

**PRELIMINARY DELINEATION OF WETLANDS AND OTHER
WATERS OF THE UNITED STATES**

**SAN FRANCISQUITO CREEK FLOOD
PROTECTION PROJECT, EAST BAYSHORE ROAD
TO SAN FRANCISCO BAY**

PREPARED FOR:

San Francisquito Creek Joint Powers Authority
1231 Hoover Street
Menlo Park, CA 94025
Contact: Kevin Murray
650.561.4580

PREPARED BY:

ICF International
75 East Santa Clara Street, Suite 300
San Jose, CA 95113
Contact: Matthew Jones
408.216.2815

June 2012



ICF International. 2012. *Preliminary Delineation of Wetlands and Other Waters of the United States, San Francisquito Creek Flood Protection Project, East Bayshore Road to San Francisco Bay*. June. (ICF 00882.09.) San Jose, CA. Prepared for San Francisquito Creek Joint Powers Authority, Menlo Park, CA.

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Acronyms and Abbreviations

Arid West Supplement Creek	Corps of Engineers Wetland Delineation Manual: Arid West Region San Francisquito Creek
CWA	Clean Water Act
DM	Diked Marsh
FP	Freshwater Pond
FWM	Freshwater Marsh
GPS	global positioning system
HTL	high tide line
HTL	high tide line
MHW	mean high water
MSL	mean sea level
NAVD	North American Vertical Datum
other waters Project	other waters of the United States San Francisquito Creek Flood Protection Project, East Bayshore Road to San Francisco Bay
RPW	relatively permanent water
TC	Tidal Channel and Bay Waters
TNW	Traditional Navigable Water
TP	Tidal Pan
TSM	Tidal Salt Marsh
US 101	U.S. Highway 101
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey
WETS	Wetland Evaluation Technique Summary

San Francisquito Creek Flood Protection Project Preliminary Delineation of Wetlands and Other Waters of the United States

1 Summary

This report presents the results of a delineation of wetlands and other water bodies conducted for the San Francisquito Creek Flood Protection Project, East Bayshore Road to San Francisco Bay in San Mateo and Santa Clara Counties, California. The delineation was conducted to assist the San Francisquito Creek Joint Powers Authority in determining the type and extent of wetlands and other waters of the United States (other waters) in the delineation study area that may be subject to regulation by the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act.

Wetlands and other waters of the United States were delineated using the routine onsite determination method described in the USACE *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and, where applicable, the criteria specified in the Regional Supplement to the *Corps of Engineers Wetland Delineation Manual: Arid West Region* (Arid West Supplement) (U.S. Army Corps of Engineers 2008). Data were gathered during field surveys conducted on July 6, 7, and 8, 2010 and February 22, 2012. Identification of the extent of tidal waters under Rivers and Harbors Act Section 10 jurisdiction was based on field evidence of the mean high water (MHW) mark.

The study area for the delineation encompasses 263.5 acres and includes all areas that could potentially be directly or indirectly disturbed during implementation of the Project (Figure 1).

Based on the data gathered during the field surveys, the delineation study area preliminarily contains 140.8 acres of wetlands and other waters of the United States. Jurisdictional area types in the study area are tidal salt marsh, diked marsh, freshwater marsh, tidal channel and bay waters, freshwater pond, and tidal pan. The combined acreage of the wetlands and other waters is shown in Table 1.

Table 1. Acreage Summary of Wetlands and Other Waters

Feature	Acreage
Tidal Salt Marsh (TSM)	112.3
Diked Marsh (DM)	4.8
Freshwater Marsh (FWM)	0.3
Tidal Channel and Bay Waters (TC)	22.4
Freshwater Pond (FP)	0.1
Tidal Pan (TP)	0.4
Total	140.81

A description of the wetlands and other waters mapped in the delineation study area is provided in the *Results* section of this report, and their locations are shown on Exhibit A. All jurisdictional area boundaries presented in this report are preliminary and subject to verification by the USACE San Francisco District.

2 Introduction

This report presents the results of the ICF International's delineation of wetlands and other water bodies for the proposed San Francisquito Creek Flood Protection Project, East Bayshore Road to San Francisco Bay (Project) in San Mateo and Santa Clara counties, California (Figure 1). The Project is proposed to provide improved flood protection for homes, businesses, and other facilities along San Francisquito Creek (Creek) in the cities of Palo Alto and East Palo Alto downstream of U.S. Highway 101 (US 101). The Project is expected to consist of a combination of levee improvements, floodwalls, possible development of expanded floodplain storage on the adjacent Palo Alto Municipal Golf Course, and possible restoration of the hydraulic connectivity between the Creek and the adjacent Faber Tract Baylands (Faber Tract), restoring their historic role as tidally influenced floodplain, as discussed in the City of Palo Alto's Baylands Master Plan (2008).

The Project applicant is San Francisquito Creek Joint Powers Authority. The contact for the Project applicant is

Kevin Murray
Project Manager
San Francisquito Creek Joint Powers Authority
1231 Hoover Street

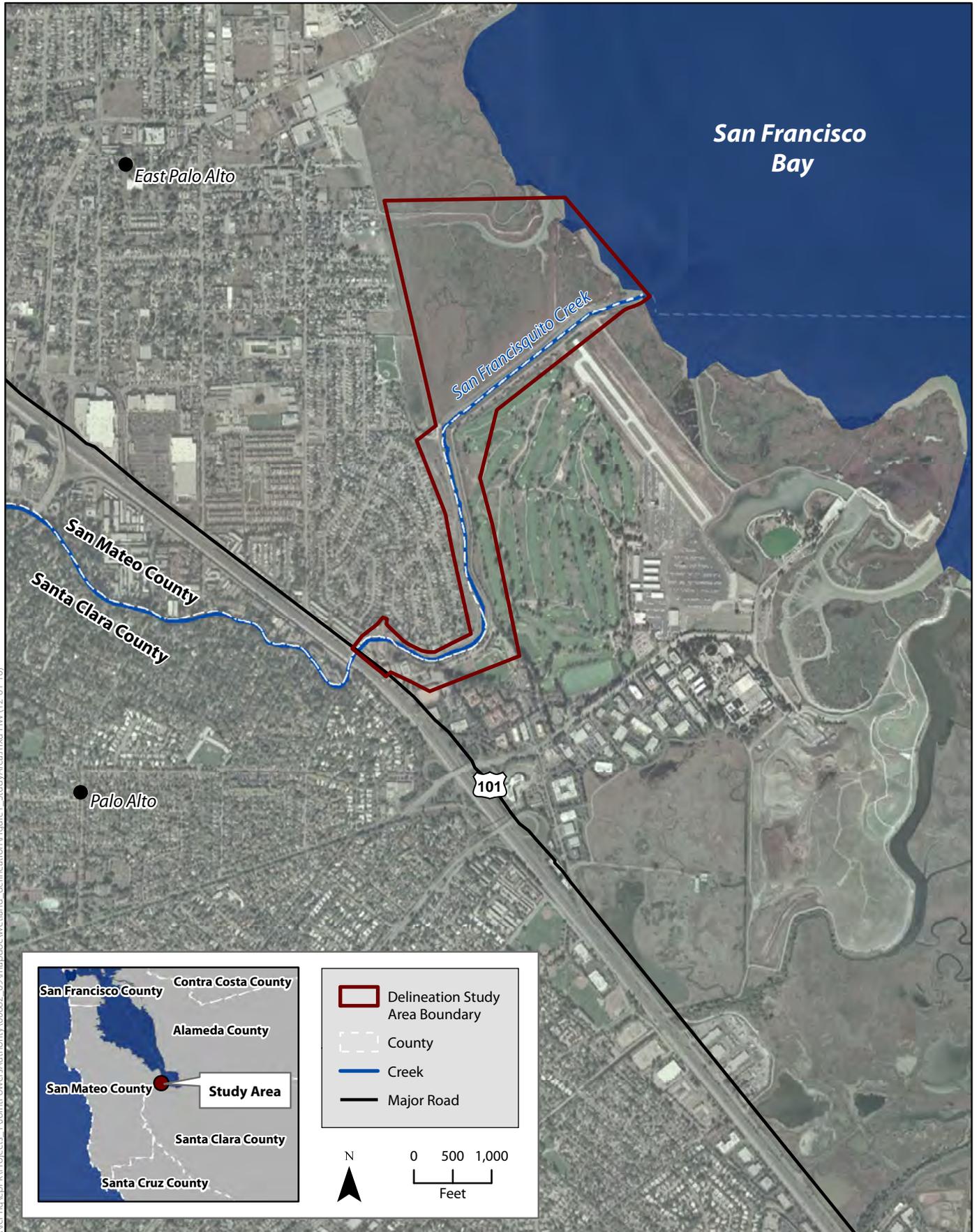
Menlo Park, CA 94025
650-561-4580

2.1 Site Location and Driving Directions

The delineation study area is located in southeastern San Mateo County and northeastern Santa Clara County, on the border between East Palo Alto and Palo Alto. Figure 1 shows the location of the delineation study area and its relationship to the surrounding towns and highways.

The delineation study area is shown on the Palo Alto and Mountain View U.S. Geological Survey (USGS) 7.5-minute quadrangles. The approximate centroid of the delineation study area is located at 37.46132° north latitude and 122.12379° west longitude.

To reach the delineation study area, take US 101 south from San Francisco. Take the University Avenue exit in Palo Alto and turn right onto University Avenue. Proceed approximately 0.2 mile and turn right on Donohoe Street. Proceed approximately 0.25 mile and turn right onto Clarke Avenue. Proceed approximately 0.1 mile and turn left onto O'Connor Street. Proceed approximately 0.3 mile to park at the end of O'Connor Street. Walk a short distance along the footpath to reach the delineation study area.



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Figure 1
Study Area

2.2 Site Description

2.2.1 General

The 263.5-acre delineation study area is situated in alluvial plain, alluvial fan, and tidal marsh area. Palo Alto Municipal Golf Course and the Palo Alto Airport are adjacent to the eastern and southern boundaries of the study area. San Francisco Bay is to the east, and residential areas and tidal marshes are to the north. The western edge is formed by East Bayshore Road.

A wetland delineation of the entire golf course was prepared in 1994 (H.T. Harvey and Associates 1994); the delineation map was verified by the USACE San Francisco District on April 28, 1995 (file number 21160S49). The delineation report indicates that 2.51 acres of Section 404 jurisdictional wetlands and 17.3 acres “historic waters” exist in the golf course study area. The historic waters were features that were identified by H.T. Harvey & Associates using historic maps (prepared before the golf course was constructed) and consisted of sloughs, channels, and ponds. (These features, which no longer exist on the site, were assumed to meet the definition Rivers and Harbors Act Section 10 jurisdiction. They appear to be shown on the H.T. Harvey & Associates delineation map but are not labeled as such.) Because H.T. Harvey’s delineation map was verified more than five years ago, it is no longer valid and needs to be updated using the Arid West Supplement.

Artificial levees exist along both sides of San Francisquito Creek and along the western edge and interior of the Faber Tract (discussed below). A footbridge (Friendship Bridge) crosses the Creek channel just south of the Faber Tract.

Elevations in the delineation study area are roughly 15 feet above mean sea level (MSL) (referenced to the North American Vertical Datum [NAVD]) near East Bayshore Road to approximately sea level in the eastern part. With the exception of levees, slopes are nearly level in most areas and undulating in the golf course. Levee slopes are approximately 1:1 to 2:1 (horizontal:vertical). The banks of San Francisquito Creek are roughly four feet high and in places are vertical. Natural levees exist on the “benches” along the Creek in places, causing the ground to slope away from the channel in these areas.

In the northern part of the area are the approximately 87-acre Faber Tract and the southern portion of the Laumeister Tract, the latter of which consists of a natural marsh. The Faber Tract appears to have been diked in the 1930s and used for pasture and for hay production (H.T. Harvey & Associates 2009). The dike probably eroded sometime between 1961 and 1963, allowing some tidal exchange into the area. Dredge spoils from the Palo Alto Harbor subsequently were deposited on the tract between 1968 and 1969. San Mateo County initially established a hydrologic connection between the Faber Tract and the adjacent tidal marsh to the north (in the Laumeister Tract) via three culverts installed through the levee separating the two areas. In 1971, the county breached the outboard levee in the northeastern corner of the Faber Tract, opening the tract to tidal action to San Francisco Bay.

2.2.2 Hydrology

The delineation study area is located in the San Francisco Bay hydrologic unit (HUC 18050004) (U.S. Geological Survey 2007).

San Francisquito Creek, shown as a perennial stream on the USGS topographic quadrangle map, flows overall easterly through the entire delineation study area (Exhibit A). The Creek empties into South San Francisco Bay at the eastern edge of the delineation study area. Based on a review of historic aerial photographs and U.S. Coast Survey maps (Hermstad et al. 2009), much of the plan form of the Creek and extent of its associated tidal marshes have significantly changed since the mid-1800s. An 1899 USGS topographic map shows the Creek channel extending through what is now the Palo Alto Municipal Golf Course. A September 1948 aerial photograph available on Google Earth shows the area of what is now the golf course as occupied by an airfield with two dirt or grass runways.

San Francisquito Creek is tidally influenced throughout the delineation study area. At San Francisquito Creek's confluence with San Francisco Bay, the MHW elevation is 6.544 feet NAVD 1988 (converted from NGVD 1929) (H.T. Harvey & Associates 1994). The high tide line (HTL) at the Port of Redwood City (i.e., the nearest known record for HTL) is 7.034 feet NAVD 1988 (converted from NGVD 1929) (Wetlands Research Associates 2007). Because the tidally influenced areas of the study area are bounded by levees, in plan view the datums effectively coincide near the landside toe of the levees when viewed at the scale that was used for the delineation map (see Exhibit A). Because of map data limitations, the MHW and HTL elevations are both represented by the nearest whole-foot contour (i.e., 7.0 feet NAVD 1988) on the exhibit.

Wetlands that are not hydrologically connected to San Francisquito Creek (i.e., those isolated by levees or dikes) are not influenced by tidal action (FP1, FP2, and DM1 to DM13). The City of East Palo Alto maintains two stormwater outfall facilities to San Francisquito Creek near the east end of O'Connor Street and San Francisquito Creek, and immediately north of East Bayshore Road at the upstream end of a side channel to San Francisquito Creek. The East Bayshore Road outfall drains to an apparent artificial channel, which extends a short distance to San Francisquito Creek.

2.2.3 Soils

The U.S. Department of Agriculture (USDA) Soil Conservation Service (Kashiwagi and Hokholt 1991) (San Mateo County) and the USDA Natural Resources Conservation Service (2010a) (Santa Clara County) have mapped the soils within the delineation study area. Salient characteristics of the soil map units are summarized in Table 2. Among these, the only soil map unit that consists entirely of native soil material is Novato clay. (The soil survey apparently did not recognize the fact that dredged material was placed in the Faber Tract, which the soil survey indicates is Novato clay.) All of the other map units consist partly or wholly of various thicknesses of fill material that has been placed on top of the native soil.

Table 2. Summary of Characteristics of the Soils in the Delineation Study Area

Soil Map Symbol	Soil Map Unit Name	Landform	Natural Drainage Class	Hydric Status of Primary Component and Inclusions of Map Unit*
108	Botella-Urban land complex, 0 to 5 percent slopes	Stream terraces, alluvial fans	Well	Primary component: non-hydric Inclusions: non-hydric
120/120s cl	Aquic Xerorthents, bay mud substratum, 0 to 2 percent slopes	Marshes	Poor	Primary component: hydric Inclusions: hydric
131	Urban land	(not identified)	(not identified)	Primary component: non-hydric Inclusions: non-hydric
155/155s cl	Novato clay, 0 to 1 percent slopes, tidally flooded	Salt marshes	Very poor	Primary component: hydric Inclusions: non-hydric
169	Urbanland-Elder complex, 0 to 2 percent slopes, protected	Alluvial fans and streams	Somewhat excessive	Primary component: non-hydric Inclusions: non-hydric
169scl	Urbanland-Campbell complex, 0 to 2 percent slopes, protected	Alluvial fans and streams	Somewhat excessive	Primary component: non-hydric Inclusions: non-hydric

Source: Kashiwagi and Hokholt 1991; USDA Natural Resources Conservation Service 2010a; Soil Survey Staff 2011

* "Primary Component" refers to the soil that makes up approximately 85 percent or more of the map unit. The remaining soils in the map unit are inclusions.

A map of the soils in the delineation study area and associated hydric soil information are provided in Appendix A.

2.2.4 Precipitation and Growing Season

The climate in the delineation study area is characterized by warm, dry summers and cool, moist winters. National Weather Service cooperative weather station number CA 7339 (Redwood City) is the closest weather station to the delineation study area, located approximately 4.5 miles to the northwest. Average annual precipitation at this weather station is 19.8 inches, with most falling as rain from October to April (U.S. Department of Agriculture Natural Resources Conservation Service 2010b). (See Wetland Evaluation Technique Summary [WETS] tables in Appendix B.)

Rainfall for the precipitation year preceding the delineation field surveys conducted in early July, 2010 (i.e., precipitation year July 1, 2009–June 30, 2010) was roughly 110 percent of the average in the vicinity. Rainfall for the precipitation year for the delineation field survey conducted in late-February 2012 (i.e., precipitation year July 1, 2011–June 30, 2012) as of the date of the survey was roughly 35 percent of the average in the vicinity.

The length of the growing season at the Redwood City weather station in 5 years out of 10 at 28 degrees air temperature averages 365 days (U.S. Department of Agriculture Natural Resources Conservation Service 2010b).

2.2.5 Vegetation

The delineation study area is within the San Francisco Bay Area subregion of the Central Western California region in the California Floristic Province (Hickman 1993).

In addition to the aquatic habitats described in the *Results* section below, the delineation study area also supports annual grasslands, ruderal areas, turf, and urbanized areas. Scientific names of the plant species that were observed while conducting the delineation field surveys and their wetland indicator status are provided in Appendix C. The wetland plant communities found in the delineation study area are described in the *Results* section of this report.

3 Delineation Methods

Fieldwork for the delineation was conducted by a soil and wetland scientist and a botanist on July 6, 7, and 8, 2010 and on February 22, 2012, using the routine onsite determination method described in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and, where applicable, criteria specified in the Regional Supplement to the *Corps of Engineers Wetland Delineation Manual: Arid West Region* (Arid West Supplement) (U.S. Army Corps of Engineers 2008).

As detailed in the Arid West Supplement, data on vegetation, soil, and hydrology characteristics used as the basis for wetland boundary determinations were collected and recorded on Arid West Supplement data forms (Appendix D). Data forms were completed at 49 sample plots (data points).

The wetland indicator status of each plant species was based on the *National List of Plant Species that Occur in Wetlands: California* (Reed 1988). Common and scientific plant names were taken from *The Jepson Manual: Vascular Plants of California*, Second Edition (Baldwin et al. 2012).

