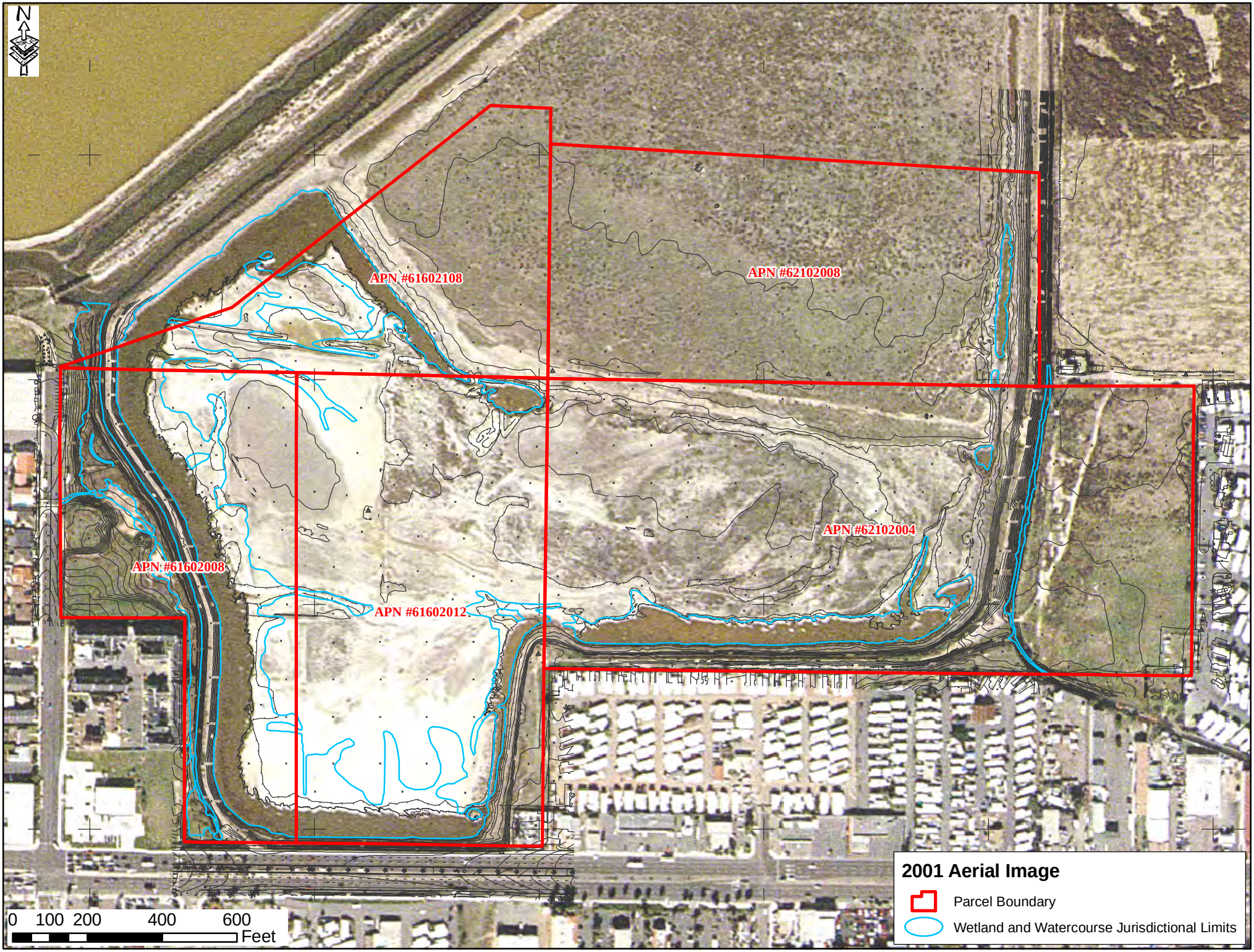
Feet
1998 Aerial Image
Parcel Boundary
Wetland and Watercourse Jurisdictional Limits


N
APN #61602108
APN #62102008
APN #62102004
APN #61602008
APN #61602012
0 100 200 400 600
Feet
2000 Aerial Image
Parcel Boundary
Wetland and Watercourse Jurisdictional Limits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APN #61602108
APN #62102008
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Feet
2001 Aerial Image
Parcel Boundary
Wetland and Watercourse Jurisdictional Limits


N
APN #61602108
APN #62102008
APN #62102004
APN #61602008
APN #61602012
0 100 200 400 600
Feet
2003 Aerial Image
Parcel Boundary
Wetland and Watercourse Jurisdictional Limits