The inland limit of USACE jurisdiction for tidally influenced waters was mapped at the high tide line (HTL) in the absence of adjacent wetlands. USACE jurisdiction of nontidal waters was mapped at the MHW mark. The MHW mark represents the limit of potential USACE jurisdiction over tidal waters under Section 10 of the Rivers and Harbors Act, whereas the HTL represents the inland limit of USACE jurisdiction in the absence of adjacent nontidal wetlands under Section 404 of the Clean Water Act.

For practical purposes, the HTL mark was identified using the landward extent of hydrophytic vegetation, according to USACE guidance in Section 33 of the U.S. Code of Federal Regulations, Part 328.3 (2010). The hydrophytic vegetation was predominantly composed of pickleweed (*Salicornia pacifica*). Pickleweed typically occurs to the landward limit of wetlands in the tidally influenced areas of the study area because such areas are bordered by a steep levee slope, thereby severely limiting the occurrence of “high” marsh species, such as alkali heath (*Frankenia salina*) and saltgrass (*Distichlis spicata*), which would occupy the landward limits of wetlands in areas unconstrained by levees.

A Trimble GeoXT global positioning system (GPS) receiver, typically accurate to less than 1 meter horizontally, was used to record the location of the data points and certain jurisdictional area

boundaries. However, where physical access to the boundary was poor, the features were mapped directly onto a recent 1 inch=160 foot color aerial photograph (taken in 2008) base map (ESRI 2008). The division between wetlands and other waters was also mapped from aerial photograph interpretation. Features depicted in the aerial photograph were digitized into a geographic information system data layer. This mapping was added to the GPS data layer to generate the delineation map at a scale of 1 inch=100 feet.

The resulting delineation map and this report were prepared in accordance with USACE San Francisco District guidelines (U.S. Army Corps of Engineers 2007).

4 Results

Table 3 provides the total acreage of wetlands and other waters mapped in the delineation study area.

Table 3. Acreage Summary of Wetlands and Other Waters

Feature	Type	Acreage
Tidal salt marsh (TSM)	Wetland	112.3
Diked Marsh (DM)	Wetland	4.3
Freshwater Marsh (FWM)	Wetland	0.3
Wetlands Subtotal		116.9
Tidal Channel and Bay Waters (TC)	Other Waters	22.4
Tidal Pan (TP)	Other Waters	0.4
Freshwater Pond (FP)	Other Waters	1.1
Other Waters Subtotal		23.9
Total		140.81

Photographs of representative wetlands and other waters and of the delineation study area in general are provided in Appendix E.

4.1 Wetlands

4.1.1 Tidal Salt Marsh

Tidal salt marshes were mapped throughout the Faber Tract and Laumeister Tract, and along both sides of San Francisquito Creek. The marshes are supported primarily by tidal exchange.

The tidal salt marsh community (represented by data points 1, 3, 5, 15, 17, 19, 21, 29, 31, 37, and 39) met the hydrophytic vegetation criterion based on a dominance of Pacific cordgrass (*Spartina foliosa*) (OBL) (at approximately MHW and below), pickleweed (OBL) (both at approximately MHW to MHHW); and perennial peppergrass (*Lepidium latifolium*) (FACW), gumplant (*Grindelia stricta*) (FACW), and alkali heath (*Frankenia salina*) (FACW) (all at approximately MHHW). Wetland hydrology was documented either by sediment deposits (B2), saturation (A3), or drift deposits (B3). Hydric soil was documented either by a redox dark surface (F6), stratified layers (A5), Histic epipedon (A2), or depleted matrix (F3).

Included within the mapped areas of tidal salt marsh are tidal channels that were too narrow to map at the scale used. Also included are narrow bands of brackish tidal marsh along a few-hundred-foot-long section of San Francisquito Creek downstream of East Bayshore Road. In the brackish marsh, bulrush (*Schoenoplectus* sp.) is the dominant species rather than cordgrass and pickleweed.

4.1.2 Diked Marsh

Diked marshes were mapped in areas on the landward side of the levees along San Francisquito Creek and within the golf course. Such areas appear to have been tidal salt marsh before levees were constructed in the area and appear to not have received significant amounts of fill material as part of levee and golf course construction.

The diked marsh community (represented by data points 7, 9, 11, 13, 24, 25, 27, 33, 35, 41, 45, and 48) met the hydrophytic vegetation criterion based on a dominance of saltgrass (FACW), pickleweed, alkali heath, Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*), and other hydrophytes. (Percent vegetative cover is low in some areas, but overall greater than the 5 percent cover threshold required for wetlands [U.S. Army Corps of Engineers 2008]). Wetland hydrology was documented either by a salt crust (B11), surface soil cracks (B6), or oxidized rhizospheres (C3). Hydric soil was documented either by a depleted matrix (F3) or redox dark surface (F6).

The marshes generally appear to be supported primarily by incident precipitation. However, the diked marshes that occur within or adjoining the golf course may receive inputs from the turf sprinkler systems, both indirectly and as runoff.

4.1.3 Freshwater Marsh

The freshwater marsh community was mapped at only one location, along the shore of a pond within the Palo Alto Municipal Golf Course.

Freshwater marsh is represented by data point 44 and is dominated by cattail (*Typha* sp.) and hardstem bulrush (*Schoenoplectus acutus*) (both obligate wetland species). The marsh met the hydrophytic vegetation criterion based on dominance by cattail. Wetland hydrology was documented by the presence of surface water. Hydric soil was documented by redox dark surface (F6).

The freshwater marsh appears to be supported by water piped into the associated freshwater pond (discussed under *Freshwater Pond, Section 4.3.2* below), and to a lesser degree ground water.

4.2 Other Waters

Aquatic areas mapped as other waters were less than five percent vegetated, and therefore qualify as *other waters* (U.S. Army Corps of Engineers 2008).

4.2.1 Tidal Channel and Bay Waters

Tidal channels exist as San Francisquito Creek and sloughs that extend into the Faber Tract and Laumeister Tract. Bay waters exist as the deep water area of South San Francisco Bay. All the channels are supported by tidal action.

4.2.2 Freshwater Pond

The freshwater pond community was mapped at only one location, on the Palo Alto Municipal Golf Course. The pond appears to be supported by water piped into it for the golf course and to a lesser degree by ground water.

The 1948 aerial photograph mentioned under *Hydrology, Section 2.3.2* above shows that a pond existed in the general footprint of the present-day pond.

4.2.3 Tidal Pan

Three tidal pans were mapped within the Faber Tract. The pans appear to exist at approximately MHHW and appear to be primarily supported by extreme high tides.

5 Jurisdictional Determination Information

In accordance with USACE San Francisco District (2007) delineation report guidelines, this section provides information intended to assist the USACE in completing the Approved Jurisdictional Determination Form, in particular Section III, Parts A and B.

5.2.1 Relatively Permanent Waters

Because San Francisquito Creek appears to be intermittent or perennial and because it is subject to tidal action, it qualifies as a *relatively permanent water* (RPW) (Exhibit A).

All of the sloughs that extend into the Faber Tract and Laumeister Tract also appear to be RPWs because they are subject to the ebb and flow of the tide.

5.2.2 Traditional Navigable Waters

South Francisco Bay (along the northeastern edge of the delineation study area) is a *Traditional Navigable Water* (TNW) (Exhibit A), as defined under 33 CFR Section 329.4 and 33 CFR Section 328.3(a)(1).

5.2.3 Evaluation of Hydrologic and Water Quality Characteristics of Stream Order Segment

San Francisquito Creek has a watershed of approximately 45 square miles. The headwaters of the Creek are relatively undeveloped. The lower part of its watershed is heavily urbanized. The main stem of the Creek is 14 miles long (City of Palo Alto Parks and Recreation Commission 2010).

During the wetland delineation field surveys in early July 2010, a small base flow in the Creek was observed at low tide. It is unknown whether the base flow normally continues through to the beginning of the following rainy season.

San Francisquito Creek is listed as impaired for sedimentation/siltation on the State Water Resources Control Board (2006) Clean Water Act Section 303(d) List of Impaired Waterways.

5.2.4 Evaluation of Hydrologic, Water Quality, and Functional Characteristics of Onsite Wetlands

There are no known data on the hydrologic or water quality characteristics of the wetlands in the delineation study area. However, the tidal salt marshes that adjoin the San Francisquito Creek channel are expected to receive typical wildland and urban runoff pollutants, including sediment, nutrients, pesticides, and litter. The diked marshes that exist within and adjacent to the golf course and the freshwater marsh are assumed to receive runoff containing nutrients and pesticides from the golf course.

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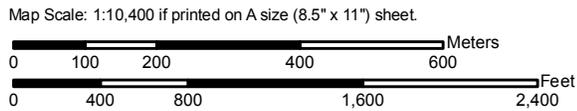
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Appendix A

Hydric Soil Information and Soils Map

Soil Map—San Mateo County, Eastern Part, and San Francisco County, California; and Santa Clara Area, California, Western Part
(Soil Survey Map)



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Units

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot
-  Spoil Area
-  Stony Spot

 Very Stony Spot

 Wet Spot

 Other

Special Line Features

-  Gully
-  Short Steep Slope
-  Other

Political Features

 Cities

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

MAP INFORMATION

Map Scale: 1:10,400 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: UTM Zone 10N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Mateo County, Eastern Part, and San Francisco County, California
Survey Area Data: Version 9, Jul 11, 2011

Soil Survey Area: Santa Clara Area, California, Western Part
Survey Area Data: Version 1, Jul 27, 2010

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Date(s) aerial images were photographed: 6/12/2005; 6/13/2005

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

San Mateo County, Eastern Part, and San Francisco County, California (CA689)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
108	Botella-Urban land complex, 0 to 5 percent slopes	7.9	3.1%
120scl	Aquic Xerorthents, bay mud substratum, 0 to 2 percent slopes	20.6	8.0%
131	Urban land	0.0	0.0%
155scl	Novato clay, 0 to 1 percent slopes, tidally flooded	121.7	47.3%
169scl	Urbanland-Elder complex, 0 to 2 percent slopes, protected	5.5	2.1%
W	Water	3.0	1.2%
Subtotals for Soil Survey Area		158.7	61.6%
Totals for Area of Interest		257.5	100.0%

Santa Clara Area, California, Western Part (CA641)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
120	Aquic Xerorthents, bay mud substratum, 0 to 2 percent slopes	78.1	30.3%
155	Novato clay, 0 to 1 percent slopes, tidally flooded	1.7	0.7%
165	Urbanland-Campbell complex, 0 to 2 percent slopes, protected	4.3	1.7%
169	Urbanland-Elder complex, 0 to 2 percent slopes, protected	13.1	5.1%
W	Water	1.5	0.6%
Subtotals for Soil Survey Area		98.8	38.4%
Totals for Area of Interest		257.5	100.0%

Hydric Soils (CA)

This table lists the map unit components and their hydric status in the survey area. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 2002).

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for all of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches. This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Map units that are dominantly made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units dominantly made up of nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

The criteria for hydric soils are represented by codes in the table (for example, 2B3). Definitions for the codes are as follows:

1. All Histels except for Folistels, and Histosols except for Folist.
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that:
 - A. are somewhat poorly drained and have a water table at the surface (0.0 feet) during the growing season, or
 - B. are poorly drained or very poorly drained and have either:
 - i. a water table at the surface (0.0 feet) during the growing season if textures are coarse sand, sand, or fine sand in all layers within a depth of 20 inches, or
 - ii. a water table at a depth of 0.5 foot or less during the growing season if saturated hydraulic conductivity (Ksat) is equal to or greater than 6.0 in/hr in all layers within a depth of 20 inches, or
 - iii. a water table at a depth of 1.0 foot or less during the growing season if saturated hydraulic conductivity (Ksat) is less than 6.0 in/hr in any layer within a depth of 20 inches.
3. Soils that are frequently ponded for long or very long duration during the growing season.
4. Soils that are frequently flooded for long or very long duration during the growing season.

Hydric Condition: Food Security Act information regarding the ability to grow a commodity crop without removing woody vegetation or manipulating hydrology.

References:

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Report—Hydric Soils (CA)

Hydric Soils (CA)– CA689 - San Mateo County, Eastern Part, and San Francisco County, California							
Map symbol and map unit name	Component/ Local Phase	Hydric status	Landform	Hydric criteria met (code)	Farmable condition	Comp. pct.	Altered hydrology notes
108: Botella-Urban land complex, 0 to 5 percent slopes	(C) - Botella-	No	Stream terraces,flood plains,alluvial fans	—	—	45	—
	(C) - Urban Land-	No	—	—	—	30	—
	(I) - Orthents Cut&fill-	No	—	—	—	0-8	—
	(I) - Unnamed-	No	—	—	—	0-8	—
	(I) - Unnamed-	No	—	—	—	0-8	—
120scl: Aquic Xerorthents, bay mud substratum, 0 to 2 percent slopes	(C) - Aquic Xerorthents-bay mud substratum	No	Marshes	—	—	95	—
	(I) - Urban Land-	No	Basin floors	—	—	0-5	—
131: Urban land	(C) - Urban Land-	No	—	—	—	85	—
	(I) - Orthents Cut&fill-	No	—	—	—	0-7	—
	(I) - Orthents Reclaimed-	No	—	—	—	0-7	—
155scl: Novato clay, 0 to 1 percent slopes, tidally flooded	(C) - Novato-tidally flooded	Yes	Marshes	2B3,4	Neither wooded nor farmable under natural conditions	95	—
	(I) - Water-	—	Channels	—	—	0-4	—
	(I) - Typic Xerorthents-acid sulphate	No	Marshes	—	—	0-1	—
169scl: Urbanland-Elder complex, 0 to 2 percent slopes, protected	(C) - Urban Land-	No	Alluvial fans	—	—	70	—
	(C) - Elder-protected	No	Streams	—	—	20	—
	(I) - Caninecreek-gravelly substratum, protected	No	Streams	—	—	0-8	—
	(I) - Water-	Yes	Streams	—	Wooded under natural conditions	0-2	—
W: Water	(C) - Water-	No	—	—	—	100	—

Hydric Soils (CA)– CA641 - Santa Clara Area, California, Western Part							
Map symbol and map unit name	Component/Local Phase	Hydric status	Landform	Hydric criteria met (code)	Farmable condition	Comp. pct.	Altered hydrology notes
120: Aquic Xerorthents, bay mud substratum, 0 to 2 percent slopes	(C) - Aquic Xerorthents-bay mud substratum	No	Marshes	—	—	95	—
	(I) - Urban Land-	No	Basin floors	—	—	0-5	—
155: Novato clay, 0 to 1 percent slopes, tidally flooded	(C) - Novato-tidally flooded	Yes	Marshes	2B3,4	Neither wooded nor farmable under natural conditions	95	—
	(I) - Water-	—	Channels	—	—	0-4	—
	(I) - Typic Xerorthents-acid sulphate	No	Marshes	—	—	0-1	—
165: Urbanland-Campbell complex, 0 to 2 percent slopes, protected	(C) - Urban Land-	No	Alluvial fans	—	—	70	—
	(C) - Campbell-protected	No	Alluvial fans	—	—	20	water tables have been lowered below the soil profile by historic agricultural pumping
	(I) - Newpark-	No	Alluvial fans	—	—	0-5	—
	(I) - Clear Lake-	No	Basin floors	—	—	0-5	—
169: Urbanland-Elder complex, 0 to 2 percent slopes, protected	(C) - Urban Land-	No	Alluvial fans	—	—	70	—
	(C) - Elder-protected	No	Streams	—	—	20	—
	(I) - Caninecreek-gravelly substratum, protected	No	Streams	—	—	0-8	—
	(I) - Water-	Yes	Streams	—	Wooded under natural conditions	0-2	—
W: Water	(C) - Water-	No	—	—	—	100	—

Data Source Information

Soil Survey Area: San Mateo County, Eastern Part, and San Francisco County, California

Survey Area Data: Version 9, Jul 11, 2011

Soil Survey Area: Santa Clara Area, California, Western Part

Survey Area Data: Version 1, Jul 27, 2010

Appendix B
WETS Tables

 * Percent chance of the growing season occurring between the Beginning
 and Ending dates.

total 1948-2002 prcp

Station : CA7339, REDWOOD CITY

----- Unit = inches

yr	jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec	annl
48							0.02	0.00	0.00	0.25	M0.12	4.10	4.49
49	1.20	3.39	4.91	0.00	0.72	0.01	0.09	0.21	0.03	0.07	1.54	2.09	14.26
50	7.44	2.52	1.47	1.05	0.53	0.03	0.00	0.00	0.00	1.66	6.54	5.69	26.93
51	2.92	2.21	1.18	0.89	0.64	0.02	0.00	0.00	0.00	1.03	2.58	9.34	20.81
52	8.57	1.90	4.43	0.80	0.25	0.09	0.03	0.00	0.01	0.14	2.51	10.19	28.92
53	3.12	0.04	1.76	2.11	0.48	0.16	0.00	0.03	0.00	0.24	2.44	0.36	10.74
54	4.33	2.67	3.07	0.98	0.04	0.24	0.00	0.00	0.00	0.02	2.30	4.00	17.65
55	4.58	1.71	0.11	1.55	0.60	0.00	0.00	0.00	0.00	0.00	1.45	14.16	24.16
56	7.85	2.36	0.19	0.94	0.93	0.01	M0.00	0.00	0.22	1.10	0.00	0.35	13.95
57	2.97	4.06	1.42	1.32	2.76	0.00	0.00	0.00	0.72	1.95	0.66	4.12	19.98
58	4.61	8.82	6.52	6.37	0.30	0.20	0.00	0.00	0.10	0.01	0.12	1.06	28.11
59	5.05	4.55	0.14	0.21	0.00	0.00	0.00	0.02	3.07	0.00	0.00	1.65	14.69
60	4.51	4.57	0.89	0.65	0.63	0.00	0.00	0.00	0.00	0.05	3.15	0.99	15.44
61	1.95	0.83	2.70	0.94	0.76	0.03	0.00	0.02	0.36	0.19	3.11	1.77	12.66
62	1.84	7.58	3.29	0.25	0.00	0.00	0.00	0.01	0.01	6.39	0.33	2.82	22.52
63	4.46	3.20	3.63	2.92	0.55	0.00	0.00	0.00	0.29	0.95	3.98	0.26	20.24
64	3.60	0.27	1.67	0.13	0.56	0.75	0.00	0.08	0.00	1.30	3.59	6.63	18.58
65	3.88	1.08	1.96	3.25	0.00	0.00	0.00	0.07	0.01	0.00	4.45	5.17	19.87
66	2.18	1.81	0.24	0.66	0.13	0.09	0.30	0.04	0.10	0.00	4.04	3.56	13.15
67	10.90	0.17	5.44	4.68	0.15	0.52	0.00	0.00	0.00	0.25	1.33	2.86	26.30
68	5.44	1.42	3.43	0.78	0.07	0.00	0.00	0.11	0.00	0.37	1.95	4.75	18.32
69	9.39	8.90	1.42	1.79	0.01	0.04	0.00	0.00	0.01	1.24	0.73	4.11	27.64
70	8.77	2.04	1.43	0.40	0.04	0.06	0.00	0.00	0.00	0.74	6.69	7.42	27.59
71	1.22	0.36	2.73	0.73	0.21	0.00	0.01	0.35	0.12	0.03	0.81	4.36	10.93
72	1.15	1.21	0.09	0.86	0.00	0.08	0.00	0.00	0.47	4.19	6.29	1.80	16.14
73	7.61	6.07	2.09	0.11	0.00	0.00	0.00	0.00	0.03	1.96	7.36	4.83	30.06
74	3.46	1.05	4.64	2.11	0.00	0.13	0.22	0.00	0.00	1.20	0.69	2.59	16.09
75	1.50	4.33	5.72	1.57	0.00	0.11	0.13	0.46	0.00	1.55	0.22	0.22	15.81
76	0.27	1.92	0.84	0.79	0.00	0.03	0.02	0.90	0.52	0.38	1.11	1.23	8.01
77	1.46	0.86	1.97	0.01	1.07	0.00	0.10	0.00	0.85	0.25	2.17	3.49	12.23
78	9.05	4.95	5.01	2.83	0.02	0.00	0.00	0.00	0.36	0.00	1.73	0.52	24.47
79	5.73	4.94	3.53	1.00	0.38	0.00	0.23	0.00	0.00	2.08	1.65	M1.03	20.57
80	4.56	8.08	1.79	1.43	0.10	0.02	0.10	0.00	0.00	0.05	0.07	2.54	18.74
81	7.21	2.50	4.39	0.19	0.06	0.00	0.00	0.00	0.26	2.20	7.23	5.20	29.24
82	7.29	3.41	8.23	3.27	0.00	0.10	0.00	0.02	1.03	2.05	5.94	5.25	36.59
83	8.07	7.36	9.20	3.58	0.37	0.00	0.00	0.00	0.37	0.69	7.09	6.09	42.82
84	0.46	1.66	1.58	0.54	0.00	0.03	0.00	0.20	0.22	1.83	5.67	2.03	14.22
85	0.66	1.97	4.15	0.08	0.45	0.15	0.05	0.01	0.18	0.99	M2.87	2.57	14.13
86	2.98	10.06		0.67	0.45	0.00	0.03	0.00	0.63	0.00	0.04	1.33	16.19
87	2.84	5.01	1.60	0.22	0.03	0.00	0.00	0.00	0.00	1.05	1.60	3.93	16.28
88	3.31	0.58	0.05	1.65	0.24	0.03	0.00	0.00	0.00	0.18	1.87	3.09	11.00
89	1.59	1.37	3.27	0.95	0.05	0.03	0.00	0.00	0.64	1.72	1.42	0.00	11.04
90	2.48	2.68	0.76	0.18	1.61	0.00	0.01	0.00	0.11	0.20	0.09	2.04	10.16
91	0.33	2.94	7.87	0.33	0.15	0.15	0.00	0.17	0.13	1.70	0.40	2.63	16.80
92	1.85	6.34	3.05	0.20	0.00	0.20	0.00	0.05	0.00	1.58	0.09	6.26	19.62
93	9.81	4.78	2.51	0.63	0.44	0.31	0.00	0.00	0.00	0.41	1.40	2.08	22.37

94	1.97	4.90	0.40	0.99	1.52	0.00	0.00	0.00	0.08	0.62	5.30	2.30	18.08
95	8.55	0.13	8.45	1.16	1.53	0.69	0.00	0.00	0.00	0.00	0.00	6.10	26.61
96	6.51	6.26	3.11	1.01	1.06	0.00	0.00	0.00	0.00	0.60	2.29	6.46	27.30
97	7.84	0.08	0.31	0.28	0.37	0.35	0.00	0.81	0.00	0.62	M7.60	2.61	20.87
98	7.48	12.42	2.43	2.05	2.23	0.00	0.00	0.00	0.06	0.70	3.26	0.89	31.52
99		4.33	3.46	1.77	0.03	0.39	0.00	0.06	0.22	0.32	M1.53	0.34	12.45
0			2.36	0.92		0.13	0.00			M2.57	0.77	0.21	6.96
1	2.44	4.48	1.48	0.83	0.00	0.00	0.00		0.19	0.36	4.54	6.50	20.82
2													

Source: U.S. Department of Agriculture, Natural Resources Conservation Service. 2010

Plant Species Observed in the Delineation Study Area

Appendix C. Plant Species Observed in the Delineation Study Area

The * following a scientific name indicates that the species is not native. Wetland indicator status follows Reed (1988); nomenclature follows Reed (1988) and *The Jepson Manual, Second Edition* (Baldwin et al. 2012) and online updates.

Scientific Name	Common Name	Wetland Indicator Status‡
Trees		
<i>Acacia greggii</i> *	acacia, catclaw	FACU
<i>Acacia melanoxylon</i> *	Blackwood acacia	not listed
<i>Acer negundo</i>	box elder	FACW
<i>Alnus rhombifolia</i>	white alder	FACW
<i>Eucalyptus globulus</i> *	blue gum	not listed
<i>Juglans</i> sp.	walnut	not determined
<i>Pinus</i> spp.*	pine-ornamental	UPL
<i>Populus alba</i> *	white cottonwood	not listed
<i>Quercus agrifolia</i>	coast live oak	not listed
<i>Salix babylonica</i> *	weeping willow	FACW-
<i>Umbellularia californica</i>	California bay laurel	FAC
Shrubs and Woody Vines		
<i>Baccharis pilularis</i>	coyote brush	not listed
<i>Morella (Myrica) californica</i>	California wax myrtle	FAC+
<i>Rubus armeniacus [R. discolor]</i> *	Himalayan blackberry	FACW*
<i>Rubus ursinus [R. vitifolius]</i>	California blackberry	FACW*
<i>Salix lasiolepis</i>	arroyo willow	FACW
<i>Sambucus nigra</i> ssp. <i>caerulea (S.mexicana)</i>	blue elderberry	FAC
Forbs		
<i>Achillea millefolium</i>	yarrow	FACU
<i>Artemisia californica</i>	California sagebrush	not listed
<i>Artemisia douglasiana</i>	mugwort	FACW
<i>Atriplex prostrata (A. triangularis)</i> *	fat hen	not listed
<i>Brassica nigra</i> *	black mustard	not listed
<i>Carduus pycnocephalus</i> *	Italian thistle	not listed
<i>Carpobrotus chilensis</i> *	iceplant; sea fig	not listed
<i>Centaurea solstitialis</i> *	yellow star-thistle	not listed
<i>Centromadia fitchii</i>	Fitch's spikeweed	not listed
<i>Chenopodium</i> sp.	goosefoot	undetermined
<i>Cirsium vulgare</i> *	bull thistle	FACU

Scientific Name	Common Name	Wetland Indicator Status‡
<i>Conium maculatum</i> *	poison hemlock	FACW
<i>Convolvulus arvensis</i> *	field bindweed	not listed
<i>Conyza canadensis</i>	Canada horseweed	FAC
<i>Cotula coronopifolia</i> *	brass buttons	FACW+
<i>Cressa truxillensis</i>	alkali weed	FACW
<i>Cuscuta salina</i>	dodder	not listed
<i>Delairea [Senecio] mikanioides</i> *	Cape ivy	not listed
<i>Eschscholzia californica</i>	California poppy	not listed
<i>Foeniculum vulgare</i> *	fennel	FACU
<i>Frankenia salina</i>	alkali heath	FACW+
<i>Geranium</i> sp.*	geranium	undetermined
<i>Grindelia stricta</i>	gumplant	FACW
<i>Helminthotheca (Picris) echioides</i> *	bristly ox-tongue	FAC*
<i>Hemizonia</i> sp.	tarplant	undetermined
<i>Hirschfeldia incana</i> *	Mediterranean hoary mustard	not listed
<i>Jaumea carnosa</i>	jaumea	OBL
<i>Lactuca serriola</i> *	prickly lettuce	FAC
<i>Lepidium latifolium</i> *	perennial pepperweed	FACW
<i>Limonium californicum</i>	sea lavender	OBL
<i>Lotus corniculatus</i> *	bird's-foot trefoil	FAC
<i>Malva neglecta</i> *	common mallow	not listed
<i>Medicago polymorpha</i> *	burclover	not listed
<i>Melilotus albus [M. alba]</i> *	white sweetclover	FACU+
<i>Mesembryanthemum (Gasoul) nodiflorum</i> *	slender leaf iceplant	FACU
<i>Mimulus aurantiacus</i>	sticky monkeyflower	not listed
<i>Nicotiana</i> sp.*	tobacco plant	undetermined
<i>Plantago coronopus</i> *	buckhorn plantain	FAC
<i>Plantago lanceolata</i> *	English plantain	FAC-
<i>Plantago major</i> *	common plantain	FACW-
<i>Polygonum aviculare</i> ssp. <i>depressum</i> [<i>P. arenastrum</i>]*	common knotweed	FAC
<i>Raphanus sativus</i> *	wild radish	not listed
<i>Ricinus communis</i> *	castor bean	FACU

Scientific Name	Common Name	Wetland Indicator Status‡
<i>Rumex crispus</i> *	curly dock	FACW-
<i>Rumex pulcher</i> *	fiddle dock	FAC+
<i>Ruppia maritima</i>	widgeon grass	OBL
<i>Salicornia pacifica</i> (<i>S. virginica</i>)	pickleweed; Pacific swampfire	OBL
<i>Salsola soda</i> *	oppositeleaf Russian thistle	not listed
<i>Scrophularia californica</i>	bee plant	FAC
<i>Senecio vulgaris</i> *	common groundsel	NI*
<i>Silybum marianum</i> *	milk thistle	not listed
<i>Sonchus asper</i> ssp. <i>asper</i> *	prickly sowthistle	FAC
<i>Sonchus oleraceus</i> *	common sowthistle	NI*
<i>Spergularia macrotheca</i>	beach sand spurrey	FAC+
<i>Tamarix parviflora</i> *	smallflower tamarisk	FAC
<i>Trifolium fragiferum</i> *	strawberry clover	NI
<i>Trifolium hirtum</i> *	rose clover	not listed
<i>Typha angustifolia</i> *	narrowleaf cattail	OBL
<i>Typha latifolia</i>	broadleaf cattail	OBL
<i>Xanthium strumarium</i>	rough cockle-bur	FAC+
Grasses and Grass-like Plants		
<i>Arundo donax</i> *	giant reed	FACW
<i>Avena fatua</i> *	wild oats	not listed
<i>Bolboschoenus</i> [<i>Scirpus</i>] <i>maritimus</i>	alkali bulrush	OBL
<i>Bromus diandrus</i> *	ripgut brome	not listed
<i>Bromus hordeaceus</i> [<i>B. mollis</i>]*	soft chess	FACU-
<i>Bromus madritensis</i> ssp. <i>madritensis</i> *	foxtail chess	not listed
<i>Cortaderia jubata</i> *	purple pampas grass	not listed
<i>Cynodon dactylon</i> *	Bermuda grass	FAC
<i>Cyperus eragrostis</i>	tall flatsedge	FACW
<i>Distichlis spicata</i>	saltgrass	FACW
<i>Elymus</i> [<i>Elytrigia</i>] sp.*	wheatgrass	undetermined
<i>Elymus trachycaulus</i> [<i>Agropyron trachycaulum</i>]	slender wheatgrass	NI*
<i>Elymus</i> [<i>Leymus</i>] <i>triticoides</i>	creeping wildrye	FAC+
<i>Festuca</i> [<i>Vulpia</i>] <i>bromoides</i> *	brome fescue	FACW
<i>Festuca</i> (<i>Vulpia</i>) <i>myuros</i> *	rattail fescue	FACU*

Scientific Name	Common Name	Wetland Indicator Status‡
<i>Festuca perennis</i> [<i>Lolium perenne</i> ssp. <i>multiflorum</i>]*	Italian ryegrass	FAC*
<i>Hordeum marinum</i> ssp. <i>gussoneanum</i> [<i>H. hystrix</i>]*	Mediterranean barley	FAC
<i>Hordeum murinum</i> ssp. <i>leporinum</i> *	hare barley	NI
<i>Parapholis incurva</i> *	curved sicklegrass	OBL
<i>Paspalum dilatatum</i> *	dallis grass	FAC
<i>Phalaris aquatica</i> *	Harding grass	FAC+
<i>Poa annua</i> *	annual bluegrass	FACW-
<i>Polypogon interruptus</i> *	ditch rabbitsfoot grass	OBL
<i>Polypogon maritimus</i> *	Mediterranean rabbitsfoot grass	OBL
<i>Polypogon monspeliensis</i> *	rabbitsfoot grass	FACW+
<i>Shoenoplectus</i> [<i>Scirpus</i>] <i>acutus</i>	hardstem bulrush	OBL
<i>Spartina foliosa</i>	cordgrass	OBL
<i>Stipa miliacea</i> var. <i>miliacea</i> [<i>Piptatherum miliaceum</i>]*	smilgrass	not listed

‡ Wetland Indicator Status for Region 0, California:

OBL (obligate)—almost always occurs in wetlands (99% probability of occurrence in wetlands).

FAC (facultative)—equally likely to occur in wetlands or nonwetlands (34–66% probability).

FACU (facultative upland)—usually occurs in nonwetlands but occasionally occurs in wetlands (1–33% probability).

FACW (facultative wetland)—usually occurs in wetlands (67–99% probability).

UPL (obligate upland)—almost never occurs in wetlands (1% probability); in general, species that are not listed on the wetland plant list are assumed to be obligate upland species.

NI (no indicator)—no indicator status assigned because regional status information is lacking; the indicator status assigned to the species in the nearest adjacent region is applied, in this case, Region 9 (Northwest).

Undetermined—cannot be assigned an indicator status because plant could not be identified to species.

A plus (+) modifier indicates more frequently found in wetlands, a minus (-) modifier indicates less frequently found in wetlands; however, although these modifiers are used in Reed (1988), they are not used in the regional supplements to the 1987 Wetlands Delineation Manual. For example, FAC-, FAC, and FAC+ plants are all considered to be FAC. An asterisk (*) was assigned if the indicator status was derived from limited ecological information.

Appendix D

Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	1
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 6, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Tidal marsh	Land Surface Shape (concave, convex, planar):	Concave	Slope (%):	1
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Novato clay, 0 to 1 percent slopes	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	2	(A)	
2.							
3.				Total Number of Dominant Species Across All Strata:	2	(B)	
4.							
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)	
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
			= Total Cover	UPL species		x5 =	
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)
1. <i>Salicornia virginica</i>	50	Y	OBL	Prevalence Index = B/A =			
2. <i>Distichlis spicata</i>	30	Y	FACW				
3. <i>Atriplex triangularis</i>	10	N	FACW	Hydrophytic Vegetation Indicators:			
4. <i>Polypogon monspeliensis</i>	5	N	FACW				
5. <i>Hordeum murinum ssp. leporinum</i>	5	N	NI	X	Dominance Test is >50%		
6.				Prevalence Index is ≤3.0 ¹			
7.				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
8.							
			100	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
Woody Vine Stratum (Plot size r = 30 ft.)							
1.							
2.							
			= Total Cover	Hydrophytic Vegetation Present?			
% Bare Ground in Herb Stratum	5	% Cover of Biotic Crust	0	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-4	10YR4/3	100					cl	A1	
4-8	10YR4/3	100					sicl	A2	
8-20	Gley 1 2.5/10Y	95	7.5YR3/4	5	C	PL	sic	Bg	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input checked="" type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input checked="" type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?				
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	n/a	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	None to 20				
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	None to 20				

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	2
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 6, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Lower side slope of levee	Land Surface Shape (concave, convex, planar):	Planar	Slope (%):	20
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Novato clay, 0 to 1 percent slopes (117)	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	3	(A)	
2.							
3.				Total Number of Dominant Species Across All Strata:	1	(B)	
4.							
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	33	(A/B)	
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
			= Total Cover	UPL species		x5 =	
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)
1. <i>Lolium multiflorum</i>	35	Y	FAC	Prevalence Index = B/A =			
2. <i>Avena fatua</i>	30	Y	UPL	Hydrophytic Vegetation Indicators: Dominance Test is >50% Prevalence Index is ≤3.0 ¹			
3. <i>Brassica nigra</i>	20	Y	NL				
4. <i>Lactuca serriola</i>	10	N	FAC	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
5. <i>Picris echioides</i>	5	N	FAC				
6.				Problematic Hydrophytic Vegetation ¹ (Explain)			
7.							
8.				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
			100 = Total Cover				
Woody Vine Stratum (Plot size r = 30 ft.)				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
1.							
2.				% Bare Ground in Herb Stratum <input type="checkbox"/> 0 % Cover of Biotic Crust <input type="checkbox"/> 0			
			= Total Cover				
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 2

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

Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-10	10YR3/2	100					cl	Fill 1	
10-19	5Y3/1	85	10YR3/4	15	C	M	c	Fill 2	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Type:						
Depth (Inches):						

Remarks: Redox appears to be contemporary.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)				Secondary Indicators (2 or more required)			
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)	<input type="checkbox"/>	Water Marks (B1) (Riverine)		
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)	<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)		
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)	<input type="checkbox"/>	Drift Deposits (B3) (Riverine)		
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)	<input type="checkbox"/>	Drainage Patterns (B10)		
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/>	Dry-Season Water Table (C2)		
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)	<input type="checkbox"/>	Crayfish Burrows (C8)		
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)	<input type="checkbox"/>	Shallow Aquitard (D3)		
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)	<input type="checkbox"/>	FAC-Neutral Test (D5)		

Field Observations:

Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	n/a	Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	None to 19					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	None to 19					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	3
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 6, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Tidal marsh	Land Surface Shape (concave, convex, planar):	Concave	Slope (%):	0-1
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Novato clay, 0 to 1 percent slopes (117)	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed? N	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , naturally problematic? N (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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:				
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)		
2.								
3.				Total Number of Dominant Species Across All Strata:	1	(B)		
4.								
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)		
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:				
1.				Total % Cover of:		Multiply by:		
2.				OBL species		x1 =		
3.				FACW species		x2 =		
4.				FAC species		x3 =		
5.				FACU species		x4 =		
			= Total Cover	UPL species		x5 =		
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)	
1. <i>Lepidium latifolium</i>	90	Y	FACW	Prevalence Index = B/A =				
2. <i>Salicornia virginica</i>	10	N	OBL	Hydrophytic Vegetation Indicators: X 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)				
3.								
4.								
5.								
6.								
7.								
8.								
			100 = Total Cover					
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
1.								
2.								
			= Total Cover	Hydrophytic Vegetation Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
% Bare Ground in Herb Stratum	5	% Cover of Biotic Crust	0					
Remarks:								

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-4	10YR4/2	100					sl	A1	
4-13	10YR4/2	90					sl	A2	Stratified
	10YR3/2	10					sl	A3	Stratified
13-21	10YR4/2	75	5YR4/6	25	C	M, PL	sicl	B	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input checked="" type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input checked="" type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	Water Marks (B1) (Riverine)
		<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)
		<input type="checkbox"/>	Drift Deposits (B3) (Riverine)
		<input type="checkbox"/>	Drainage Patterns (B10)
		<input type="checkbox"/>	Dry-Season Water Table (C2)
		<input type="checkbox"/>	Crayfish Burrows (C8)
		<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
		<input type="checkbox"/>	Shallow Aquitard (D3)
		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 21					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 21					