N
APN #61602108
APN #62102008
APN #62102004
APN #61602008
APN #61602012
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Feet
2005 Aerial Image
Parcel Boundary
Wetland and Watercourse Jurisdictional Limits


N
APN #61602108
APN #62102008
APN #62102004
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APN #61602012
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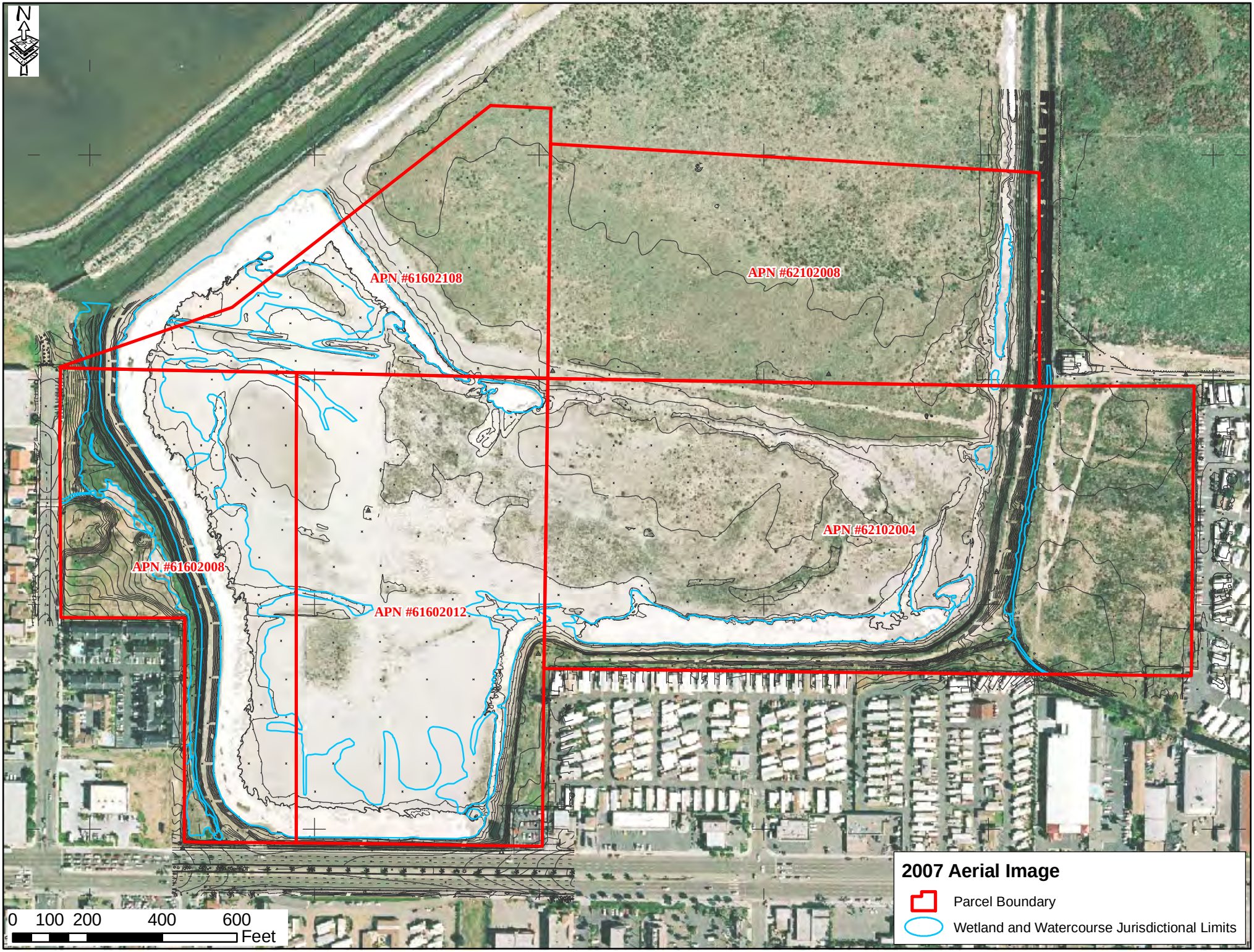
Feet
2006 Aerial Image
Parcel Boundary
Wetland and Watercourse Jurisdictional Limits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APN #61602108
APN #62102008
APN #62102004
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APN #61602012
0 100 200 400 600
Feet
2007 Aerial Image
Parcel Boundary
Wetland and Watercourse Jurisdictional Limits