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

Remarks:	Rhizospheres in B horizon (13-21).
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WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	4
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 6, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Lower side slope of levee	Land Surface Shape (concave, convex, planar):	Planar	Slope (%):	25
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Novato clay, 0 to 1 percent slopes (117)	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input 2"="" type="checkbox/>, significantly disturbed?</td> <td colspan="/> Are "Normal Circumstances" present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input 5"="" type="checkbox/>, naturally problematic?</td> <td colspan="/> (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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	0	(A)	
2.							
3.				Total Number of Dominant Species Across All Strata:	1	(B)	
4.							
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	0	(A/B)	
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
			= Total Cover	UPL species		x5 =	
Herb Stratum (Plot size r = 5 ft.)				Hydrophytic Vegetation Indicators:			
1. <i>Avena fatua</i>	60	Y	UPL	Column Totals:		(A)	(B)
2. <i>Raphanus sativus</i>	15	N	NL	Prevalence Index = B/A =			
3. <i>Lactuca serriola</i>	15	N	FAC	Dominance Test is >50%			
4. <i>Lepidium latifolium</i>	10	N	FACW				
5.				Prevalence Index is ≤3.0 ¹			
6.				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
7.							
8.				Problematic Hydrophytic Vegetation ¹ (Explain)			
			100	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
Woody Vine Stratum (Plot size r = 30 ft.)							
1.							
2.				Hydrophytic Vegetation Present?			
			= Total Cover				
% Bare Ground in Herb Stratum	0	% Cover of Biotic Crust	0				
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL Sampling Point: 4

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

Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-11	10YR3/2	100					I	Fill 1	
11-20	10YR3/2	85	7.5YR4/6	15	C	M	cl	Fill 2	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) **Indicators for Problematic Hydric Soils³:**

<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.	
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)		
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)		
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)		
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)				

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input type="checkbox"/>	No	X
Type:						
Depth (Inches):						

Remarks: Redox appears to be contemporary.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)				Secondary Indicators (2 or more required)			
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)	<input type="checkbox"/>	Water Marks (B1) (Riverine)		
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)	<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)		
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)	<input type="checkbox"/>	Drift Deposits (B3) (Riverine)		
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)	<input type="checkbox"/>	Drainage Patterns (B10)		
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/>	Dry-Season Water Table (C2)		
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)	<input type="checkbox"/>	Crayfish Burrows (C8)		
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)	<input type="checkbox"/>	Shallow Aquitard (D3)		
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)	<input type="checkbox"/>	FAC-Neutral Test (D5)		

Field Observations:

Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	n/a	Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	None to 20					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	None to 20					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	5
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 6, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Lower side slope of levee	Land Surface Shape (concave, convex, planar):	Concave	Slope (%):	4-5
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Botella-Urban land complex, 0 to 5 percent slopes (108)			NWI classification:	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?			Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	2	(A)	
2.							
3.				Total Number of Dominant Species Across All Strata:	2	(B)	
4.							
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)	
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
			= Total Cover	UPL species		x5 =	
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)
1. <i>Scripus robustus</i>	30	Y	OBL	Prevalence Index = B/A =			
2. <i>Grindelia stricta</i>	30	Y	FACW				
3. <i>Atriplex triangularis</i>	15	N	FACW	Hydrophytic Vegetation Indicators:			
4. <i>Salicornia virginica</i>	10	N	OBL	X	Dominance Test is >50%		
5. <i>Spergularia macrotheca</i>	10	N	FAC	Prevalence Index is ≤3.0 ¹			
6. <i>Polypogon monspeliensis</i>	5	N	FACW	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
7.							
8.				Problematic Hydrophytic Vegetation ¹ (Explain)			
			100	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
Woody Vine Stratum (Plot size r = 30 ft.)							
1.							
2.							
			= Total Cover	Hydrophytic Vegetation Present?			
% Bare Ground in Herb Stratum	5	% Cover of Biotic Crust	0	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 5

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

Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-5	10YR3/2	100					cl	A	
5-18	Gley 1 2.5/N	100					clayey muck	Bg	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input checked="" type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	X	No	<input type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input checked="" type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	X	No	<input type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 18					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 18					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	6
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 6, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Stream bank	Land Surface Shape (concave, convex, planar):	Planar	Slope (%):	45
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Botella-Urban land complex, 0 to 5 percent slopes (108)			NWI classification:	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/>	Soil <input type="checkbox"/>	Or Hydrology <input type="checkbox"/>	significantly disturbed?	Are "Normal Circumstances" present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Are Vegetation <input type="checkbox"/>	Soil <input type="checkbox"/>	Or Hydrology <input type="checkbox"/>	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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	0	(A)	
2.							
3.				Total Number of Dominant Species Across All Strata:	1	(B)	
4.							
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	0	(A/B)	
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
			= Total Cover	UPL species		x5 =	
Herb Stratum (Plot size r = 5 ft.)				Hydrophytic Vegetation Indicators:			
1. <i>Avena fatua</i>	85	Y	UPL	Column Totals:		(A)	(B)
2. <i>Lepidium latifolium</i>	10	N	FACW	Prevalence Index = B/A =			
3. <i>Brassica nigra</i>	5	N	NL	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)			
4.							
5.							
6.							
7.							
8.							
			100 = Total Cover	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
Woody Vine Stratum (Plot size r = 30 ft.)							
1.							
2.				Hydrophytic Vegetation Present?			
			= Total Cover				
% Bare Ground in Herb Stratum	0	% Cover of Biotic Crust	0				
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth	Matrix		Redox Features				Texture	Horizon	Remarks	
(inches)	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²				
0-19	10YR4/3	100					fsl	A		

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.	
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)				
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (any one indicator is sufficient)			Secondary Indicators (2 or more required)		
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)	<input type="checkbox"/>	Water Marks (B1) (Riverine)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)	<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)	<input type="checkbox"/>	Drift Deposits (B3) (Riverine)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)	<input type="checkbox"/>	Drainage Patterns (B10)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/>	Dry-Season Water Table (C2)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)	<input type="checkbox"/>	Crayfish Burrows (C8)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)	<input type="checkbox"/>	Shallow Aquitard (D3)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)	<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 19					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 19					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	7
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 6, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	1
Landform (hillslope, terrace, etc.):	Diked tidal marsh	Land Surface Shape (concave, convex, planar):	Concave	Slope (%):	0
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Novato clay, 0 to 1 percent slopes (117)	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:				
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)		
2.								
3.				Total Number of Dominant Species Across All Strata:	1	(B)		
4.								
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)		
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:				
1.				Total % Cover of:		Multiply by:		
2.				OBL species		x1 =		
3.				FACW species		x2 =		
4.				FAC species		x3 =		
5.				FACU species		x4 =		
			= Total Cover	UPL species		x5 =		
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)	
1. <i>Ruppia maritima</i>	80	Y	OBL	Prevalence Index = B/A =				
2.				Hydrophytic Vegetation Indicators: X 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)				
3.								
4.								
5.								
6.								
7.								
8.								
			80 = Total Cover					
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
1.								
2.								
			= Total Cover	Hydrophytic Vegetation Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
% Bare Ground in Herb Stratum	20	% Cover of Biotic Crust	0					
Remarks:	Pickleweed and rabbitsfoot grass present around edges of depression.							

Project Site: San Francisquito Creek Flood Protection Project

SOIL Sampling Point: 7

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

Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-3	5YR4/1	65	7.5YR4/4	35	C	M	c	A1	
3-13	10YR4/1	70	7.5YR4/4	30	C	M	c	A2	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.	
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)				
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input checked="" type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	Water Marks (B1) (Riverine)
		<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)
		<input type="checkbox"/>	Drift Deposits (B3) (Riverine)
		<input type="checkbox"/>	Drainage Patterns (B10)
		<input type="checkbox"/>	Dry-Season Water Table (C2)
		<input type="checkbox"/>	Crayfish Burrows (C8)
		<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
		<input type="checkbox"/>	Shallow Aquitard (D3)
		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 13					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 13					

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

Remarks:	
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WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	8
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 6, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Levee slope	Land Surface Shape (concave, convex, planar):	Planar	Slope (%):	90
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Novato clay, 0 to 1 percent slopes (117)	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:				
5.				Number of Dominant Species That Are OBL, FACW, or FAC:	0	(A)		
6.								
7.				Total Number of Dominant Species Across All Strata:	1	(B)		
8.								
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	0	(A/B)		
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:				
6.				<u>Total % Cover of:</u>		<u>Multiply by:</u>		
7.				OBL species		x1 =		
8.				FACW species		x2 =		
9.				FAC species		x3 =		
10.				FACU species		x4 =		
			= Total Cover	UPL species		x5 =		
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)	
9. <i>Avena fatua</i>	35	Y	UPL	Prevalence Index = B/A =				
10. <i>Picris echioides</i>	5	N	FAC					
11. <i>Malva</i> sp.	5	N	NL	Hydrophytic Vegetation Indicators:				
12. <i>Lolium multiflorum</i>	5	N	FAC	Dominance Test is >50%				
13.				Prevalence Index is ≤3.0 ¹				
14.				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)				
15.								
16.				Problematic Hydrophytic Vegetation ¹ (Explain)				
			50	= Total Cover				
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
3.								
4.								
			= Total Cover					
% Bare Ground in Herb Stratum	50	% Cover of Biotic Crust	0	Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		
Remarks:	Part of levee slope was burned = bare soil.							

Project Site: San Francisquito Creek Flood Protection Project

SOIL Sampling Point: 8

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

Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-18	10YR3/1	100					grcl	Fill	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.	
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)				
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	Water Marks (B1) (Riverine)
		<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)
		<input type="checkbox"/>	Drift Deposits (B3) (Riverine)
		<input type="checkbox"/>	Drainage Patterns (B10)
		<input type="checkbox"/>	Dry-Season Water Table (C2)
		<input type="checkbox"/>	Crayfish Burrows (C8)
		<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
		<input type="checkbox"/>	Shallow Aquitard (D3)
		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):						n/a
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):						None to 18
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):						None to 18

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

Remarks:	
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WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	9
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 6, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Diked tidal marsh	Land Surface Shape (concave, convex, planar):	Concave	Slope (%):	0-1
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Novato clay, 0 to 1 percent slopes (117)	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed? Y	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
Remarks:	Area disturbed by vehicles/bikes.				

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:		2	(A)
2.				Total Number of Dominant Species Across All Strata:		2	(B)
3.				Percent of Dominant Species That Are OBL, FACW, or FAC:		100	(A/B)
4.				= Total Cover			
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
= Total Cover				UPL species		x5 =	
Herb Stratum (Plot size r = 5 ft.)				Column Totals:			
1. <i>Ruppia maritima</i>	40	Y	OBL			(A)	(B)
2. <i>Salicornia virginica</i>	50	Y	OBL	Prevalence Index = B/A =			
3.				Hydrophytic Vegetation Indicators:			
4.				X	Dominance Test is >50%		
5.				Prevalence Index is ≤3.0 ¹			
6.				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
7.							
8.				Problematic Hydrophytic Vegetation ¹ (Explain)			
90 = Total Cover				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
Woody Vine Stratum (Plot size r = 30 ft.)							
1.							
2.				Hydrophytic Vegetation Present?			
= Total Cover							
% Bare Ground in Herb Stratum	10	% Cover of Biotic Crust	0	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-4	10YR4/2	100					cl	Fill	Disturbed
4-18	10YR4/1	80	7.5YR4/4	20	C	M	c	Ab	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input checked="" type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input checked="" type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 18					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 18					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	10
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 6, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Fill mound	Land Surface Shape (concave, convex, planar):	Planar	Slope (%):	20
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Novato clay, 0 to 1 percent slopes (117)	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)	
2.							
3.				Total Number of Dominant Species Across All Strata:	2	(B)	
4.							
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	50	(A/B)	
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
			= Total Cover	UPL species		x5 =	
Herb Stratum (Plot size r = 5 ft.)				Hydrophytic Vegetation Indicators:			
1. <i>Avena fatua</i>	60	Y	UPL	Column Totals:		(A)	(B)
2. <i>Rumex</i> sp.	20	Y	FACW	Prevalence Index = B/A =			
3. <i>Malva</i> sp.	10	N	NL	Hydrophytic Vegetation Indicators:			
4. <i>Picris echioides</i>	5	N	FAC				
5. <i>Lactuca serriola</i>	5	N	FAC	Prevalence Index is ≤3.0 ¹			
6.				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
7.							
8.				Problematic Hydrophytic Vegetation ¹ (Explain)			
			100	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
Woody Vine Stratum (Plot size r = 30 ft.)							
1.							
2.				Hydrophytic Vegetation Present?			
			= Total Cover				
% Bare Ground in Herb Stratum	5	% Cover of Biotic Crust	0				
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 10

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

Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-19	10YR4/4	100					cl	Fill	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.	
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)				
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	Water Marks (B1) (Riverine)
<input type="checkbox"/>		<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)
<input type="checkbox"/>		<input type="checkbox"/>	Drift Deposits (B3) (Riverine)
<input type="checkbox"/>		<input type="checkbox"/>	Drainage Patterns (B10)
<input type="checkbox"/>		<input type="checkbox"/>	Dry-Season Water Table (C2)
<input type="checkbox"/>		<input type="checkbox"/>	Crayfish Burrows (C8)
<input type="checkbox"/>		<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/>		<input type="checkbox"/>	Shallow Aquitard (D3)
<input type="checkbox"/>		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 19					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 19					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	11
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 6, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Diked tidal marsh	Land Surface Shape (concave, convex, planar):	Concave	Slope (%):	0-1
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Novato clay, 0 to 1 percent slopes (117)	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:				
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)		
2.					Total Number of Dominant Species Across All Strata:	1	(B)	
3.				Percent of Dominant Species That Are OBL, FACW, or FAC:		100	(A/B)	
4.						= Total Cover		
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:				
1.				Total % Cover of:		Multiply by:		
2.				OBL species	x1 =			
3.				FACW species	x2 =			
4.				FAC species	x3 =			
5.				FACU species	x4 =			
= Total Cover				UPL species	x5 =			
Herb Stratum (Plot size r = 5 ft.)				Hydrophytic Vegetation Indicators:				
1. <i>Salicornia virginica</i>	50	Y	OBL	Column Totals:	(A)		(B)	
2. <i>Hordeum marinum ssp. gussoneanum</i>	10	N	FAC	Prevalence Index = B/A =				
3. <i>Salsola soda</i>	10	N	NL	Hydrophytic Vegetation Indicators:				
4. <i>Distichlis spicata</i>	10	N	FACW	X	Dominance Test is >50%			
5.				Prevalence Index is ≤3.0 ¹				
6.				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)				
7.				Problematic Hydrophytic Vegetation ¹ (Explain)				
8.								
80 = Total Cover								
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
1.								
2.								
= Total Cover				Hydrophytic Vegetation Present?				
% Bare Ground in Herb Stratum	20	% Cover of Biotic Crust	0	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
Remarks:	Area has been mowed.							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 11

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

Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-9	10YR3/2	75	7.5YR4/6	25	C	PL, M	cl	A1	
9-20	10YR4/1	70	7.5YR4/6	30	C	M	sicl	A2	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input checked="" type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input checked="" type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input checked="" type="checkbox"/>	Surface Soil Cracks (B6) Some	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 20					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 20					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	12
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 6, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Toe of levee	Land Surface Shape (concave, convex, planar):	Planar	Slope (%):	10
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Novato clay, 0 to 1 percent slopes (117)	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	0	(A)	
2.							
3.				Total Number of Dominant Species Across All Strata:	1	(B)	
4.							
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)	
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
			= Total Cover	UPL species		x5 =	
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)
1. <i>Avena fatua</i>	95	Y	UPL	Prevalence Index = B/A =			
2. <i>Distichlis spicata</i>	5	N	FACW				
3.				Hydrophytic Vegetation Indicators:			
4.				Dominance Test is >50%			
5.				Prevalence Index is ≤3.0 ¹			
6.				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
7.							
8.				Problematic Hydrophytic Vegetation ¹ (Explain)			
			100	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
Woody Vine Stratum (Plot size r = 30 ft.)							
1.							
2.							
			= Total Cover	Hydrophytic Vegetation Present?			
% Bare Ground in Herb Stratum	0	% Cover of Biotic Crust	0	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 12

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-19	10YR3/2	100					cl	Fill	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.	
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)				
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (any one indicator is sufficient)			Secondary Indicators (2 or more required)		
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)	<input type="checkbox"/>	Water Marks (B1) (Riverine)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)	<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)	<input type="checkbox"/>	Drift Deposits (B3) (Riverine)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)	<input type="checkbox"/>	Drainage Patterns (B10)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/>	Dry-Season Water Table (C2)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)	<input type="checkbox"/>	Crayfish Burrows (C8)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)	<input type="checkbox"/>	Shallow Aquitard (D3)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)	<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 19					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 19					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	13
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 6, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Diked tidal marsh	Land Surface Shape (concave, convex, planar):	Concave	Slope (%):	0-1
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Novato clay, 0 to 1 percent slopes (117)	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:		2	(A)
2.				Total Number of Dominant Species Across All Strata:		3	(B)
3.				Percent of Dominant Species That Are OBL, FACW, or FAC:		66	(A/B)
4.				= Total Cover			
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
6.				UPL species		x5 =	
= Total Cover				Column Totals:		(A)	(B)
1. <i>Salicornia virginica</i>	45	Y	OBL	Prevalence Index = B/A =			
2. <i>Polypogon maritimus</i>	10	N	OBL	Hydrophytic Vegetation Indicators:			
3. <i>Lolium multiflorum</i>	20	N	FAC				
4. <i>Salsola soda</i>	20	N	NL	X	Dominance Test is >50%		
5. <i>Atriplex triangularis</i>	5	N	FACW	Prevalence Index is ≤3.0 ¹			
6.				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
7.							
8.				Problematic Hydrophytic Vegetation ¹ (Explain)			
= Total Cover							
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
1.							
2.				Hydrophytic Vegetation Present?			
= Total Cover							
% Bare Ground in Herb Stratum	10	% Cover of Biotic Crust	0	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth	Matrix		Redox Features				Texture	Horizon	Remarks
(inches)	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-8	10YR3/2	93	7.5YR5/6	7	C	PL	cl	A1	
8-17	10YR4/1	85	7.5YR4/4	15	C	M	c	A2	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input checked="" type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	Water Marks (B1) (Riverine)
		<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)
		<input type="checkbox"/>	Drift Deposits (B3) (Riverine)
		<input type="checkbox"/>	Drainage Patterns (B10)
		<input type="checkbox"/>	Dry-Season Water Table (C2)
		<input type="checkbox"/>	Crayfish Burrows (C8)
		<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
		<input type="checkbox"/>	Shallow Aquitard (D3)
		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 17					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 17					

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

Remarks:										
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WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	14
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 6, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Levee slope	Land Surface Shape (concave, convex, planar):	Planar	Slope (%):	70
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Novato clay, 0 to 1 percent slopes (117)	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:				
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)		
2.								
3.				Total Number of Dominant Species Across All Strata:	3	(B)		
4.								
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	33	(A/B)		
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:				
1.				Total % Cover of:		Multiply by:		
2.				OBL species		x1 =		
3.				FACW species		x2 =		
4.				FAC species		x3 =		
5.				FACU species		x4 =		
			= Total Cover	UPL species		x5 =		
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)	
1. <i>Avena fatua</i>	60	Y	UPL	Prevalence Index = B/A =				
2. <i>Picris echioides</i>	20	Y	FAC					
3. <i>Malva</i> sp.	20	Y	NL	Hydrophytic Vegetation Indicators:				
4.				Dominance Test is >50%				
5.				Prevalence Index is ≤3.0 ¹				
6.				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)				
7.								
8.				Problematic Hydrophytic Vegetation ¹ (Explain)				
			100	= Total Cover				
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
1.								
2.								
			= Total Cover					
% Bare Ground in Herb Stratum	0	% Cover of Biotic Crust	0	Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		
Remarks:								

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 14

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

Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-11	10YR3/1	100					vgrcl	Fill	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.	
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)				
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:	Refusal by gravel at 11".					

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	Water Marks (B1) (Riverine)
		<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)
		<input type="checkbox"/>	Drift Deposits (B3) (Riverine)
		<input type="checkbox"/>	Drainage Patterns (B10)
		<input type="checkbox"/>	Dry-Season Water Table (C2)
		<input type="checkbox"/>	Crayfish Burrows (C8)
		<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
		<input type="checkbox"/>	Shallow Aquitard (D3)
		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 11					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 11					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	15
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 6, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Salt marsh	Land Surface Shape (concave, convex, planar):	Concave	Slope (%):	0
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Novato clay, 0 to 1 percent slopes (117)	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)	
2.							
3.				Total Number of Dominant Species Across All Strata:	1	(B)	
4.							
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)	
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
			= Total Cover	UPL species		x5 =	
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)
1. <i>Salicornia virginica</i>	90	Y	OBL	Prevalence Index = B/A =			
2. <i>Jaumea carnosa</i>	10	N	OBL				
3.				Hydrophytic Vegetation Indicators:			
4.				X	Dominance Test is >50%		
5.					Prevalence Index is ≤3.0 ¹		
6.					Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
7.							
8.					Problematic Hydrophytic Vegetation ¹ (Explain)		
			100	= Total Cover			
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
1.							
2.							
			= Total Cover	Hydrophytic Vegetation Present?			
% Bare Ground in Herb Stratum	0	% Cover of Biotic Crust	0	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 15

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

Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-8	10YR4/1	100					sic	A1	
8-18	10YR4/1	70	7.5YR4/6	30	C	M	sic	A2	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:	Dredged spoils deposited approximately in 1970's.					

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input checked="" type="checkbox"/>	Saturation (A3) *	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:							Wetland Hydrology Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	X	Depth (inches):	n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	X	Depth (inches):	None to 18					
Saturation Present? (includes capillary fringe)	Yes	X	No	<input type="checkbox"/>	Depth (inches):	9					

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

Remarks: * Saturation between ped faces only.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	16
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 6, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Fill area in restored tidal marsh	Land Surface Shape (concave, convex, planar):	Planar	Slope (%):	2
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Novato clay, 0 to 1 percent slopes (117)	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:		1	(A)
2.				Total Number of Dominant Species Across All Strata:		1	(B)
3.				Percent of Dominant Species That Are OBL, FACW, or FAC:		100	(A/B)
4.				= Total Cover			
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
6.				UPL species		x5 =	
= Total Cover				Column Totals:		(A)	(B)
1. <i>Distichlis spicata</i>				70	Y	FACW	Prevalence Index = B/A =
2. <i>Salicornia virginica</i>				10	N	OBL	
3. <i>Grindelia stricta</i>				10	N	FACW	Hydrophytic Vegetation Indicators:
4. <i>Frankenia salina</i>				10	N	FACW	
5.							
6.							Prevalence Index is $\leq 3.0^1$
7.							Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
8.							Problematic Hydrophytic Vegetation ¹ (Explain)
= Total Cover				100			
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
1.							
2.							
= Total Cover				Hydrophytic Vegetation Present?			
% Bare Ground in Herb Stratum	0	% Cover of Biotic Crust	0	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 16

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

Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-7	10YR3/2	100					cl	A1	Fill
7-18	10YR4/1	50					sic	A2	variegated
	and 10YR5/4	50							

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	Water Marks (B1) (Riverine)
		<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)
		<input type="checkbox"/>	Drift Deposits (B3) (Riverine)
		<input type="checkbox"/>	Drainage Patterns (B10)
		<input type="checkbox"/>	Dry-Season Water Table (C2)
		<input type="checkbox"/>	Crayfish Burrows (C8)
		<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
		<input type="checkbox"/>	Shallow Aquitard (D3)
		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 18					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 18					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	17
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 7, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Salt marsh	Land Surface Shape (concave, convex, planar):	Concave/planar	Slope (%):	0
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Novato clay, 0 to 1 percent slopes (117)	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:		1	(A)
2.				Total Number of Dominant Species Across All Strata:		1	(B)
3.							
4.							
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:		100	(A/B)
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
			= Total Cover	UPL species		x5 =	
Herb Stratum (Plot size r = 5 ft.)				Column Totals:			
1. <i>Salicornia virginica</i>	100	Y	OBL			(A)	(B)
2.				Prevalence Index = B/A =			
3.				Hydrophytic Vegetation Indicators:			
4.				X	Dominance Test is >50%		
5.					Prevalence Index is ≤3.0 ¹		
6.					Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
7.					Problematic Hydrophytic Vegetation ¹ (Explain)		
8.							
			= Total Cover				
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
1.							
2.							
			= Total Cover	Hydrophytic Vegetation Present?			
% Bare Ground in Herb Stratum	0	% Cover of Biotic Crust	0	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 17

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

Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-15	10YR5/1	80	5YR4/6	20	C	M	sic	A1	
15-16	Gley 1 3/N	100					sic	A2	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)				Secondary Indicators (2 or more required)			
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)	<input type="checkbox"/>	Water Marks (B1) (Riverine)		
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)	<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)		
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)	<input type="checkbox"/>	Drift Deposits (B3) (Riverine)		
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)	<input type="checkbox"/>	Drainage Patterns (B10)		
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/>	Dry-Season Water Table (C2)		
<input checked="" type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)	<input type="checkbox"/>	Crayfish Burrows (C8)		
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)	<input type="checkbox"/>	Shallow Aquitard (D3)		
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)	<input type="checkbox"/>	FAC-Neutral Test (D5)		

Field Observations:							Wetland Hydrology Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	15					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	13					

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

Remarks:	
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WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	18
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 7, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Toe of levee	Land Surface Shape (concave, convex, planar):	Planar	Slope (%):	10
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Novato clay, 0 to 1 percent slopes (117)	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)	
2.							
3.				Total Number of Dominant Species Across All Strata:	2	(B)	
4.							
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	50	(A/B)	
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
			= Total Cover	UPL species		x5 =	
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)
1. <i>Brassica nigra</i>	60	Y	NL	Prevalence Index = B/A =			
2. <i>Frankenia salina</i>	25	Y	FACW				
3. <i>Salicornia virginica</i>	10	N	OBL	Hydrophytic Vegetation Indicators:			
4.				Dominance Test is >50%			
5.				Prevalence Index is ≤3.0 ¹			
6.				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
7.							
8.				Problematic Hydrophytic Vegetation ¹ (Explain)			
			100	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
Woody Vine Stratum (Plot size r = 30 ft.)							
1.							
2.							
			= Total Cover	Hydrophytic Vegetation Present?			
% Bare Ground in Herb Stratum	0	% Cover of Biotic Crust	0	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 18

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-14	10YR4/1	65	10YR4/4	35	C	M	c	Fill	Relic Redox
14-18	10YR4/1	75	7.5YR4/6	25	C	M, PL	sic	Ab	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:	Relictual redox – not hydric.					

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	Water Marks (B1) (Riverine)
		<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)
		<input type="checkbox"/>	Drift Deposits (B3) (Riverine)
		<input type="checkbox"/>	Drainage Patterns (B10)
		<input type="checkbox"/>	Dry-Season Water Table (C2)
		<input type="checkbox"/>	Crayfish Burrows (C8)
		<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
		<input type="checkbox"/>	Shallow Aquitard (D3)
		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 18					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 18					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	19
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 7, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Salt marsh	Land Surface Shape (concave, convex, planar):	Concave/planar	Slope (%):	0
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Novato clay, 0 to 1 percent slopes (117)	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:				
1.				Number of Dominant Species That Are OBL, FACW, or FAC:		1	(A)	
2.				Total Number of Dominant Species Across All Strata:		1	(B)	
3.				Percent of Dominant Species That Are OBL, FACW, or FAC:		100	(A/B)	
4.				= Total Cover				
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:				
1.				Total % Cover of:		Multiply by:		
2.				OBL species		x1 =		
3.				FACW species		x2 =		
4.				FAC species		x3 =		
5.				FACU species		x4 =		
6.				UPL species		x5 =		
= Total Cover				Column Totals:		(A)	(B)	
= Total Cover				Prevalence Index = B/A =				
Herb Stratum (Plot size r = 5 ft.)				Hydrophytic Vegetation Indicators:				
1. <i>Salicornia virginica</i>	100	Y	OBL	X	Dominance Test is >50%			
2.					Prevalence Index is ≤3.0 ¹			
3.					Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
4.					Problematic Hydrophytic Vegetation ¹ (Explain)			
5.								
6.								
7.								
8.								
= Total Cover				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
Woody Vine Stratum (Plot size r = 30 ft.)								
1.								
2.				= Total Cover				
= Total Cover				Hydrophytic Vegetation Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
% Bare Ground in Herb Stratum	10	% Cover of Biotic Crust	0					
Remarks:								

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 19

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

Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-8	10YR5/1	75	5YR4/6	25	C	M	sic	A	
8-22	Gley 1 4/N	100					sic	Bg	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input checked="" type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	Water Marks (B1) (Riverine)
		<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)
		<input type="checkbox"/>	Drift Deposits (B3) (Riverine)
		<input type="checkbox"/>	Drainage Patterns (B10)
		<input type="checkbox"/>	Dry-Season Water Table (C2)
		<input type="checkbox"/>	Crayfish Burrows (C8)
		<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
		<input type="checkbox"/>	Shallow Aquitard (D3)
		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): 20 *					
Saturation Present? (includes capillary fringe)	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Depth (inches): 4					

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

Remarks: * Not yet stabilized.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	20
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 7, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Levee top	Land Surface Shape (concave, convex, planar):	Planar	Slope (%):	0
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Novato clay, 0 to 1 percent slopes (117)	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation	<input type="checkbox"/>	Soil	<input type="checkbox"/>	Or Hydrology	<input type="checkbox"/>
significantly disturbed?			Are "Normal Circumstances" present?		
			Yes	<input checked="" type="checkbox"/>	No
			<input type="checkbox"/>		
Are Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> Or Hydrology <input type="checkbox"/> 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	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Hydric Soil Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>			<input type="checkbox"/>		<input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>					
Remarks:									

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:					
1.				Number of Dominant Species That Are OBL, FACW, or FAC:		1		(A)	
2.									
3.				Total Number of Dominant Species Across All Strata:		2		(B)	
4.									
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:		50		(A/B)	
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:					
1.				Total % Cover of:			Multiply by:		
2.				OBL species			x1 =		
3.				FACW species			x2 =		
4.				FAC species			x3 =		
5.				FACU species			x4 =		
			= Total Cover	UPL species			x5 =		
Herb Stratum (Plot size r = 5 ft.)				Hydrophytic Vegetation Indicators:					
1. <i>Mesembryanthemum nodiflorum</i>	40	Y	NL	Column Totals:		(A)		(B)	
2. <i>Frankenia salina</i>	40	Y	FACW	Prevalence Index = B/A =					
3. <i>Bromus diandrus</i>	10	N	UPL	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)					
4.									
5.									
6.									
7.									
8.									
			90	= Total Cover					
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.					
1.									
2.									
			= Total Cover	Hydrophytic Vegetation Present?					
% Bare Ground in Herb Stratum	10	% Cover of Biotic Crust	0						
Remarks:									

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 20

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

Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-5	10YR4/2	100					cl	Fill 1	
5-21	10YR3/1	85	7.5YR3/2	15	C	M	sic	Fill 2	Relic redox

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	Water Marks (B1) (Riverine)
		<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)
		<input type="checkbox"/>	Drift Deposits (B3) (Riverine)
		<input type="checkbox"/>	Drainage Patterns (B10)
		<input type="checkbox"/>	Dry-Season Water Table (C2)
		<input type="checkbox"/>	Crayfish Burrows (C8)
		<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
		<input type="checkbox"/>	Shallow Aquitard (D3)
		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 21					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 21					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	21
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 7, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Salt marsh	Land Surface Shape (concave, convex, planar):	Planar	Slope (%):	0
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Novato clay, 0 to 1 percent slopes (117)	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:				
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)		
2.					Total Number of Dominant Species Across All Strata:	1	(B)	
3.				Percent of Dominant Species That Are OBL, FACW, or FAC:		100		(A/B)
4.								
			= Total Cover					
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:				
1.				Total % Cover of:		Multiply by:		
2.				OBL species		x1 =		
3.				FACW species		x2 =		
4.				FAC species		x3 =		
5.				FACU species		x4 =		
			= Total Cover	UPL species		x5 =		
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)	
1. <i>Salicornia virginica</i>	100	Y	OBL	Prevalence Index = B/A =				
2. <i>Distichlis spicata</i>	5	N	FACW					
3.				Hydrophytic Vegetation Indicators:				
4.				X	Dominance Test is >50%			
5.					Prevalence Index is ≤3.0 ¹			
6.					Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
7.					Problematic Hydrophytic Vegetation ¹ (Explain)			
8.								
			105	= Total Cover				
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
1.								
2.								
			= Total Cover					
% Bare Ground in Herb Stratum	0	% Cover of Biotic Crust	0	Hydrophytic Vegetation Present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Remarks:								

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 21

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

Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-11	10YR4/1	85	5YR4/6	15	C	M	sic	A	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) **Indicators for Problematic Hydric Soils³:**

<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.	
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)		
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)		
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)		
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)				

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)				Secondary Indicators (2 or more required)			
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)	<input type="checkbox"/>	Water Marks (B1) (Riverine)	<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)	<input type="checkbox"/>	Aquatic Invertebrates (B13)	<input type="checkbox"/>	Drift Deposits (B3) (Riverine)
<input checked="" type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/>	Drainage Patterns (B10)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/>	Dry-Season Water Table (C2)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Thin Muck Surface (C7)	<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
<input checked="" type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Other (Explain in Remarks)	<input type="checkbox"/>	Shallow Aquitard (D3)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	FAC-Neutral Test (D5)		

Field Observations:						Wetland Hydrology Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Depth (inches): 10 *					
Saturation Present? (includes capillary fringe)	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Depth (inches): 3					

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

Remarks:	* Water table not yet stabilized.
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WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	22
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 7, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Levee slope near toe	Land Surface Shape (concave, convex, planar):	Planar	Slope (%):	30
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Novato clay, 0 to 1 percent slopes (117)	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:				
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)		
2.								
3.				Total Number of Dominant Species Across All Strata:	3	(B)		
4.								
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	33	(A/B)		
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:				
1.				Total % Cover of:		Multiply by:		
2.				OBL species		x1 =		
3.				FACW species		x2 =		
4.				FAC species		x3 =		
5.				FACU species		x4 =		
			= Total Cover	UPL species		x5 =		
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)	
1. <i>Brassica nigra</i>	60	Y	NL	Prevalence Index = B/A =				
2. <i>Carduus pycnocephalus</i>	20	Y	NL					
3. <i>Salicornia virginica</i>	20	Y	OBL	Hydrophytic Vegetation Indicators:				
4.				Dominance Test is >50%				
5.				Prevalence Index is ≤3.0 ¹				
6.				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)				
7.								
8.				Problematic Hydrophytic Vegetation ¹ (Explain)				
			100	= Total Cover				
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
1.								
2.								
			= Total Cover					
% Bare Ground in Herb Stratum	0	% Cover of Biotic Crust	0	Hydrophytic Vegetation Present?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Remarks:								

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 22

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth	Matrix		Redox Features						
(inches)	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²	Texture	Horizon	Remarks
0-13	10YR3/2	100					c	Fill	
13-19	10YR3/1	95	7.5YR4/6	5	C	PL	c	Ab	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	Water Marks (B1) (Riverine)
		<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)
		<input type="checkbox"/>	Drift Deposits (B3) (Riverine)
		<input type="checkbox"/>	Drainage Patterns (B10)
		<input type="checkbox"/>	Dry-Season Water Table (C2)
		<input type="checkbox"/>	Crayfish Burrows (C8)
		<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
		<input type="checkbox"/>	Shallow Aquitard (D3)
		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:											
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	n/a	Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	None to 19					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	None to 19					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	23
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 7, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Diked tidal slope	Land Surface Shape (concave, convex, planar):	Planar	Slope (%):	3
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	(no mapping data available)			NWI classification:	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input 3"="" type="checkbox/>, significantly disturbed?</td> <td colspan="/> Are "Normal Circumstances" present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input 5"="" type="checkbox/>, naturally problematic?</td> <td colspan="/> (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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)	
2.							
3.				Total Number of Dominant Species Across All Strata:	2	(B)	
4.							
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	50	(A/B)	
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
			= Total Cover	UPL species		x5 =	
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)
1. <i>Brassica nigra</i>	30	Y	NL	Prevalence Index = B/A =			
2. <i>Lepidium latifolium</i>	10	N	FACW	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)			
3. <i>Mesembryanthemum nodiflorum</i>	10	N	UPL				
4. <i>Frankenia salina</i>	10	N	FACW				
5. <i>Salicornia virginica</i>	20	Y	OBL				
6. <i>Hordeum marinum ssp. gussoneanum</i>	5	N	FAC				
7. <i>Bromus madritensis ssp. madritensis</i>	10	N	UPL				
8. unknown tarweed	5	N					
			= Total Cover				
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
1.							
2.							
			= Total Cover	Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
% Bare Ground in Herb Stratum	20	% Cover of Biotic Crust	0				
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 23

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

Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-10	10YR3/1	100					grcl	Fill 1	
10-12	10YR3/2	95	10YR3/4	5	C	M	grcl	Fill 2	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:	Refusal at 12" by gravel.					

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)				Secondary Indicators (2 or more required)			
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)	<input type="checkbox"/>	Water Marks (B1) (Riverine)		
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)	<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)		
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)	<input type="checkbox"/>	Drift Deposits (B3) (Riverine)		
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)	<input type="checkbox"/>	Drainage Patterns (B10)		
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/>	Dry-Season Water Table (C2)		
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)	<input type="checkbox"/>	Crayfish Burrows (C8)		
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)	<input type="checkbox"/>	Shallow Aquitard (D3)		
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)	<input type="checkbox"/>	FAC-Neutral Test (D5)		

Field Observations:

Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	n/a	Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	None to 12					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	None to 12					

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

Remarks:	
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WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	24
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 7, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Diked tidal marsh	Land Surface Shape (concave, convex, planar):	Concave	Slope (%):	1
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	(no mapping data available)			NWI classification:	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?			Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:				
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)		
2.								
3.				Total Number of Dominant Species Across All Strata:	1	(B)		
4.								
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)		
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:				
1.				Total % Cover of:		Multiply by:		
2.				OBL species		x1 =		
3.				FACW species		x2 =		
4.				FAC species		x3 =		
5.				FACU species		x4 =		
			= Total Cover	UPL species		x5 =		
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)	
1. <i>Salicornia virginica</i>	65	Y	OBL	Prevalence Index = B/A =				
2.				Hydrophytic Vegetation Indicators: X 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)				
3.								
4.								
5.								
6.								
7.								
8.								
			= Total Cover					
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
1.								
2.								
			= Total Cover	Hydrophytic Vegetation Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
% Bare Ground in Herb Stratum	35	% Cover of Biotic Crust	0					
Remarks:								

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 24

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

Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-17	10YR4/1	65	5YR4/6	35	C	M	sic	A	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.	
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)				
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input checked="" type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 17					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 17					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	25
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 7, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Diked tidal marsh	Land Surface Shape (concave, convex, planar):	Planar	Slope (%):	2-5
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	(no mapping data available)			NWI classification:	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?			Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:				
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)		
2.								
3.				Total Number of Dominant Species Across All Strata:	1	(B)		
4.								
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)		
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:				
1.				Total % Cover of:		Multiply by:		
2.				OBL species		x1 =		
3.				FACW species		x2 =		
4.				FAC species		x3 =		
5.				FACU species		x4 =		
			= Total Cover	UPL species		x5 =		
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)	
1. <i>Salicornia virginica</i>	100	Y	OBL	Prevalence Index = B/A =				
2.				Hydrophytic Vegetation Indicators: X 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)				
3.								
4.								
5.								
6.								
7.								
8.								
			= Total Cover					
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
1.								
2.								
			= Total Cover	Hydrophytic Vegetation Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
% Bare Ground in Herb Stratum	10	% Cover of Biotic Crust	0					
Remarks:								

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 25

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth	Matrix		Redox Features						
(inches)	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²	Texture	Horizon	Remarks
0-5	10YR3/1	100					vgrl	Fill	
5-12	10YR3/2	85	7.5YR4/6	15	C	PL	c	Ab	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input checked="" type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input checked="" type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	Water Marks (B1) (Riverine)
		<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)
		<input type="checkbox"/>	Drift Deposits (B3) (Riverine)
		<input type="checkbox"/>	Drainage Patterns (B10)
		<input type="checkbox"/>	Dry-Season Water Table (C2)
		<input type="checkbox"/>	Crayfish Burrows (C8)
		<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
		<input type="checkbox"/>	Shallow Aquitard (D3)
		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:											
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	n/a	Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	None to 12					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	None to 12					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	26
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 7, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Diked tidal marsh	Land Surface Shape (concave, convex, planar):	Planar	Slope (%):	2
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	(no mapping data available)			NWI classification:	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?			Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:				
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)		
2.								
3.				Total Number of Dominant Species Across All Strata:	1	(B)		
4.								
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)		
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:				
1.				Total % Cover of:		Multiply by:		
2.				OBL species		x1 =		
3.				FACW species		x2 =		
4.				FAC species		x3 =		
5.				FACU species		x4 =		
			= Total Cover	UPL species		x5 =		
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)	
1. <i>Salicornia virginica</i>	100	Y	OBL	Prevalence Index = B/A =				
2.				Hydrophytic Vegetation Indicators: X 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)				
3.								
4.								
5.								
6.								
7.								
8.								
			= Total Cover					
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
1.								
2.								
			= Total Cover	Hydrophytic Vegetation Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
% Bare Ground in Herb Stratum	10	% Cover of Biotic Crust	0					
Remarks:								

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 26

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-11	10YR4/3	100					grcl	Fill	
11-13	10YR2/1	100					c	Ab	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:	Refusal at 13".					

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	Water Marks (B1) (Riverine)
		<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)
		<input type="checkbox"/>	Drift Deposits (B3) (Riverine)
		<input type="checkbox"/>	Drainage Patterns (B10)
		<input type="checkbox"/>	Dry-Season Water Table (C2)
		<input type="checkbox"/>	Crayfish Burrows (C8)
		<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
		<input type="checkbox"/>	Shallow Aquitard (D3)
		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 13					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 13					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	27
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 7, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	0183
Landform (hillslope, terrace, etc.):	Diked tidal marsh	Land Surface Shape (concave, convex, planar):	Planar	Slope (%):	0-2
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	(no mapping data available)			NWI classification:	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input 3"="" type="checkbox/>, significantly disturbed?</td> <td colspan="/>	Are "Normal Circumstances" present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input 5"="" type="checkbox/>, naturally problematic?</td> <td colspan="/> (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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	2	(A)	
2.							
3.				Total Number of Dominant Species Across All Strata:	2	(B)	
4.							
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)	
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
			= Total Cover	UPL species		x5 =	
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)
1. <i>Salicornia virginica</i>	60	Y	OBL	Prevalence Index = B/A =			
2. <i>Parapholis strigosa</i> (?)	20	Y	OBL				
3.				Hydrophytic Vegetation Indicators:			
4.				X	Dominance Test is >50%		
5.					Prevalence Index is ≤3.0 ¹		
6.					Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
7.							
8.					Problematic Hydrophytic Vegetation ¹ (Explain)		
			80	= Total Cover			
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
1.							
2.							
			= Total Cover	Hydrophytic Vegetation Present?			
% Bare Ground in Herb Stratum	20	% Cover of Biotic Crust	0	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 27

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-3	10YR4/2	90	7.5YR4/6	10	C	M, PL	sic	A1	
3-20	10YR4/1	80	7.5YR4/6	20	C	M	sic	A2	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input checked="" type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input checked="" type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 20					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 20					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	28
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 7, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Filled tidal marsh	Land Surface Shape (concave, convex, planar):	Planar	Slope (%):	3
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	(no mapping data available)			NWI classification:	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input 3"="" type="checkbox/>, significantly disturbed?</td> <td colspan="/> Are "Normal Circumstances" present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input 5"="" type="checkbox/>, naturally problematic?</td> <td colspan="/> (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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)	
2.							
3.				Total Number of Dominant Species Across All Strata:	3	(B)	
4.							
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	33	(A/B)	
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
			= Total Cover	UPL species		x5 =	
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)
1. <i>Melilotus alba</i>	30	Y	UPL	Prevalence Index = B/A =			
2. <i>Bromus diandrus</i>	30	Y	UPL	Hydrophytic Vegetation Indicators: X Dominance Test is >50% Prevalence Index is ≤3.0 ¹			
3. <i>Salicornia virginica</i>	20	Y	OBL				
4. <i>Hordeum marinum ssp. gussoneanum</i>	10	N	FAC	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
5. <i>Carduus pycnocephalus</i>	10	N	NL				
6.				Problematic Hydrophytic Vegetation ¹ (Explain)			
7.							
8.				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
			= Total Cover				
Woody Vine Stratum (Plot size r = 30 ft.)				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
1.							
2.				% Bare Ground in Herb Stratum <input type="checkbox"/> 0 % Cover of Biotic Crust <input type="checkbox"/> 0			
			= Total Cover				
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 28

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth	Matrix		Redox Features						
(inches)	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²	Texture	Horizon	Remarks
0-2	10YR3/1	100					l	Fill 1	
2-9	10YR3/2	85	7.5YR3/4	15	C	M	cl	Fill 2	
9-21	10YR3/1	70	7.5YR4/6	30	C	M	c	Ab	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input checked="" type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?			
Type:		Yes	<input checked="" type="checkbox"/>	Q	<input type="checkbox"/>
Depth (Inches):					
Remarks:					

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	Water Marks (B1) (Riverine)
		<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)
		<input type="checkbox"/>	Drift Deposits (B3) (Riverine)
		<input type="checkbox"/>	Drainage Patterns (B10)
		<input type="checkbox"/>	Dry-Season Water Table (C2)
		<input type="checkbox"/>	Crayfish Burrows (C8)
		<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
		<input type="checkbox"/>	Shallow Aquitard (D3)
		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?				
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	n/a	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	None to 21				
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	None to 21				

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	29
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 7, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Salt marsh	Land Surface Shape (concave, convex, planar):	Planar	Slope (%):	0
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Novato clay, 0 to 1 percent slopes (117)	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)	
2.							
3.				Total Number of Dominant Species Across All Strata:	1	(B)	
4.							
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)	
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
			= Total Cover	UPL species		x5 =	
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)
1. <i>Salicornia virginica</i>	100	Y	OBL	Prevalence Index = B/A =			
2.				Hydrophytic Vegetation Indicators:			
3.				X	Dominance Test is >50%		
4.					Prevalence Index is ≤3.0 ¹		
5.					Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
6.							
7.					Problematic Hydrophytic Vegetation ¹ (Explain)		
8.							
			100	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
Woody Vine Stratum (Plot size r = 30 ft.)							
1.							
2.							
			= Total Cover	Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
% Bare Ground in Herb Stratum	0	% Cover of Biotic Crust	0				
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 29

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-5	10YR3/2	80	7.5YR4/4	20	C	M	sic	A	
5-19	10YR4/1						sic	Bg	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.	
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input checked="" type="checkbox"/>	Redox Dark Surface (F6)				
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input checked="" type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input checked="" type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input checked="" type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Depth (inches): 10 *					
Saturation Present? (includes capillary fringe)	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Depth (inches): 3					

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

Remarks: * Not yet stabilized.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	30
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 7, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Side slope levee	Land Surface Shape (concave, convex, planar):	Planar	Slope (%):	15
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Novato clay, 0 to 1 percent slopes (117)	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:		2	(A)
2.				Total Number of Dominant Species Across All Strata:		2	(B)
3.				Percent of Dominant Species That Are OBL, FACW, or FAC:		100	(A/B)
4.				= Total Cover			
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
				= Total Cover		UPL species	
						x5 =	
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)
1. <i>Frankenia salina</i>	60	Y	FACW	Prevalence Index = B/A =			
2. <i>Salicornia virginica</i>	20	Y	OBL				
3. <i>Bromus diandrus</i>	10	N	UPL	Hydrophytic Vegetation Indicators:			
4. <i>Lolium multiflorum</i> [L. perenne]	5	N	FAC	X	Dominance Test is >50%		
5. <i>Brassica nigra</i>	5	N	NL	Prevalence Index is ≤3.0 ¹			
6.				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
7.							
8.				Problematic Hydrophytic Vegetation ¹ (Explain)			
				= Total Cover			
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
1.							
2.							
				= Total Cover			
% Bare Ground in Herb Stratum	0	% Cover of Biotic Crust	0	Hydrophytic Vegetation Present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 30

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-15	10YR3/2	100					c	Fill	
15-21	10YR3/1	90	7.5YR4/6	10	C	PL	c	Ab	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	Water Marks (B1) (Riverine)
		<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)
		<input type="checkbox"/>	Drift Deposits (B3) (Riverine)
		<input type="checkbox"/>	Drainage Patterns (B10)
		<input type="checkbox"/>	Dry-Season Water Table (C2)
		<input type="checkbox"/>	Crayfish Burrows (C8)
		<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
		<input type="checkbox"/>	Shallow Aquitard (D3)
		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 21					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 21					

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

Remarks:										
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WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	31
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 7, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Salt marsh	Land Surface Shape (concave, convex, planar):	Planar	Slope (%):	0
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Novato clay, 0 to 1 percent slopes (117)	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?		Yes <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
Remarks:	SM-8				

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:		1	(A)
2.				Total Number of Dominant Species Across All Strata:		1	(B)
3.				Percent of Dominant Species That Are OBL, FACW, or FAC:		100	(A/B)
4.				= Total Cover			
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
= Total Cover				UPL species		x5 =	
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)
1. <i>Salicornia virginica</i>	100	Y	OBL	Prevalence Index = B/A =			
2.				Hydrophytic Vegetation Indicators:			
3.				X	Dominance Test is >50%		
4.				Prevalence Index is ≤3.0 ¹			
5.				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
6.				Problematic Hydrophytic Vegetation ¹ (Explain)			
7.							
8.							
= Total Cover				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
Woody Vine Stratum (Plot size r = 30 ft.)							
1.							
2.				Hydrophytic Vegetation Present?			
= Total Cover				Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
% Bare Ground in Herb Stratum	0	% Cover of Biotic Crust	0				
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 31

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-7	10YR4/1	80	5YR4/4	20	C	M	sic	A	
7-14	10YR4/1	100						Bg	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.	
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)				
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input checked="" type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input checked="" type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?					
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	n/a	Wetland Hydrology Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Water Table Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Depth (inches):	10					
Saturation Present? (includes capillary fringe)	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Depth (inches):	6"					

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

Remarks:	Water in pit not yet stabilized.
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WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	32
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 7, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Levee side slope	Land Surface Shape (concave, convex, planar):	Planar	Slope (%):	40
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Novato clay, 0 to 1 percent slopes (117)	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)	
2.							
3.				Total Number of Dominant Species Across All Strata:	2	(B)	
4.							
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	50	(A/B)	
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
			= Total Cover	UPL species		x5 =	
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)
1. <i>Frankenia salina</i>	50	Y	FACW	Prevalence Index = B/A =			
2. <i>Bromus diandrus</i>	10	N	UPL	Hydrophytic Vegetation Indicators:			
3. <i>Mesembryanthemum nodiflorum</i>	20	Y	NL				
4. <i>Vulpia myuros</i>	10	N	FACU	X	Dominance Test is >50%		
5. <i>Brassica nigra</i>	10	N	NL		Prevalence Index is ≤3.0 ¹		
6.					Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
7.							
8.					Problematic Hydrophytic Vegetation ¹ (Explain)		
			100	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
Woody Vine Stratum (Plot size r = 30 ft.)							
1.							
2.							
			= Total Cover	Hydrophytic Vegetation Present?			
% Bare Ground in Herb Stratum	10	% Cover of Biotic Crust	0	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 32

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth	Matrix		Redox Features				Texture	Horizon	Remarks	
(inches)	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²				
0-11	10YR5/2	100					sic	Fill 1		
11-18	10YR4/2	90	7.5YR4/4	10	C	M	c	Fill 2		

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:	Redox apparently formed in dredged source material; not diagnostic.					

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	Water Marks (B1) (Riverine)
		<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)
		<input type="checkbox"/>	Drift Deposits (B3) (Riverine)
		<input type="checkbox"/>	Drainage Patterns (B10)
		<input type="checkbox"/>	Dry-Season Water Table (C2)
		<input type="checkbox"/>	Crayfish Burrows (C8)
		<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
		<input type="checkbox"/>	Shallow Aquitard (D3)
		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 18					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 18					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	33
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 8, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Diked tidal marsh	Land Surface Shape (concave, convex, planar):	Planar/Concave	Slope (%):	0
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	(no mapping data available)	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)	
2.							
3.				Total Number of Dominant Species Across All Strata:	1	(B)	
4.							
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)	
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
			= Total Cover	UPL species		x5 =	
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)
1. <i>Salicornia virginica</i>	100	Y	OBL	Prevalence Index = B/A =			
2.				Hydrophytic Vegetation Indicators: X 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)			
3.							
4.							
5.							
6.							
7.							
8.							
			= Total Cover				
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
1.							
2.							
			= Total Cover	Hydrophytic Vegetation Present?			
% Bare Ground in Herb Stratum	20	% Cover of Biotic Crust	0				
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 33

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

Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-9	10YR4/2	70	5YR4/6	30	C	M	sic	A	
9-14	Gley 1 2.5/N	100					c	Bg	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input checked="" type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input checked="" type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Depth (inches): 14 *					
Saturation Present? (includes capillary fringe)	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Depth (inches): 12					

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

Remarks: * Water level not yet stabilized.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	34
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 8, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Levee slope –near toe	Land Surface Shape (concave, convex, planar):	Planar	Slope (%):	40
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	(no mapping data available)			NWI classification:	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?			Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	0	(A)	
2.							
3.				Total Number of Dominant Species Across All Strata:	3	(B)	
4.							
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	0	(A/B)	
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
			= Total Cover	UPL species		x5 =	
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)
1. <i>Bromus diandrus</i>	60	Y	NI	Prevalence Index = B/A =			
2. <i>Carduus pycnocephalus</i>	20	Y	NL				
3. <i>Salsola soda</i>	20	Y	NL	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)			
4.							
5.							
6.							
7.							
8.							
			100 = Total Cover	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
Woody Vine Stratum (Plot size r = 30 ft.)							
1.							
2.				= Total Cover	Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
% Bare Ground in Herb Stratum	0	% Cover of Biotic Crust	0				
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 34

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

Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-8	10YR3/2	100					cl	Fill	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.	
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)				
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	Water Marks (B1) (Riverine)
		<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)
		<input type="checkbox"/>	Drift Deposits (B3) (Riverine)
		<input type="checkbox"/>	Drainage Patterns (B10)
		<input type="checkbox"/>	Dry-Season Water Table (C2)
		<input type="checkbox"/>	Crayfish Burrows (C8)
		<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
		<input type="checkbox"/>	Shallow Aquitard (D3)
		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:							Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	None to 8					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	None to 8					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	35
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 8, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Diked tidal marsh	Land Surface Shape (concave, convex, planar):	Planar/Concave	Slope (%):	0
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	(no mapping data available)	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)	
2.							
3.				Total Number of Dominant Species Across All Strata:	1	(B)	
4.							
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)	
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
			= Total Cover	UPL species		x5 =	
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)
1. <i>Salicornia virginica</i>	100	Y	OBL	Prevalence Index = B/A =			
2.				Hydrophytic Vegetation Indicators: X 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)			
3.							
4.							
5.							
6.							
7.							
8.							
			= Total Cover				
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
1.							
2.							
			= Total Cover	Hydrophytic Vegetation Present?			
% Bare Ground in Herb Stratum	10	% Cover of Biotic Crust	10				
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 35

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

Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-12	10YR4/1	60	2.5YR4/8	25	C	M, PL	sic	A	
			5YR4/6	15	C	M, PL			
12-17	10YR4/1	100					c	Bg	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input checked="" type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input checked="" type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 17					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 17					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	36
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 8, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Levee slope near toe	Land Surface Shape (concave, convex, planar):	Planar	Slope (%):	40
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	(no mapping data available)			NWI classification:	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)	
2.							
3.				Total Number of Dominant Species Across All Strata:	2	(B)	
4.							
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	50	(A/B)	
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
			= Total Cover	UPL species		x5 =	
Herb Stratum (Plot size r = 5 ft.)				Hydrophytic Vegetation Indicators:			
1. <i>Bromus diandrus</i>	50	Y	NI	Column Totals:		(A)	(B)
2. <i>Frankenia salina</i>	20	Y	FACW	Prevalence Index = B/A =			
3. <i>Carduus pycnocephalus</i>	10	N	NL	Hydrophytic Vegetation Indicators:			
4. <i>Distichlis spicata</i>	10	N	FACW				
5.				Prevalence Index is ≤3.0 ¹			
6.				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
7.							
8.				Problematic Hydrophytic Vegetation ¹ (Explain)			
			90	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
			= Total Cover				
Woody Vine Stratum (Plot size r = 30 ft.)							
1.				Hydrophytic Vegetation Present?			
2.							
			= Total Cover	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
% Bare Ground in Herb Stratum	10	% Cover of Biotic Crust	0				
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 36

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

Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-9	10YR3/2	100					sl	Fill 1	
9-21	10YR4/2	85	7.5YR4/6	15	C	M	sl & sic	Fill 2	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:	Redox too deep to meet criteria for indicators.					

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	Water Marks (B1) (Riverine)
		<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)
		<input type="checkbox"/>	Drift Deposits (B3) (Riverine)
		<input type="checkbox"/>	Drainage Patterns (B10)
		<input type="checkbox"/>	Dry-Season Water Table (C2)
		<input type="checkbox"/>	Crayfish Burrows (C8)
		<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
		<input type="checkbox"/>	Shallow Aquitard (D3)
		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 21					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 21					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	37
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 8, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Salt marsh	Land Surface Shape (concave, convex, planar):	Planar	Slope (%):	0
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	(no mapping data available)			NWI classification:	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?			Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:				
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)		
2.								
3.				Total Number of Dominant Species Across All Strata:	1	(B)		
4.								
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)		
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:				
1.				Total % Cover of:		Multiply by:		
2.				OBL species		x1 =		
3.				FACW species		x2 =		
4.				FAC species		x3 =		
5.				FACU species		x4 =		
			= Total Cover	UPL species		x5 =		
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)	
1. <i>Salicornia virginica</i>	100	Y	OBL	Prevalence Index = B/A =				
2.				Hydrophytic Vegetation Indicators: X 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)				
3.								
4.								
5.								
6.								
7.								
8.								
			= Total Cover					
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
1.								
2.								
			= Total Cover	Hydrophytic Vegetation Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
% Bare Ground in Herb Stratum	10	% Cover of Biotic Crust	0					
Remarks:								

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 37

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-7	10YR3/2	75	5YR4/6	25	C	M	sic	A	
7-15	10YR4/1	100					sic	Bg	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :					
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)				
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)				
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)				
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)				
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)				
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input checked="" type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.					
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)						
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)						
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)						
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)								
Restrictive Layer (if present):									
Type:				Hydric Soils Present?		Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Depth (Inches):									
Remarks:									

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input checked="" type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input checked="" type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input checked="" type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input checked="" type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:										
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	n/a	Wetland Hydrology Present?			
Water Table Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Depth (inches):	11				
Saturation Present? (includes capillary fringe)	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Depth (inches):	8				

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

Remarks: Water in pit not yet stabilized.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	38
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 8, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Levee slope near toe	Land Surface Shape (concave, convex, planar):	Planar	Slope (%):	50
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	(no mapping data available)	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	0	(A)	
2.							
3.				Total Number of Dominant Species Across All Strata:	2	(B)	
4.							
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	0	(A/B)	
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
			= Total Cover	UPL species		x5 =	
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)
1. <i>Bromus diandrus</i>	20	Y	UPL	Prevalence Index = B/A =			
2. <i>Carduus pycnocephalus</i>	15	Y	NL	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)			
3. <i>Lolium multiflorum</i> [L. perenne]	10	N	FAC				
4. <i>Frankenia salina</i>	10	N	FACW				
5. <i>Lactuca serriola</i>	5	N	FAC				
6. <i>Hordeum murinum</i> ssp. <i>leporinum</i>	5	N	NI				
7.							
8.							
			65				
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
1.							
2.							
			= Total Cover	Hydrophytic Vegetation Present?			
% Bare Ground in Herb Stratum	35	% Cover of Biotic Crust	0				
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 38

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-14	10YR4/2	100					cl	Fill	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.	
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)				
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (any one indicator is sufficient)			Secondary Indicators (2 or more required)		
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)	<input type="checkbox"/>	Water Marks (B1) (Riverine)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)	<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)	<input type="checkbox"/>	Drift Deposits (B3) (Riverine)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)	<input type="checkbox"/>	Drainage Patterns (B10)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/>	Dry-Season Water Table (C2)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)	<input type="checkbox"/>	Crayfish Burrows (C8)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)	<input type="checkbox"/>	Shallow Aquitard (D3)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)	<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 14					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 14					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	39		
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 8, 2010		
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:			
Landform (hillslope, terrace, etc.):	Bench	Land Surface Shape (concave, convex, planar):	Planar/Concave	Slope (%):	0		
Subregion (LRR):	C	Lat:		Long:			
Soil Map Unit Name:	(no mapping data available)			NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)							
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?				
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>				Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>					
Remarks:	Data point located in trough-like area, which is the lowest point along bench on east side of creek. Trough is approximately one-foot lower than remainder of bench-like area. Drift line is inboard of bench at outer edge of Spartina. Bank is vertical and higher than opposite bank.						

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:		1	(A)
2.				Total Number of Dominant Species Across All Strata:		1	(B)
3.				Percent of Dominant Species That Are OBL, FACW, or FAC:		100	(A/B)
4.				= Total Cover			
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
= Total Cover				UPL species		x5 =	
Herb Stratum (Plot size r = 5 ft.)				Column Totals:			
1. <i>Salicornia virginica</i>	90	Y	OBL	(A)			(B)
2. <i>Frankenia salina</i>	10	N	FACW	Prevalence Index = B/A =			
3. <i>Elytrigia</i> sp.	10	N	NL	Hydrophytic Vegetation Indicators:			
4.				Dominance Test is >50%			
5.				Prevalence Index is ≤3.0 ¹			
6.				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
7.				Problematic Hydrophytic Vegetation ¹ (Explain)			
8.							
= Total Cover							
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
1.				Hydrophytic Vegetation Present?			
2.							
= Total Cover							
% Bare Ground in Herb Stratum	10	% Cover of Biotic Crust	0	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 39

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

Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-13	10YR3/1	100					cl	A	
13-22	10YR4/1	75	10YR4/6	25	C	M	c	B	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:	Redox is too deep to be diagnostic.					

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	Water Marks (B1) (Riverine)
		<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)
		<input type="checkbox"/>	Drift Deposits (B3) (Riverine)
		<input type="checkbox"/>	Drainage Patterns (B10)
		<input type="checkbox"/>	Dry-Season Water Table (C2)
		<input type="checkbox"/>	Crayfish Burrows (C8)
		<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
		<input type="checkbox"/>	Shallow Aquitard (D3)
		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 22					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 22					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	40
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 8, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Salt marsh	Land Surface Shape (concave, convex, planar):	Planar	Slope (%):	0
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	(no mapping data available)			Datum:	
Soil Map Unit Name:		(no mapping data available)		NWI classification:	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation	<input type="checkbox"/>	Soil	<input type="checkbox"/>	Or Hydrology	<input type="checkbox"/>
significantly disturbed?				Are "Normal Circumstances" present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Are Vegetation	<input type="checkbox"/>	Soil	<input type="checkbox"/>	Or Hydrology	<input type="checkbox"/>
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	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Hydric Soil Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>		Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Wetland Hydrology Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>		Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Remarks:	Below MHW.								

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:											
1.				Number of Dominant Species That Are OBL, FACW, or FAC:		2	(A)								
2.				Total Number of Dominant Species Across All Strata:		2	(B)								
3.				Percent of Dominant Species That Are OBL, FACW, or FAC:		100	(A/B)								
4.				= Total Cover											
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:											
1.				Total % Cover of:			Multiply by:								
2.				OBL species		x1 =									
3.				FACW species		x2 =									
4.				FAC species		x3 =									
5.				FACU species		x4 =									
6.				UPL species		x5 =									
7.				= Total Cover											
Herb Stratum (Plot size r = 5 ft.)				Prevalence Index = B/A =											
1. <i>Spartina foliosa</i>	80	Y	OBL	Column Totals:		(A)	(B)								
2. <i>Salicornia virginica</i>	20	Y	OBL	Prevalence Index = B/A =											
3.				Hydrophytic Vegetation Indicators:											
4.				X	Dominance Test is >50%										
5.					Prevalence Index is ≤3.0 ¹										
6.					Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)										
7.					Problematic Hydrophytic Vegetation ¹ (Explain)										
8.															
9.	100			= Total Cover											
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.											
1.															
2.															
3.				= Total Cover											
% Bare Ground in Herb Stratum	10	% Cover of Biotic Crust	0	Hydrophytic Vegetation Present?		Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>						
Remarks:															

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 40

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-16	10YR4/1	85	5YR4/6	15	C	M	sl	A	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.	
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)				
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (any one indicator is sufficient)			Secondary Indicators (2 or more required)		
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)	<input type="checkbox"/>	Water Marks (B1) (Riverine)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)	<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)	<input type="checkbox"/>	Drift Deposits (B3) (Riverine)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)	<input type="checkbox"/>	Drainage Patterns (B10)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/>	Dry-Season Water Table (C2)
<input checked="" type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)	<input type="checkbox"/>	Crayfish Burrows (C8)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)	<input type="checkbox"/>	Shallow Aquitard (D3)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)	<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 16					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 16					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	41
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 8, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Diked tidal marsh	Land Surface Shape (concave, convex, planar):	Planar	Slope (%):	0
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	(no mapping data available)			NWI classification:	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?			Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Remarks:	Adjacent to turf area.				

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:		2	(A)
2.				Total Number of Dominant Species Across All Strata:		2	(B)
3.				Percent of Dominant Species That Are OBL, FACW, or FAC:		100	(A/B)
4.				= Total Cover			
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
6.				UPL species		x5 =	
= Total Cover				Column Totals:		(A)	(B)
= Total Cover				Prevalence Index = B/A =			
Herb Stratum (Plot size r = 5 ft.)				Hydrophytic Vegetation Indicators:			
1. <i>Hordeum marinum</i> ssp. <i>gussoneanum</i>	50	Y	FAC	X	Dominance Test is >50%		
2. <i>Salicornia virginica</i>	30	Y	OBL		Prevalence Index is ≤3.0 ¹		
3. <i>Lolium multiflorum</i> [L. <i>perenne</i>]	10	N	FAC		Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
4. <i>Polypogon monspeliensis</i>	10	N	FACW				
5.					Problematic Hydrophytic Vegetation ¹ (Explain)		
6.							
7.					¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
8.							
= Total Cover				Hydrophytic Vegetation Present?			
= Total Cover							
% Bare Ground in Herb Stratum		10	% Cover of Biotic Crust		30		
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 41

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-6	10YR4/1	85	7.5YR4/6	15	C	PL, M	sicl	A	
6-14	10YR4/3	100					cl	B	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input checked="" type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input checked="" type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input checked="" type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	Water Marks (B1) (Riverine)
		<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)
		<input type="checkbox"/>	Drift Deposits (B3) (Riverine)
		<input type="checkbox"/>	Drainage Patterns (B10)
		<input type="checkbox"/>	Dry-Season Water Table (C2)
		<input type="checkbox"/>	Crayfish Burrows (C8)
		<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
		<input type="checkbox"/>	Shallow Aquitard (D3)
		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 14					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 14					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	42
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	July 8, 2010
Investigator(s):	Butterworth, Valerius	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	Levee slope	Land Surface Shape (concave, convex, planar):	Slope	Slope (%):	40
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	(no mapping data available)			NWI classification:	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input 3"="" type="checkbox/>, significantly disturbed?</td> <td colspan="/> Are "Normal Circumstances" present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input 5"="" type="checkbox/>, naturally problematic?</td> <td colspan="/> (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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Remarks:					

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:				
1. <i>Pinus sp.</i>	20	Y	NL	Number of Dominant Species That Are OBL, FACW, or FAC:	0	(A)		
2.				Total Number of Dominant Species Across All Strata:	2	(B)		
3.								
4.				Percent of Dominant Species That Are OBL, FACW, or FAC:	0	(A/B)		
	20	= Total Cover						
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:				
1.				Total % Cover of:		Multiply by:		
2.				OBL species		x1 =		
3.				FACW species		x2 =		
4.				FAC species		x3 =		
5.				FACU species		x4 =		
		= Total Cover		UPL species		x5 =		
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)	
1. <i>Avena fatua</i>	90	Y	UPL	Prevalence Index = B/A =				
2. <i>Distichlis spicata</i>	10	N	FACW	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)				
3.								
4.								
5.								
6.								
7.								
8.								
	100	= Total Cover						
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
1.								
2.								
		= Total Cover		Hydrophytic Vegetation Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
% Bare Ground in Herb Stratum	0	% Cover of Biotic Crust	0					
Remarks:								

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 42

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-11	10YR3/2	100					grcl	Fill	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.	
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)				
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:	Refusal at 13".					

HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (any one indicator is sufficient)			Secondary Indicators (2 or more required)		
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)	<input type="checkbox"/>	Water Marks (B1) (Riverine)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)	<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)	<input type="checkbox"/>	Drift Deposits (B3) (Riverine)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)	<input type="checkbox"/>	Drainage Patterns (B10)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/>	Dry-Season Water Table (C2)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)	<input type="checkbox"/>	Crayfish Burrows (C8)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)	<input type="checkbox"/>	Shallow Aquitard (D3)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)	<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 11					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 11					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	43
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	February 22, 2012
Investigator(s):	Butterworth, Brimacombe	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	filled tidal marsh	Land Surface Shape (concave, convex, planar):	convex	Slope (%):	5
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Aquic Xerofluvents, bay mud substratum, 0 to 2 percent slopes (120)			NWI classification:	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation	<input type="checkbox"/>	Soil	<input type="checkbox"/>	Or Hydrology	<input type="checkbox"/>
significantly disturbed?			Are "Normal Circumstances" present?		
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Are Vegetation	<input type="checkbox"/>	Soil	<input type="checkbox"/>	Or Hydrology	<input checked="" type="checkbox"/>
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	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Hydric Soil Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>		Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>		Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Remarks:	At 35% of average annual precipitation to date.								

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:											
1.				Number of Dominant Species That Are OBL, FACW, or FAC:		1		(A)							
2.															
3.				Total Number of Dominant Species Across All Strata:		1		(B)							
4.															
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:		100		(A/B)							
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:											
1.				Total % Cover of:			Multiply by:								
2.				OBL species			x1 =								
3.				FACW species			x2 =								
4.				FAC species			x3 =								
5.				FACU species			x4 =								
			= Total Cover	UPL species			x5 =								
Herb Stratum (Plot size r = 5 ft.)				Hydrophytic Vegetation Indicators:											
1. <i>Cynodon dactylon</i>	95	Y	FAC	Column Totals:		(A)		(B)							
2. <i>Rumex crispus</i>	5	N	FACW	Prevalence Index = B/A =											
3. Unknown turf grass	2	N	undet.	Hydrophytic Vegetation Indicators:											
4.				X	Dominance Test is >50% see remarks										
5.					Prevalence Index is ≤3.0 ¹										
6.					Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)										
7.					Problematic Hydrophytic Vegetation ¹ (Explain)										
8.															
			102	= Total Cover											
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.											
1.										Hydrophytic Vegetation Present?					
2.															
			= Total Cover												
% Bare Ground in Herb Stratum	0	% Cover of Biotic Crust		0											
Remarks:	Sampling point taken on irrigated fairway of golf course; supplemental water may influence vegetation that grows in the area														

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 43

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-9	10YR3/2	100					l	Fill 1	
9-21	10YR3/2	100					cl	Fill 2	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :				
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)			
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)			
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)			
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)			
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)			
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.				
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)					
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)					
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)					
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)							
Restrictive Layer (if present):				Hydric Soils Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Type:								
Depth (Inches):								
Remarks:	Soil consists of fill material							

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:											
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	n/a	Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	None to 21					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	None to 21					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	44
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	February 22, 2012
Investigator(s):	Butterworth, Brimacombe	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	depression in filled tidal marsh	Land Surface Shape (concave, convex, planar):	concave	Slope (%):	0
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Aquic Xerofluvents, bay mud substratum, 0 to 2 percent slopes (120)	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
Remarks:	At 35% of average annual precipitation to date.				

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)	
2.							
3.				Total Number of Dominant Species Across All Strata:	1	(B)	
4.							
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)	
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
			= Total Cover	UPL species		x5 =	
Herb Stratum (Plot size r = 5 ft.)				UPL species			
1. <i>Typha latifolia</i>	80	Y	OBL	Column Totals:		(A)	(B)
2. <i>Cyperus eragrostis</i>	5	N	FACW	Prevalence Index = B/A =			
3.				Hydrophytic Vegetation Indicators:			
4.				X	Dominance Test is >50%		
5.					Prevalence Index is ≤3.0 ¹		
6.					Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
7.							
8.					Problematic Hydrophytic Vegetation ¹ (Explain)		
			= Total Cover				
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
1.				Hydrophytic Vegetation Present?			
2.							
			= Total Cover				
% Bare Ground in Herb Stratum	15	% Cover of Biotic Crust	0	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 44

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-5	5Y 2.5/1	100					I	A	
5-11	Gley 1 3/10Y	100					I	Bg	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :					
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)				
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)				
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)				
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input checked="" type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)				
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)				
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.					
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)						
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)						
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)						
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)								
Restrictive Layer (if present):									
Type:				Hydric Soils Present?		Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Depth (Inches):									
Remarks:									

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input checked="" type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input checked="" type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input checked="" type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:										
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	n/a	Wetland Hydrology Present?			
Water Table Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Depth (inches):	at 5"				
Saturation Present? (includes capillary fringe)	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Depth (inches):	at 4"				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:										

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	45
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	February 22, 2012
Investigator(s):	Butterworth, Brimacombe	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	tidal marsh	Land Surface Shape (concave, convex, planar):	concave	Slope (%):	2
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Aquic Xerofluvents, bay mud substratum, 0 to 2 percent slopes (120)			NWI classification:	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?			Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Remarks:	At 35% of average annual precipitation to date. Diked marsh; 2 ponded areas within wetland. 4-inch drainpipe at each end.				

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:				
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)		
2.								
3.				Total Number of Dominant Species Across All Strata:	1	(B)		
4.								
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)		
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:				
1.				Total % Cover of:		Multiply by:		
2.				OBL species		x1 =		
3.				FACW species		x2 =		
4.				FAC species		x3 =		
5.				FACU species		x4 =		
			= Total Cover	UPL species		x5 =		
Herb Stratum (Plot size r = 5 ft.)				Column Totals:		(A)	(B)	
1. <i>Salicornia pacifica</i>	75	Y	OBL	Prevalence Index = B/A =				
2.				Hydrophytic Vegetation Indicators: X 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)				
3.								
4.								
5.								
6.								
7.								
8.								
			75 = Total Cover					
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
1.								
2.								
			= Total Cover	Hydrophytic Vegetation Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
% Bare Ground in Herb Stratum	25	% Cover of Biotic Crust	0					
Remarks:								

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 45

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

Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-6	10YR4/2	100					grl	Fill 1	
6-8	7.5YR 3/2	100					grcl	Fill 2	
8+									Refusal by high gravel content

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input checked="" type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Type:						
Depth (Inches):						

Remarks: Fill material with low organic matter content and recent deposition appear to prevent formation of redox features.

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input checked="" type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 8"					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 8"					

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	46
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	February 22, 2012
Investigator(s):	Butterworth, Brimacombe	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	filled tidal marsh	Land Surface Shape (concave, convex, planar):	planar	Slope (%):	25
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Aquic Xerofluvents, bay mud substratum, 0 to 2 percent slopes (120)			NWI classification:	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation	<input checked="" type="checkbox"/>	Soil	<input type="checkbox"/>	Or Hydrology	<input type="checkbox"/>
significantly disturbed?			Are "Normal Circumstances" present?		
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Are Vegetation	<input type="checkbox"/>	Soil	<input type="checkbox"/>	Or Hydrology	<input type="checkbox"/>
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 <input checked="" type="checkbox"/>	No	<input type="checkbox"/>		
Hydric Soil Present?	Yes <input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Is the Sampling Area within a Wetland?	
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>
				No	<input checked="" type="checkbox"/>
Remarks:	At 35% of average annual precipitation to date.				

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:					
1.				Number of Dominant Species That Are OBL, FACW, or FAC:			(A)		
2.				Total Number of Dominant Species Across All Strata:			(B)		
3.				Percent of Dominant Species That Are OBL, FACW, or FAC:			(A/B)		
4.				= Total Cover					
<u>Sapling/Shrub Stratum</u> (Plot size r = 5 ft.)				Prevalence Index Worksheet:					
1.				<u>Total % Cover of:</u>		<u>Multiply by:</u>			
2.				OBL species		x1 =			
3.				FACW species		x2 =			
4.				FAC species		x3 =			
5.				FACU species		x4 =			
= Total Cover				UPL species		x5 =			
<u>Herb Stratum</u> (Plot size r = 5 ft.)				Column Totals:		(A)	(B)		
1. Unknown turf grass	80	Y	-	Prevalence Index = B/A =					
2. <i>Plantago coronopus</i>	5	N	FAC	Hydrophytic Vegetation Indicators:					
3. <i>Salicornia pacifica</i>	5	N	OBL	Dominance Test is >50%					
4. <i>Frankenia salina</i>	5	N	FACW	Prevalence Index is ≤3.0 ¹					
5. <i>Helminthotheca (Picris) echiodes</i>	2	N	FAC	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)					
6. <i>Cirsium vulgare</i>	2	N	FACU						
7. <i>Geranium</i> sp.	2	N	not listed						
8.				X	Problematic Hydrophytic Vegetation ¹ (Explain)				
= Total Cover									
<u>Woody Vine Stratum</u> (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.					
1.									
2.									
= Total Cover				Hydrophytic Vegetation Present?					
% Bare Ground in Herb Stratum		0	% Cover of Biotic Crust		0	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Remarks:	Grass recently mown, making accurate identification of species difficult. Sampling point is on irrigated golf course. Grass species in nearby areas include <i>Cynodon dactylon</i> (FAC) and <i>Poa annua</i> (FACW).								

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 46

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-7	10YR 3/2	100					grl	Fill 1	
7-13	10YR 3/2	100					grc	Fill 2	
13-14	7.5YR 3/2	100					grc	Fill 3	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :					
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)				
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)				
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)				
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)				
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)				
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.					
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)						
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)						
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)						
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)								
Restrictive Layer (if present):									
Type:				Hydric Soils Present?		Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Depth (Inches):									
Remarks:	Fill material								

HYDROLOGY

Wetland Hydrology Indicators:									
Primary Indicators (any one indicator is sufficient)					Secondary Indicators (2 or more required)				
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)	<input type="checkbox"/>	Water Marks (B1) (Riverine)				
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)	<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)				
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)	<input type="checkbox"/>	Drift Deposits (B3) (Riverine)				
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)	<input type="checkbox"/>	Drainage Patterns (B10)				
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/>	Dry-Season Water Table (C2)				
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)	<input type="checkbox"/>	Crayfish Burrows (C8)				
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)				
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)	<input type="checkbox"/>	Shallow Aquitard (D3)				
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)	<input type="checkbox"/>	FAC-Neutral Test (D5)				

Field Observations:										
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	n/a	Wetland Hydrology Present?			
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	None to 14				
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	None to 14				

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

Remarks:	
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WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	47		
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	February 22, 2012		
Investigator(s):	Butterworth, Brimacombe	Section, Township, Range:		Photo No:			
Landform (hillslope, terrace, etc.):	filled tidal marsh	Land Surface Shape (concave, convex, planar):	convex	Slope (%):	5		
Subregion (LRR):	C	Lat:		Long:			
Soil Map Unit Name:	Aquic Xerofluvents, bay mud substratum, 0 to 2 percent slopes (120)			NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (If no, explain in Remarks.)							
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input 3"="" type="checkbox/>, significantly disturbed?</td> <td colspan="/> Are "Normal Circumstances" present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input 5"="" type="checkbox/>, naturally problematic?</td> <td colspan="/> (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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?				
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>				Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>					
Remarks:	At 35% of average annual precipitation to date.						

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:		2	(A)
2.				Total Number of Dominant Species Across All Strata:		3	(B)
3.				Percent of Dominant Species That Are OBL, FACW, or FAC:		67	(A/B)
4.				= Total Cover			
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
= Total Cover				UPL species		x5 =	
Herb Stratum (Plot size r = 5 ft.)				Column Totals:			
1. <i>Frankenia salina</i>	50	Y	FACW	(A)			(B)
2. <i>Hordeum murinum</i> ssp. <i>leporinum</i>	30	Y	NI	Prevalence Index = B/A =			
3. <i>Distichlis spicata</i>	20	Y	FAC	Hydrophytic Vegetation Indicators:			
4. <i>Brassica nigra</i>	5	N	not listed	X	Dominance Test is >50%		
5. <i>Cirsium vulgare</i>	5	N	FACU	Prevalence Index is ≤3.0 ¹			
6. <i>Poa annua</i>	2	N	FACW	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
7. <i>Festuca (Vulpia) myuros</i>	2	N	FACU				
8.				Problematic Hydrophytic Vegetation ¹ (Explain)			
= Total Cover				114			
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
1.				Hydrophytic Vegetation Present?			
2.							
= Total Cover							
% Bare Ground in Herb Stratum	0	% Cover of Biotic Crust	0	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Remarks:	sampling point is on irrigated golf course						

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 47

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-4	7.5YR 3/1	30					l	Fill 1	
	and 2.5Y 3/2	70					cl	Fill 1	
4-17	10YR 3/2	100					cl	Fill 2	
17-23	10YR 4/1	80	5YR3/4	20	C	M	l	Fill 3	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): n/a					
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 23					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): None to 23					

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

Remarks:	
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WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	48
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	February 22, 2012
Investigator(s):	Butterworth, Brimacombe	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	channel in filled tidal marsh	Land Surface Shape (concave, convex, planar):	convex	Slope (%):	1
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Aquic Xerofluvents, bay mud substratum, 0 to 2 percent slopes (120)			NWI classification:	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , significantly disturbed?	Are "Normal Circumstances" present?			Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , Or Hydrology <input type="checkbox"/> , 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Remarks:	At 35% of average annual precipitation to date.				

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC:		2	(A)
2.				Total Number of Dominant Species Across All Strata:		3	(B)
3.				Percent of Dominant Species That Are OBL, FACW, or FAC:		67	(A/B)
4.				= Total Cover			
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:			
1.				Total % Cover of:		Multiply by:	
2.				OBL species		x1 =	
3.				FACW species		x2 =	
4.				FAC species		x3 =	
5.				FACU species		x4 =	
6.				UPL species		x5 =	
= Total Cover				Column Totals:		(A)	(B)
= Total Cover				Prevalence Index = B/A =			
Herb Stratum (Plot size r = 5 ft.)				Hydrophytic Vegetation Indicators:			
1. <i>Salicornia pacifica</i>	60	Y	OBL	X	Dominance Test is >50%		
2. <i>Distichlis spicata</i>	35	Y	FACW		Prevalence Index is ≤3.0 ¹		
3. <i>Frankenia salina</i>	10	N	FACW		Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
4.					Problematic Hydrophytic Vegetation ¹ (Explain)		
5.							
6.							
7.							
8.							
= Total Cover							
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
1.							
2.							
= Total Cover				Hydrophytic Vegetation Present?			
% Bare Ground in Herb Stratum	5	% Cover of Biotic Crust	0	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Remarks:							

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 48

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-10	10YR 3/2	85	7.5YR4/6	15	C	M	sicl	A	native soil
10-14	10YR 3/2	100					sicl	Bw	native soil

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.	
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input checked="" type="checkbox"/>	Redox Dark Surface (F6)				
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Type:						
Depth (Inches):						
Remarks:						

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)
<input checked="" type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)
<input checked="" type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>		<input type="checkbox"/>	FAC-Neutral Test (D5)

Field Observations:						Wetland Hydrology Present?				
Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	n/a	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Water Table Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Depth (inches):	at 3"				
Saturation Present? (includes capillary fringe)	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Depth (inches):	at 2"				

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site:	San Francisquito Creek Flood Protection Project	City/County:	East Palo Alto/San Mateo	Sampling Point:	49
Applicant/Owner:	San Francisquito Creek Joint Powers Authority	State:	CA	Sampling Date:	February 22, 2012
Investigator(s):	Butterworth, Brimacombe	Section, Township, Range:		Photo No:	
Landform (hillslope, terrace, etc.):	depression in tidal marsh	Land Surface Shape (concave, convex, planar):	convex	Slope (%):	1
Subregion (LRR):	C	Lat:		Long:	
Soil Map Unit Name:	Aquic Xerofluvents, bay mud substratum, 0 to 2 percent slopes (120)			NWI classification:	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation	<input type="checkbox"/>	Soil	<input type="checkbox"/>	Or Hydrology	<input type="checkbox"/>
significantly disturbed?			Are "Normal Circumstances" present?		
Yes <input checked="" type="checkbox"/>			No <input type="checkbox"/>		
Are Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> Or Hydrology <input type="checkbox"/> 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	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Is the Sampling Area within a Wetland?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Hydric Soil Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>		Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>		Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Remarks:	At 35% of average annual precipitation to date.								

VEGETATION

Tree Stratum (Plot size r = 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:											
1.				Number of Dominant Species That Are OBL, FACW, or FAC:		1	(A)								
2.				Total Number of Dominant Species Across All Strata:		1	(B)								
3.				Percent of Dominant Species That Are OBL, FACW, or FAC:		100	(A/B)								
4.				= Total Cover											
Sapling/Shrub Stratum (Plot size r = 5 ft.)				Prevalence Index Worksheet:											
1.				Total % Cover of:		Multiply by:									
2.				OBL species		x1 =									
3.				FACW species		x2 =									
4.				FAC species		x3 =									
5.				FACU species		x4 =									
6.				UPL species		x5 =									
7.				= Total Cover											
Herb Stratum (Plot size r = 5 ft.)				Hydrophytic Vegetation Indicators:											
1. <i>Distichlis spicata</i>	80	Y	FACW	Column Totals:		(A)			(B)						
2. <i>Spergularia macrotheca</i>	10	N	FAC	Prevalence Index = B/A =											
3. <i>Salicornia pacifica</i>	5	N	OBL	Hydrophytic Vegetation Indicators:											
4. <i>Rumex pulcher</i>	5	N	FAC	X	Dominance Test is >50%										
5.				Prevalence Index is ≤3.0 ¹											
6.				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)											
7.				Problematic Hydrophytic Vegetation ¹ (Explain)											
8.															
	100		= Total Cover												
Woody Vine Stratum (Plot size r = 30 ft.)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.											
1.															
2.															
			= Total Cover												
% Bare Ground in Herb Stratum	0	% Cover of Biotic Crust	0	Hydrophytic Vegetation Present?		Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>						
Remarks:															

Project Site: San Francisquito Creek Flood Protection Project

SOIL

Sampling Point: 49

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

Depth (inches)	Matrix		Redox Features				Texture	Horizon	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²			
0-8	10YR 3/2	100					sic	A	
8-22	10YR 3/2	75	7.5YR3/4	25	C	M	c	Bw	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, LRC=Living Root Channel, M=Matrix.

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	1 cm Muck (A9) (LRR C)		
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	2 cm Muck (A10) (LRR B)		
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Reduced Vertic (F18)		
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Red Parent Material (TF2)		
<input type="checkbox"/>	Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/>	Depleted Matrix (F3)	<input type="checkbox"/>	Other (Explain in Remarks)		
<input type="checkbox"/>	1 cm Muck (A9) (LRR D)	<input type="checkbox"/>	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present.			
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Dark Surface (F7)				
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Depressions (F8)				
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Vernal Pools (F9)				
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)						

Restrictive Layer (if present):		Hydric Soils Present?	Yes	<input checked="" type="checkbox"/>	Q	<input type="checkbox"/>
Type:						
Depth (Inches):						

Remarks: Appears to be mostly native soil

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)				Secondary Indicators (2 or more required)			
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Salt Crust (B11)	<input type="checkbox"/>	Water Marks (B1) (Riverine)		
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Biotic Crust (B12)	<input type="checkbox"/>	Sediment Deposits (B2) (Riverine)		
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)	<input type="checkbox"/>	Drift Deposits (B3) (Riverine)		
<input type="checkbox"/>	Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)	<input type="checkbox"/>	Drainage Patterns (B10)		
<input type="checkbox"/>	Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/>	Dry-Season Water Table (C2)		
<input type="checkbox"/>	Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/>	Presence of Reduced Iron (C4)	<input type="checkbox"/>	Crayfish Burrows (C8)		
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Thin Muck Surface (C7)	<input type="checkbox"/>	Shallow Aquitard (D3)		
<input type="checkbox"/>	Water-Stained Leaves (B9)	<input type="checkbox"/>	Other (Explain in Remarks)	<input type="checkbox"/>	FAC-Neutral Test (D5)		

Field Observations:

Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	n/a	Wetland Hydrology Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	None to 22					
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches):	None to 22					

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

Remarks:

Appendix E
Representative Photographs

Appendix E Representative Photographs



Photo 1 – Tidal channel (San Francisquito Creek). Facing downstream (northeast) from footbridge. Tidal salt marsh on right bank.



Photo 2 – Tidal salt marsh. Facing northeast at Data Point 19, with toe of levee in foreground.



Photo 3 – Tidal channel with adjoining tidal salt marsh. Facing north at Data Point 19.



Photo 4 – Diked marsh. Facing north along western edge of golf course, south of Data Points 39 and 40.



Photo 5 – Tidal pan. Facing north, in Faber Tract.



Photo 6 – Diked marsh. Facing west, in golf course.

Exhibit A
Delineation Maps

South San Francisco Bay

Palo Alto Airport

Palo Alto Golf Course

LAUMEISTER TRACT

FABER TRACT

FRANCISQUITO CREEK

FRIENDSHIP BRIDGE

CITY OF PALO ALTO PUMP STATION

Sheet 1
Sheet 2

EXHIBIT A
Delineation Map
Sheet 1 of 2

DELINEATION OF WETLANDS AND OTHER WATERS
AND POTENTIAL WETLANDS AND OTHER WATERS OF THE PROJECT
SANTA FE AND SANTA CLARA COUNTIES, CALIFORNIA

POTENTIAL WETLANDS AND OTHER WATERS OF THE UNITED STATES
Wetlands and Other Waters: 148.81 Acres

Wetlands		116.34 Acres
Great Marsh		
DM 1	0.53	
DM 2	0.22	
DM 3	0.05	
DM 4	0.02	
DM 5	0.05	
DM 6	0.11	
DM 7	0.02	
DM 8	0.25	
DM 9	0.08	
DM 10	0.28	
DM 11	0.24	
DM 12	0.16	
DM 13	0.21	
Freshwater Marsh		
FM 1	0.10	0.32 Acres
FM 2	0.14	
Total Salt Marsh		
TSM 1	1.50	112.26 Acres
TSM 2	0.05	
TSM 3	0.01	
TSM 4	0.01	
TSM 5	0.04	
TSM 6	0.02	
TSM 7	0.04	
TSM 8	0.06	
TSM 9	0.05	
TSM 10	0.10	
TSM 11	0.05	
TSM 12	0.02	
Other Waters		
Freshwater Ponds 1.12 Acres		
FP 1	1.12	
Total Channel and Bay Waters 22.36 Acres		
TC 1	0.05	
TC 2	0.02	
TC 3	21.82	
Total Ponds 0.37 Acres		
TP 1	0.02	
TP 2	0.12	
TP 3	0.22	

Other Waters 23.88 Acres

Legend:

- Matchline
- Curvet
- Delineation Data Point
- Delineation Study Area Boundary
- Mean High Water and High Tide Line (Approx. 7.8 NAVD 83)

Scale: 1 inch = 100 feet

Prepared by: [Firm Name]

Prepared for: [Client Name]



Sheet 1
Sheet 2

Palo Alto
Golf Course

CAMELLIA DRIVE

JASMINE WAY

WISTERIA DRIVE

SAN FRANCISCO CREEK

CITY OF PALO ALTO
PUMP STATION

EAST BAYSHORE ROAD

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EXHIBIT A
Delimitation Map
Sheet 2 of 2

DELIMITATION OF POTENTIAL WETLANDS AND OTHER WATERS
AND FRESHWATER FISH AND WILDLIFE HABITAT PROJECT
SANTA CLARA AND SANTA CLARA COUNTY, CALIFORNIA

POTENTIAL WETLANDS AND OTHER WATERS OF THE UNITED STATES

Wetlands and Other Waters 148.81 Acres

Wetlands 116.93 Acres

Clear Marsh	DM 1 0.53
	DM 2 0.22
	DM 3 0.05
	DM 4 0.02
	DM 5 0.06
	DM 6 0.11
	DM 7 0.02
	DM 8 0.25
	DM 9 0.08
	DM 10 0.08
	DM 11 0.24
	DM 12 0.16
	DM 13 0.21
Freshwater Marsh	FM 1 0.15
	FM 2 0.14
Total Salt Marsh	TSM 1 1.50
	TSM 2 0.05
	TSM 3 0.01
	TSM 4 0.01
	TSM 5 0.04
	TSM 6 1.56
	TSM 7 0.30
	TSM 8 0.30
	TSM 9 0.12
	TSM 10 0.05
	TSM 11 0.05
	TSM 12 0.12
Other Waters	OW 1 0.33
	OW 2 1.12
	OW 3 1.12
Total Channel and Bay Waters	TC 1 0.55
	TC 2 0.02
	TC 3 21.82
Total Ponds	TP 1 0.02
	TP 2 0.12
	TP 3 0.22

Legend:

- Matchline
- Current
- Delimitation Data Point
- Delimitation Study Area Boundary
- Mean High Water and High Tide Line (Approx. 7.5 NAVD 83)

Scale: 1 inch = 100 feet

Prepared by: [Firm Name]
Prepared for: [Client Name]